

# THE Baseball Research JOURNAL

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## CONTENTS

John McGraw Comes to New York by Clifford Blau .....	3
56-Game Hitting Streaks Revisited by Michael Freiman .....	11
Lou vs. Babe in Real Life and in <i>Pride of the Yankees</i> by Frank Ardolino .....	16
The Evolution of World Series Scheduling by Charlie Bevis ....	21
Batting Average by Count and Pitch Type by J. Eric Bickel & Dean Stotz .....	29
Harry Wright by Christopher Devine .....	35
International League RBI Leaders by David F. Chrisman ....	39
Identifying Dick Higham by Harold Higham .....	45
Best of Times, Worst of Times by Scott Nelson .....	51
Baseball's Most Unbreakable Records by Joe Dittmar .....	54
Bill Doak's Three "No-Hitters" by Stephen Boren .....	62
The King is Dead by Victor Debs .....	64
Home Runs: More Influential Than Ever by Jean-Pierre Caillault .....	72
✓ The Most Exciting World Series Games by Peter Reidhead & Ron Visco .....	76
✓ The Best Last-Place Team Ever? by David Surdam .....	80
Kamenshek, the All-American by John Holway .....	83
✓ Most Dominant Triple Crown Winner by Vince Gennaro .....	86
Preventing Base Hits by Dick Cramer .....	88
Not Quite Marching Through Georgia by Roger Godin .....	93
✓ Forbes Field, Hitter's Nightmare? by Ron Selter .....	95
RBI, Opportunities, and Power Hitting by Cyril Morong .....	98
✓ Babe Ruth Dethroned? by Gabe Costa .....	102
✓ Wanted: One First-Class Shortstop by Robert Schaefer .....	107
✓ Does Experience Help in the Post-Season? by Tom Hanrahan .....	111
✓ The Riot at the First World Series by Louis P. Masur .....	114
Why Isn't Gil Hodges In the Hall of Fame? by John Saccoman .....	118
From a Researcher's Notebook by Al Kermisch .....	123

## EDITOR'S NOTE

I believe that this thirty-first issue of the *Baseball Research Journal* has something for everyone: controversy, nostalgia, originality, mystery—even a riot.

Starting back to front, the last article in this *BRJ*—as it has been in the journal for two decades—is Al Kermisch's *Notes From a Researcher*, certainly one of the most popular and widely read features. This is Al's last column. He wrote it just weeks before he passed away, and I am proud to include it here. His writing and his presence will be missed.

No one can read Joe Dittmar's engaging piece on unbreakable records without trying to come up with one missed by the Records Committee. A most unique research mystery is solved by Harold Higham, who identifies his 19th century ancestor through various photo techniques, including those used by the FBI. Early star Dick Higham is mostly misidentified in 19th century team photos.

Dick Cramer's statistical argument that fielders are more important than pitchers is sure to raise hackles. Eric Bickel and Dean Stotz wade in with more original data on batting average by pitch count, a fascinating topic for every baseball fan and researcher. Cy Morong tells us that you can't knock in runs unless there are runners on base—and then analyzes just who the best RBI hitters are. On the subject of ribbies, David Chrisman presents valuable and original work on early International League RBI leaders.

John Holway gets in touch with his feminine side, and argues that the best fielding first baseman ever wore skirts. While David Surdam reminds us that the 1966 Yankees weren't really that bad, despite their last-place finish.

Young Chris Devine, a winner of the Jack Kavanagh award, offers a solid article on Harry Wright, which should reassure all of us that the future of baseball research is in good hands. Also, a number of fine articles on aspects of the World Series, including one on the "riot" at the 1903 games, are included. I was particularly taken with Charlie Bevis's timely piece on World Series scheduling.

There are other fine contributions by some of SABR's most creative thinkers and veteran writers. I trust you will enjoy this issue of the *BRJ*.

Jim Charlton

CLIFFORD BLAU

## John McGraw Comes to New York

### The 1902 New York Giants

**J**ohn McGraw was one of the most successful baseball managers ever, leading the New York Giants to 10 pennants in his 30 years with the club. His arrival in mid-1902 marked the turning point in the fortunes of the Giants, a team which had been struggling for years. However, despite an influx of new players whom McGraw brought with him to New York, the Giants barely showed any improvement for the balance of the 1902 season, losing over 60 percent of their decisions in that period. This article will review the Giants' 1902 season and attempt to show why McGraw was unable to make an immediate improvement in the team.

1902 was a season of turmoil not just for the Giants, but for all of organized baseball. The National League was at war not only with the American League, but with itself. In its December 1901 meeting, four owners supported a plan proposed by John Brush to convert the National League into a trust which would be owned by all eight owners. This trust would own all eight teams and the contracts of all players. The other four owners supported the candidacy of former league president Albert Goodwill Spalding. Spalding had led the league in its successful battles with the Players League in 1890 and the American Association in 1891, and these four owners felt he was the perfect choice to defend the league against the upstart American League. The two sides couldn't reach an agreement, and the trust group, including Giants owner Andrew Freedman, left the meeting. The other four owners, claiming a quorum was still present, elected Spalding president. A lawsuit was filed by the trust group, and the matter wasn't resolved until the beginning of April 1902. The season schedule was adopted on April 5, just 12 days before opening day.

The American League, under its strong president, Ban Johnson, had moved into several large Eastern cities in 1901 and declared itself a major league on a

par with the NL. While its playing talent was probably not equal to the NL's that year, it did succeed in attracting such top stars as Nap Lajoie and Cy Young. Following the 1901 season, the AL took advantage of the chaotic situation in the NL to step up its player raids. Many of the NL's top players, such as Elmer Flick, Jimmy Sheckard, Jesse Burkett, Al Orth, and Ed Delahanty signed with the American League. Meanwhile, the Giants seemed to be making little effort to resign their players or obtain new talent. By the end of 1901, regulars Kip Selbach, Jack Warner, Charley Hickman, and pitcher Luther Taylor, who had led the league's pitchers in games started, had signed with American League teams. Most damaging, future Hall of Fame shortstop George Davis, the Giants manager in 1901, signed with the Chicago White Stockings. Later, third baseman Sammy Strang jumped ship as well. The decline of the Giants since they were purchased by the petulant, domineering Andrew Freedman in 1894 seemed to be complete. Once one of the league's premier franchises, the team had finished last or next to last the past three seasons. Freedman likely expected the trust scheme to be adopted, and that the Giants would get first pick of the league's stars. Because of the stalemate over that issue, they had to rebuild the club the old-fashioned way. With no National Agreement between the major and minor leagues, there was no draft to provide a cheap source of new talent.

Late in December, the Giants started putting together a team for 1902 by signing minor league pitchers Roy Evans and John Burke as well as catcher Manley Thurston. They also purchased second baseman/manager George Smith from the Eastern League champion Rochester team. An offer was made to Jesse Burkett, who had just jumped to the AL, but he turned it down. The Giants also tried to woo manager Ned Hanlon away from their crosstown rivals, the Brooklyn Superbas, but that was also unsuccessful. Toward the end of January, Freedman chose Horace Fogel to manage the team.

Fogel's managerial experience consisted of one sea-

**CLIFFORD BLAU** is a 20-year veteran of SABR. When he's not researching baseball, he wishes that he were.

son at the helm of Indianapolis of the National League. Otherwise, he made his living as a sports-writer and editor, mainly in Philadelphia. Fogel promised to sign some stars, but all he found were college players, American League rejects, and "Roaring" Bill Kennedy, a one-time star pitcher who had been cut loose by the Superbas. As February neared its end, however, the Giants seized an opportunity when Chicago released first baseman Jack Doyle. Fogel quickly signed Doyle and appointed him team captain, giving him responsibility for the team during games. Doyle had been a member of the champion Baltimore Orioles in 1896 and had spent three seasons with the Giants before 1901. He was a good hitter and aggressive baserunner. However, he tended to make enemies wherever he went, as he was demanding and lacking in diplomacy.

The Giants didn't go south for spring training, which was not unusual at the time. Fourteen players reported to the Polo Grounds on March 24 to begin working out under the direction of Jack Doyle. More arrived the next few days. As practice began, the team lined up this way: Captain Doyle at first, Smith at second, Walter Anderson at short, Billy Lauder at third, and Frank Bowerman behind the plate, backed up by George Yeager. Veteran George Van Haltren would be the center fielder, with several players competing for the other two outfield spots, including Jim Jackson, Roy Clark, Libe Washburn, Jim Stafford, Jimmy Jones, and Jim Delahanty. The pitching staff was led by the sensation of 1901, Christy Mathewson. Virtually every other pitcher from the prior year was gone. Attempting to replace them were Henry Thielmann (also an outfield prospect), Frank Dupee, Tully Sparks, Burke, Evans, Kennedy, and Bill Magee. Efforts were made to improve the team during spring training; on March 26 it was reported that the manager job was offered to Ed Barrow, then manager of the Toronto team in the Eastern League, and later Red Sox manager and Yankees president. Contracts were supposedly offered to American Leaguers Nap Lajoie, Elmer Flick, Topsy Hartsel, and others, and an unsuccessful attempt was made to purchase shortstop Wid Conroy from the champion Pittsburgh Pirates. Anderson proved inadequate at short, and after Delahanty and Thielmann were tried there, the Giants signed Jack Dunn, who had been released by the Orioles. The weather was cold and rainy throughout spring training. Only six exhibition games were played, against college and minor league teams, with

the Giants managing to win them all. Five other games were cancelled due to the weather. When that happened, the Giants could work out with weights or exercise machines in the Polo Grounds clubhouse.

Other players failing to make the grade during spring training were Stafford and Dupee, with Clark returning to complete his studies at Brown University. Bowerman and Van Haltren were injured during training camp; thus when the Giants opened the season at home against the Philadelphia Phillies on April 17, the lineup looked like this:

Dunn	SS
Delahanty	RF
Jones	CF
Lauder	3B
Doyle	1B
Jackson	LF
Smith	2B
Yeager	C
Mathewson	P

Jack Dunn began his major league career in 1897 as a pitcher. He converted to infield in 1901, playing third base and shortstop for the American League Baltimore Orioles. After his release by that team, he was signed by the Giants to fill their gap at short. He ended the season as a utility player, filling in at second and third and playing more games in right field than anyone else. He even started two games as pitcher, and relieved in another. Dunn spent two more seasons with the Giants as a utility infielder. He is best known today as the owner of the minor league Baltimore Orioles, where he discovered and developed many players, such as Babe Ruth and Lefty Grove.

Jim Delahanty, one of five brothers to play in the major leagues, was a very good hitter who changed teams frequently during his 11-season AL and NL career, most of which was spent as a second baseman. He had spent the bulk of 1901 playing in the Eastern League. After spring training trials at shortstop and center field, he opened the season as the regular right fielder. This was his second major league trial; his career would begin in earnest in 1904 as the regular third baseman for the Beaneaters.

Jim Jones was a fast runner without much hitting ability. Like Dunn, he had begun his career as a pitcher; Jones had played a few games for the Giants in 1901. 1902 would be his 16th major league season. He was filling in for the veteran George Van Haltren, who



was expected to be the Giants regular center fielder in 1902, as he had been since 1894. Van Haltren was nursing a cold and an injured finger. At 36, he was one of the oldest players in the league, and was frequently referred to in print as "Rip" Van Haltren.

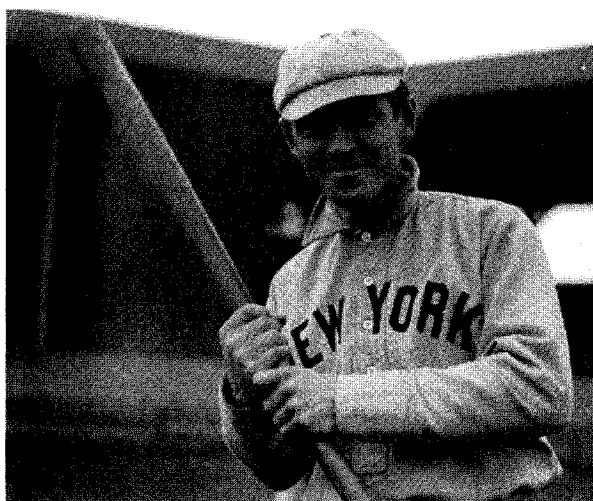
Billy Lauder was a good-field, no-hit third baseman. According to Ned Hanlon, Lauder was as good a third baseman as had ever played the game. Unfortunately he had been out of professional baseball for two years, and was never able to regain his hitting eye.

Jim Jackson was a speedster who spent his rookie season in 1901 with the Baltimore Orioles. He had a .291 on-base average and a .330 slugging average in that year. Joining the Giants in 1902, where he had to deal with the foul strike rule, his hitting took a predictable fall. In addition, his fielding average fell from a league-leading .971 in 1901 to .897 in 1902.

George "Heinie" Smith was a slick-fielding, weak-hitting second baseman. Smith played for Rochester in the International League in 1901. At 30 years old, this was Smith's first year as a regular in the majors after four previous trials. He would soon be regarded as the best defensive second baseman on the Giants since John M. Ward in 1893-94, but his big league career would end the following year with Detroit. Smith and Lauder were the only Giants to play over 109 games in 1902.

George Yeager was a veteran of five big league seasons as a backup catcher. 1902 would be his last year in the major leagues. He was filling in for the injured Bowerman.

After a band concert which concluded with "The Star-Spangled Banner," and the first ball was thrown out by a former fire commissioner, the Giants got their season off to a rousing start with a 7-0 victory. Over the next few days they would lose more than they won before rattling off a seven-game winning streak to close their home stand. As they headed for Chicago, the Giants had a 10-5 record. Their winning streak ended abruptly as Chicago swept the three-game series. However, the first two games were later disallowed by the league as Fogel had discovered before game three that the pitching rubber at West Side Grounds was two feet too close to home. (Those games were later replayed, with the Giants winning both.) Not including the two protested games, the Giants won four of the first six games on the trip. On May 16 in Cincinnati, as the new Palace of the Fans was dedicated, George Yeager pinch-hit a two-run single in the ninth to cap a five-run rally and give New



*Third baseman Billy Lauder (top)  
and John McGraw (bottom).*

**GIANTS 1902 TRANSACTIONS**

4/25	Released Magee
4/28	Signed Joe Bean
4/29	Released Jim Delahanty
5/5	Purchased Joe Bean from Rochester
5/8	Luther Taylor rejoined team (had signed over winter but jumped to AL)
5/14	Steve Brodie released
5/20	Released Henry Thielman and Thurston
5/24	Signed Tom Campbell
5/29	Acquired Hess, Hartley
5/30	Signed Libe Washburn
6/1	Signed McDonald
6/3	Signed O'Hagen
6/4	McDonald retired, Jackson released
6/5	Hartley retired
6/7	Signed Steve Brodie, Nichols, Hendricks
6/14	Signed Blewett
6/17	Released Steve Brodie
6/18	Signed Steve Brodie
6/19	John Hendricks given notice of release
6/20	Jack Doyle released (6/19?)
6/26	Joe Bean given notice of release (6/25?)
7/1	Signed Heinie Wagner
7/8	Roy Clark given notice of release, signed John McGraw
7/15	Released Blewett and Clark
7/17	Released O'Hagen, Burke, Yeager, Sparks, Evans, Wagner; signed Bresnahan, Cronin, McGann, McGinnity
7/21	Signed George Browne, R. Miller
7/25	Released Libe Washburn
8/1	Signed Joe Wall
8/6	Jim Jones suspended for balance of season
9/1	Borrowed Jack Robinson from Bridgeport

York a 14-7 mark. They looked like a pennant contender. However, the good times were over, as the team would lose 43 of its next 51 decisions. A few days after the Giants' come-from-behind victory, Fogel was quoted in a Cincinnati newspaper making disparaging remarks about golden boy Christy Mathewson. He made a quick retraction, but his days at the helm of the Giants were numbered.

Personnel changes were coming fast and furious (see sidebar). Taylor jumped back to the Giants. Bill Magee was released after lasting only two innings in his first start. Delahanty was dropped after seven games. Steve Brodie, a veteran center fielder and former Orioles teammate of Doyle, was signed, released, signed again, released again, and finally signed for a third time the next day after an injury to the Giants' latest outfielder. Indeed, injuries and illnesses would plague the team all season, especially amongst the outfielders. Brodie, despite his multiple comings and goings, was the only person to play more than 67 games in the outfield for New York. The most severe injury occurred on May 22, when Van Haltren broke his leg sliding in Pittsburgh. He would miss the remainder of the season, and his major league career would end the following year. A shortstop, Joe Bean, who had played with Smith at Rochester in 1901, was signed. Unfortunately, Rochester had an option on his services for 1902, and they got a court injunction against the Giants. This matter was resolved in a few days, with the Giants purchasing Bean's contract. Thielman, who was used in the outfield for a trio of games as well as on the mound, was dropped in mid-May, as was catcher Thurston, who never got into a game. Outfielders came and went after two or three games. Pitcher Bob Blewett from Georgetown University was given a chance, but he lived up to his name, going 0-2 in five games. Libe Washburn, star pitcher at Brown University, was used in the outfield for a few games but never got a chance on the mound. Roy Clark had rejoined the team, but, like Mathewson and Sparks, didn't play on Sundays. (This was a problem only when the team was playing in three western cities, since Sunday ball was illegal in the four eastern cities and Pittsburgh.)

After losing 14 of their last 15 games in May, and rumors of dissension spread, changes were made. On June 2 Jack Doyle was stripped of his captaincy, with George Smith taking over that role. The next day, Fogel left the team due to his father's death, and he never returned to the helm, with Smith being promot-

ed to manager on June 11. In an effort to end the dissension on the club, Doyle was released late in June. These changes didn't help the team, as they could only achieve a 5-27 record under Smith.

There had been rumors during the winter about Mathewson having a sore arm. Although he claimed to be fine during spring training and his first pitching appearances were successful, his performance soon fell off. This led to Fogel's threat to bench him. Due to Matty's sore arm and the Giants' infield problems, Smith used him at first base for three games. There was some discussion about converting him to shortstop once his arm healed. While Matty was an excellent fielder on the mound and a good hitter for a pitcher, he proved a flop at first base, making four errors in his three games there, and he returned to pitching.

Meanwhile, on July 1, a new shortstop, Heinie Wagner, joined the team. He had been found playing sandlot ball in New York by Horace Fogel. No one on the team knew anything about him, and some fans thought the Giants had somehow obtained Pittsburgh's star, Honus Wagner. Alas, Heinie, although later a capable major league player, was no Hans, but also wasn't ready for this level of play.

Another newspaper interview in early July gave insight into the Giants' troubles. Jack Hendricks, who had been released after a brief trial in June in right field, spoke candidly to a *Chicago Journal* writer. He claimed that Bowerman and Yeager did all they could to prevent young players from succeeding and that the team had deliberately played poorly behind Blewett to make him look bad. Hendricks, a Northwestern University graduate who would go on to a long career as a manager in the National League and the minors, also had harsh words for Mathewson, calling him "conceited" and a "pinhead" who constantly moaned when things didn't go his way. Matty's teammates rarely spoke to him, and gave him poor support also, according to Hendricks. On the other hand, he had nothing but praise for Doyle, who he said was very helpful to the young players and was a "splendid fellow." He concluded that Freedman should make certain changes in the team, including the manager.<sup>1</sup>

In the meantime, over in the American League, Orioles manager John McGraw was having his own problems. McGraw, another veteran of the NL Orioles of the 1890s, had begun his managerial career with that club in 1899. He quickly established a reputation as a genius by leading the team to a strong fourth-

place finish even though most of the club's stars had been transferred to its sister team, the Superbas. When the American League moved into the East, McGraw was offered part ownership of the Baltimore franchise. However, Ban Johnson insisted on supporting his umpires, which put him at frequent loggerheads with McGraw, a notorious ump baiter. By mid-1902, McGraw was fed up with the frequent suspensions and fines handed him by Johnson. As a player, he had been out of action since being spiked by a baserunner on May 24.

On July 2, McGraw was spotted at the Polo Grounds, and rumors quickly spread that he would take over the helm of the Giants. On the ninth, it became official. The Giants signed McGraw to a three-year contract at \$10,000 or \$11,000 per year, a munificent sum for the time, when the top player salaries were \$6-7,000 at best. In his first interview as the Giants' pilot, McGraw stated that he had been given unlimited authority to improve the team. "The only instructions that I have received," he stated, "were to put a winning organization in this city at any cost." Although he admitted that first place was out of reach this year, he did expect the team to finish in the first division and then compete for the flag in 1903.<sup>2</sup>

The details of how McGraw left the Orioles, of

## OUTFIELD INJURIES

4/17	Van Haltren out with cold and infected thumb until 4/19
4/18	Jones hurt sliding—didn't play again until 5/12
4/22	Jackson out with tonsillitis—returned 4/25
5/22	Van Haltren broke leg—out remainder of season
5/28	Jones hurt when Long fell on him—returned 6/2
6/2	Clark's finger injured—played 6/4 but next day thumb operated on, next played 7/2
6/6	O'Hagen hit by batted ball, returned 6/20
6/17	Washburn hit by pitch, broken nose, out until 7/19
8/29	Bresnahan in bed with illness, returned 9/8

which he was part owner, and how he planned to strengthen the Giants, soon became public. He had arranged for a majority of the Orioles' stock to be sold to Andrew Freedman, who released McGraw and many of the team's stars, including future Hall of Famers Joe McGinnity and Roger Bresnahan, as well as first baseman Dan McGann and pitcher Jack Cronin. This quartet joined McGraw and the Giants for his first game as manager on July 19. At the same time, Joe Kelley, who had also played on the Orioles of the 1890s, signed with John T. Brush to be Cincinnati's playing manager; joining him was center fielder Cy Seymour. In the ten days between McGraw being announced as new manager and his first game he was supposedly trying to sign new players, but was in fact being treated for appendicitis, which would plague him for the rest of the season.<sup>3</sup>

McGraw released seven players upon joining the Giants: Yeager, O'Hagen, Blewett, Wagner, Burke, Sparks, and Evans. Roy Clark received his ten-day notice of release two days before McGraw's signing. In addition to the four Baltimore players, the Giants soon added left fielder George Browne, who had been released by the Phillies, and pitcher Roscoe Miller, who jumped from the Detroit Tigers. Libe Washburn was released on July 25, and Jimmy Jones was suspended and then released after assaulting umpire Bob Emslie on August 6. Bresnahan split time between right field and catcher, while Browne became the regular left fielder. Both were big improvements over the players the Giants had previously tried. McGraw became the new shortstop.

While the Giants lost their first game under McGraw, the team reportedly showed more "life" than they had in some time. After two days off and an exhibition game versus the Orange (N.J.) Athletic Club, they took three out of five games against the Superbas. However, despite strong performances from some of the newcomers, the team kept on struggling, and finished the season in last place.

Injuries continued to plague the Giants, and one led to a challenge to McGraw's authority. Frank Bowerman's foot was hurt by a foul ball on August 2. The next day the team played an exhibition game in Bayonne, New Jersey, and Bowerman didn't suit up. In fact, due to injuries on the Bayonne club, Roger Bresnahan caught all nine innings for both teams. Since Bowerman hadn't asked permission to sit out, McGraw fined him fifty dollars. Bowerman argued that the fine wasn't fair, and he refused to suit up

again until it was rescinded. He threatened to jump to the American League but gave in and was back in uniform on August 7. In his first game behind the plate after the incident, however, he committed three errors and five passed balls. While it is not known if his poor fielding was deliberate, it so disgusted Mathewson that in the ninth inning, after the final two passed balls, Christy began lobbing the ball over the plate, and a three to two deficit quickly became an eight to two loss. Despite all this, and later rumors of signing with the St. Louis Browns, Bowerman remained with the team through the 1907 season.

John T. Brush sold most of his stock in the Reds in August, and a few days later was made managing director of the Giants. He worked with McGraw in trying to obtain new players. Late in the season, with McGraw aiding in the negotiations, he bought Freedman's stock and became president of the Board of Directors. A new era in Giants baseball had begun.

Why didn't McGraw turn around the Giants' fortunes in 1902 despite the influx of new talent? The reason seems to be lack of interest. Apparently, he decided soon after arriving in New York that the Giants wouldn't be able to reach the first division and turned his attention to obtaining players for 1903. In this he was successful; he signed several American Leaguers and the team rallied to second place that year. However, this meant that McGraw was away from the team for long stretches. In all, he missed 20 games due to scouting trips and his appendicitis. The team's record in these games was 8-12, little different from their overall mark after McGraw became manager. As further evidence that McGraw wasn't his usual fighting self, he wasn't ejected from a single game by the umpires with the Giants in 1902. He had promised to contain his temper after coming to New York, and did so. A year later, he was quoted, "Baseball is only fun for me when I'm out front and winning. I don't give a bag of peanuts for the rest of the game."

The Giants continued to be disrupted by injuries as well as rainouts; seven games were postponed between September 9 and October 1. Also, McGraw began the transition from player-manager to bench manager; 1902 was his last season as a regular player, and he played his last game of the season on September 11. This probably took some getting used to for McGraw.

He made one serious personnel misjudgment, releasing Tully Sparks and signing Roscoe Miller. Miller went just 1-8 with a 4.58 ERA. The following

season he won two and lost five with a 4.13 ERA. Meanwhile, Sparks was in the midst of a 12-year major league career which saw him credited with 121 pitching wins and an ERA of 2.79.

The result of the above was that the Giants' record under McGraw was just 25-38-2, although 41 of the games were played at home. But they gained only a half-game on seventh place. By contrast, the Cincinnati Reds after hiring Joe Kelley as manager were 36-26, climbing from seventh to fourth.

## NOTES

<sup>1</sup> *Chicago Journal* as reprinted in the *Sporting Life*, July 12, 1902.

<sup>2</sup> *New York Herald*, July 10, 1902.

<sup>3</sup> Details of the story vary. Some sources claim McGraw had reached an agreement with Freedman by mid-June. Mrs. McGraw—in her biography of her husband—claimed that the jump to New York was part of a plan between McGraw, Freedman, Brush, and Ban Johnson to put an AL team in New York, but she offers no evidence to support this notion.

<sup>4</sup> Stolen base statistics are based on data processed for Retrosheet, although more proofreading will be required before the files are released on the Retrosheet Web site. Only 129 games of 139 played are included, some of them incomplete.

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## THE 1902 STYLE OF PLAY

There was some excitement on the field that year also. The Giants took part in three triple plays during the season, two of them on defense. On June 6, the Pirates made one against the Giants which began with a hotly disputed catch by second baseman Claude Ritchey. June 26 saw the Giants make a sharp 6-4-3-2 triple play against the Phillies in a losing cause. With the bases loaded and no outs, Bean started a routine double play on a ground ball—but when the runner from second tried to score, first baseman O'Hagen snapped the ball to Yeager, who tagged the runner out. That game also featured the Phillies' use of a courtesy runner, a not unusual practice at the time. When their catcher was hit in the head with a pitch, a pinch-runner was used for him, but the catcher went back behind the plate in the next inning. The final triple play came in the first inning of the July 15 game. This one was started by Mathewson when he caught a bunt pop. Another fielding feat of note was performed by Jones on June 30, in another loss, when he became the second major leaguer to throw out three runners at the plate in a game.

The style of play was somewhat looser in 1902 than it is now. Outfielders were able to play more shallow due to the dead ball, yet baserunners heedlessly tried for extra bases. Sometimes it worked out; on August 9, in the second game of a doubleheader, Dan McGann scored from second on a bunt, and four days later McGraw scored from second on a groundout to the shortstop. Roger Bresnahan repeated McGann's feat on September 10, and on August 19, Ginger Beaumont of the Pirates scored the winning run from first base on a single. However, more often this recklessness resulted in lost baserunners. On August 1, the Giants had three runners thrown out at home in just two innings. In the same game that Bresnahan scored from second on a bunt, the Giants had six runners thrown out stealing or trying for an extra base; they lost the game by one run. On October 2, the Beaneaters and Giants combined to lose 12 baserunners via unforced outs; a 13th escaped only due to a

throwing error after he was picked off first. The capper, however, had to be the Pirates' baserunning adventures of July 12. Beaumont made the final out of the third going from second to third on a grounder. Hans Wagner led off the fourth with a triple but was out at home on Kitty Bransfield's grounder to first. Bransfield was then thrown out stealing. Claude Ritchey walked, but was then picked off by Mathewson for the third out. Just to show that they hadn't learned anything, Jimmy Burke led off the fifth with a double, but was nailed trying to stretch it into a triple, the fifth consecutive baserunning error. Luckily the Bucs had a surplus of runners that game; they won 4-0.

Base stealing was a similarly high-risk gambit in 1902. The overall success rate was about 55 percent.<sup>4</sup> Attempts to steal home were fairly common; double steals with runners on first and third and two outs were a popular strategy. The available statistics for the Giants games show 40 attempts to steal home. Of these, 11 were completely successful, four more resulted in a run as well as an out at second (in those days, if one runner was thrown out on a double steal, the other runner got credit for a stolen base), and twice errors resulted in a run scored. The other 23 ended in an out at home. Both the Giants and their opponents had about the same success rate on steals. The Giants stole 152 bases and were thrown out 139 times, while their catchers defended against the steal as follows:

	SB AGAINST	CS AGAINST	SB%
Bowerman	76	81	48.4
Bresnahan	10	11	47.6
Yeager	40	27	59.7
Others	7	5	58.3
Total	133	124	51.8

There was plenty of excitement at the Polo Grounds on September 6. On a day when the Giants gave a gold watch to the groundskeeper Murphy, a fire broke out in the grandstand. Mathewson and McGinnity helped to put it out. Meanwhile, being shorthanded behind the plate, the Giants tried out Jack Robinson, on loan from Bridgeport of the Connecticut State League, where he was a part-time catcher. Five wild pitches/passed balls and four

stolen bases allowed later, he was replaced after seven innings. New York fell to Pittsburgh, 9-3.

Until 1910, a ball thrown into the stands was still in play. The Giants took advantage of this rule on September 29, when Frank Bowerman circled the bases after hitting a routine grounder to Superbas' shortstop Bill Dahlen, who overthrew first.

Bunting was much more common in 1902 than it is now. On September 1, in the second game of a doubleheader, St. Louis took advantage of the weak Giants defense. Five of the first six batters in the second inning bunted, leading to three runs.

In later years, McGraw would disparage the Mathewson-at-first-base experiment, but in fact Matty played several games in the outfield after McGraw took over the club, as did other pitchers; McGinnity even spent a game as the second baseman. This was a common practice due to the small rosters at the time; clubs usually carried no more than 16 players. A table showing outfielder games by position follows.

	LF	CF	RF
Dunn*	1	3	40
Brodie	0	109	0
Jones	50	3	14
Browne	50	0	3
Bresnahan	0	0	27
Jackson	31	1	2
Van Haltren	3	13	8
Clark	2	9	9
O'Hagen	0	3	5
Hendricks	0	0	7
Delahanty	0	0	7
Cronin	0	0	7
Lauder	2	0	2
Wall	0	0	3
Washburn	0	2	1
McDonald	0	0	2
Mathewson	1	0	3
McGinnity*	0	0	4
Thielman	1	2	0
Burke	0	0	2
Callahan	0	0	1
Hartley	1	0	0

\*Dunn and McGinnity each played one more game than shown in the official statistics.

MICHAEL FREIMAN

## 56-Game Hitting Streaks Revisited

In an article in the 1994 *Baseball Research Journal*, Charles Blahous explained a system to determine the probability of various players in various seasons putting together a 56-game hitting streak. I will describe some improvements to Mr. Blahous's method, which I believe result in probabilities that are more accurate and, in almost all cases, lower than the probabilities he found. Also, I will answer what is probably the most interesting question: What is the probability that there would be some player, at some point in the history of major league baseball, who would have a 56-game hitting streak?

Mr. Blahous began by determining the probability of a given player—for example, Lave Cross—getting a hit in a given game. His method was reasonable, but I modified it so that, I hope, it will more accurately reflect the player's chances. During each game, Cross had a limited number of plate appearances in which to attempt to get a hit. For each plate appearance, the likelihood that Cross got a hit is just the ratio of his hits to his plate appearances for the season. The probability of Cross's *not* getting a hit in a given game, is one minus his probability of getting a hit in a given opportunity, to the power of his number of opportunities per game; the probability of getting a hit in the game is one minus the probability of not getting a hit.

Now we have to determine the number of plate appearances that Cross received in a given game. In 1901 for example, Cross had 450 plate appearances in 100 games played, which works out to 4.50 plate appearances per game. This presents something of a problem, as clearly Cross did not have any games during the 1901 season (or any season) in which he had exactly 4.50 plate appearances. We solve this problem by assuming that Cross had at least four plate appearances in each game, adding a fifth one in however

many games are necessary to make the average 4.50. In this case, we assume Cross had four plate appearances in 50 games, and five in the other 50. So to figure out the probability of Cross's having a hit in any one game in 1901, we consider each game to have a 50 percent chance of being a four-plate appearance game and a 50 percent chance of being a five-plate appearance game. Then the probability of Cross's getting a hit in a game in 1901 is just the average of his probability of getting a hit in a four-plate appearance game and his probability of getting a hit in a five-plate appearance game. (In most cases, this does not work out as nicely as in the case of Cross. If a player had 4.77 plate appearances per game, we would have to take a weighted average of his probability of a hit in four-plate appearance games and in five-plate appearance games, with the five-plate appearance games having 77% of the weight.)

Having figured out a player's probability of getting a hit in a given game, Mr. Blahous then determines the probability of the player's having a 56-game hitting streak in a given 56-game span, which is just the probability of a hit in a given game, taken to the 56th power. He then finds the probability of the player's not having a 56-game hitting streak in each of the overlapping 56-game spans making up his season (a player who plays 155 games in a season may be considered to have 100 56-game spans: games 1 through 56, 2 through 57, etc., up to 100 through 155). Mr. Blahous multiplies these probabilities together to find the probability of the player's not having a 56-game streak during the entire season, and subtracts this probability from 1 to find the likelihood that the player would have a 56-game hitting streak at some point during the season.

In this last multiplication lies a subtle but major flaw in Mr. Blahous's method. It is true that we can sometimes find the probability of multiple events all occurring (in this case a player failing to have a 56-game hitting streak in various 56-game spans) by multiplying together their probabilities, but this method works *only* when the events whose probabili-

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ties are being multiplied are unrelated to each other, or, in mathematical terms, when the events are independent. It should be clear that since many of the 56-game spans Blahous examines overlap (for example, games 1 through 56 overlap with games 2 through 57), the probabilities of the player's not having a 56-game hitting streak in these spans are not independent.

To take a more concrete example, suppose there is a player who plays a three-game season and has a 50% chance of getting a hit in any given game. There are eight equally likely possibilities of which games this player can get a hit in (for example, he could get a hit in all three games, no games, just the first game, just the second and third games, etc.). Of these, only three possibilities (hits in the first two games only, the last two games only, or all three games) result in his having a two-game hitting streak. Clearly then, the probability of the player having a two-game hitting streak is  $3/8$ , or  $37\frac{1}{2}\%$ . Yet using Mr. Blahous's method, the probability is found to be  $7/16$ , or  $43\frac{3}{4}\%$ . The difference between  $3/8$  and  $7/16$  may not seem like much, but over the course of a full season, the correct probabilities and those arrived at by Mr. Blahous can differ by a factor of 8 or more.

The method used to correct this problem is somewhat more complicated than Mr. Blahous's method, but it does not use any mathematics beyond basic algebra. First let us define  $p$  as the probability that a player (let's use Joe DiMaggio this time) gets a hit in any given game. Also, let  $q$  equal the probability of DiMaggio's having a 56-game hitting streak in any particular 56-game span. Then  $q$  equals  $p$  to the 56th power. Let us denote by  $D(n)$  the probability that DiMaggio has a 56-game hitting streak at some point during the first  $n$  games of the season. Clearly  $D(0)=D(1)=D(2)=\dots=D(55)=0$ , because it is impossible for DiMaggio to have a 56-game hitting streak before he has played 56 games. Also,  $D(56)=q$ , since in order to have a 56-game hitting streak in the first 56 games, DiMaggio must get a hit in every game.

Now consider the first  $n$  games of the season, where  $n$  is a number greater than 56. In order for DiMaggio to have a 56-game hitting streak in the first  $n$  games, he must either have a 56-game hitting streak in the first  $n-1$  games or have his first 56-game hitting streak in the last 56 games. (Here I am considering streaks of, say, 57 games as two overlapping 56-game streaks.) The probability of a 56-game hitting streak in the first  $n-1$  games is  $D(n-1)$ . In order to have his first 56-game hitting streak in the last 56 games,

DiMaggio must not have a 56-game hitting streak in the first  $n-57$  games (the probability of which is  $1-D(n-57)$ ), then not get a hit in game number  $n-56$  (the probability of which is  $1-p$ ), and then get a hit in each of games  $n-55$  through  $n$  (the probability of which is  $q$ ). Hence the probability that DiMaggio has a 56-game hitting streak in the first  $n$  games is

$$D(n) = D(n-1) + (1-D(n-57))(1-p)q$$

If we want to find the probability of DiMaggio's having a 56-game hitting streak during the whole season, we first find  $D(1)$ , then  $D(2)$ , and continue until we find  $D(g)$ , where  $g$  is the total number of games DiMaggio plays during the entire season. This formula can be implemented without too much trouble on any spreadsheet. (For a given number of games, this formula also reduces to a polynomial in the variable  $p$ , which is easier to use than the recursive formula.)

Okay, now for the good stuff. Table 1 lists the 45 players who have had the best chance to have a 56-game hitting streak in a given season. (The columns list the player's name, year, batting average, hits per plate appearance, probability of getting a hit in any given game, and probability of having a 56-game hitting streak at some point during the season.)

Of these players, a majority played during the nineteenth century, and no player made the list in a season after 1930. DiMaggio did not come close to being on the list; his probability of having a 56-game hitting streak in 1941 was only .01% (1 in 9,545). In fact, 1941 was only DiMaggio's fourth most likely season to put together such a streak, behind 1936, 1939 and 1937. Note that even Duffy, the leader, would have to play for 21 seasons at his 1894 level to have even a 50-50 chance of a 56-game hitting streak.

It is often stated that DiMaggio's 56-game hitting streak is a record that will last forever. However, such statements are rarely accompanied by an explanation of any way the game has changed since 1941 that would preclude the possibility of such a streak. It is true that a 56-game streak is unlikely now, but this analysis shows that it was unlikely in 1941 also (indeed, if such a streak were to have happened at all, it "should" have been before 1941, when the players on the list below were playing). In fact, there have been several instances in the 1990s alone in which a player has had a significantly better probability of having such a streak than DiMaggio had in 1941, including such less-than-legendary players as Lance Johnson in



**Table 1. BEST CHANCES FOR A 56-GAME HIT STREAK IN A SINGLE SEASON**

PLAYER	YEAR	AVG	H/PA	HIT PROB	STREAK PROB
Hugh Duffy	1894	.440	.385	90.8%	3.28% (1 in 31)
Ross Barnes	1876	.429	.404	93.0%	2.93% (1 in 34)
Willie Keeler	1897	.424	.387	90.2%	2.50% (1 in 40)
Tip O'Neill	1887	.435	.393	89.7%	1.84% (1 in 54)
Jesse Burkett	1896	.410	.371	89.4%	1.69% (1 in 59)
Nap Lajoie	1901	.426	.399	89.2%	1.53% (1 in 65)
Fred Dunlap	1884	.412	.387	89.9%	1.42% (1 in 71)
Sam Thompson	1895	.392	.366	88.8%	1.06% (1 in 94)
George Sisler	1922	.420	.376	88.3%	1.04% (1 in 96)
Sam Thompson	1894	.407	.366	89.2%	0.96% (1 in 104)
Ty Cobb	1911	.420	.379	87.8%	0.84% (1 in 119)
Ed Delahanty	1894	.407	.355	88.3%	0.74% (1 in 134)
Jesse Burkett	1895	.409	.352	87.8%	0.71% (1 in 142)
George Sisler	1920	.407	.371	87.2%	0.65% (1 in 154)
Lave Cross	1894	.386	.354	87.8%	0.59% (1 in 170)
Sam Thompson	1893	.370	.338	87.4%	0.54% (1 in 185)
Al Simmons	1925	.387	.364	86.9%	0.52% (1 in 194)
Tuck Turner	1894	.416	.379	88.8%	0.47% (1 in 211)
Bill Terry	1930	.401	.358	86.7%	0.47% (1 in 211)
Willie Keeler	1894	.371	.330	87.1%	0.47% (1 in 215)
Willie Keeler	1898	.385	.358	87.1%	0.46% (1 in 216)
Lefty O'Doul	1929	.398	.347	86.6%	0.44% (1 in 227)
Billy Hamilton	1894	.404	.321	87.0%	0.43% (1 in 231)
Ed Delahanty	1899	.410	.369	86.6%	0.41% (1 in 243)
Willie Keeler	1896	.386	.349	86.9%	0.39% (1 in 255)
Ed Delahanty	1893	.368	.336	86.7%	0.37% (1 in 268)
Pete Browning	1887	.402	.361	86.6%	0.37% (1 in 273)
Rogers Hornsby	1922	.401	.355	86.2%	0.36% (1 in 279)
Ed Delahanty	1895	.404	.336	86.9%	0.35% (1 in 286)
Ty Cobb	1912	.409	.371	86.4%	0.34% (1 in 291)
Paul Hines	1879	.357	.350	87.8%	0.31% (1 in 318)
Chuck Klein	1930	.386	.348	85.7%	0.27% (1 in 364)
Joe Jackson	1911	.408	.363	85.7%	0.25% (1 in 395)
Willie Keeler	1895	.377	.334	86.0%	0.25% (1 in 397)
Steve Brodie	1894	.366	.334	86.1%	0.25% (1 in 398)
Harry Heilmann	1921	.394	.353	85.6%	0.24% (1 in 420)
Rogers Hornsby	1924	.424	.355	85.6%	0.22% (1 in 451)
Hughie Jennings	1896	.401	.347	85.8%	0.22% (1 in 457)
Billy Hamilton	1895	.389	.320	85.9%	0.22% (1 in 464)
Ed Delahanty	1896	.397	.345	85.8%	0.20% (1 in 498)
Jesse Burkett	1901	.376	.336	85.4%	0.19% (1 in 517)
Babe Herman	1930	.393	.345	85.2%	0.19% (1 in 517)
Sam Thompson	1887	.372	.346	85.6%	0.19% (1 in 528)
Heinie Manush	1928	.378	.346	85.0%	0.18% (1 in 567)
Dan Brouthers	1883	.374	.361	86.3%	0.18% (1 in 569)

"Hit Prob" is the probability of a batter getting a hit in a given game.

"Streak Prob" is the probability of a 56-game hitting streak during a season.

1996. So, while the long odds demonstrated by the calculations above show that it is unlikely that there will be a 56-game hitting streak in any given decade, or maybe even any given century, the fact that DiMaggio was able to have a 56-game streak illustrates the fact that such odds can be overcome, if only very rarely. In short, it may be very, very hard to break Joltin' Joe's record, but forever is a long time.

It is interesting to note that a player's having a large number of walks works against his chances to have a long hitting streak, since as far as hitting streaks are concerned, a walk is a missed opportunity to get a hit. Thus Babe Ruth, who until 2001 held the single-season and career records for walks, failed to have even a 1-in-10,000 chance to have a 56-game hitting streak in any season, despite the fact that he batted over .370 six times. Similarly, Ted Williams, in his fabled 1941 season, had a chance of only 1 in 41,058 to have such a long streak, less than one fourth of DiMaggio's likelihood the same year, even though Williams' batting average was 49 points higher than DiMaggio's. The reason for this disparity is that Williams walked 147 times that year, thus "wasting" 147 of his opportunities to get a hit, as compared to 76 for DiMaggio.

In a similar vein, in Table 2 are the 45 most likely players to have a 56-game hitting streak in their careers, making the assumptions that what happens in each season is independent of what happens in any other season and that streaks spread across multiple years don't count.

Though this career list is not as skewed toward the earlier part of baseball history as the single-season list, there is still a dramatic paucity of recent players here. Among the top 45, only Stan Musial, Rod Carew, and Tony Gwynn played in any season after 1948. As before, Babe Ruth and Ted Williams are absent from the list (neither even made the top 100), and Joe DiMaggio just misses (1 in 826). It is also worth noting that for the purpose of hitting streaks it is better to have one ridiculously good season than to be very good over a long period of time, an observation that is illustrated by Hugh Duffy's being more than twice as likely as Ty Cobb to have a 56-game hitting streak at some point in his career, even though everyone would agree that Cobb was better than Duffy at getting hits. Without his monstrous 1894 season, Duffy's probability of a 56-game streak would fall to .15%, or 1 in 660.

Another question you might ask is whether DiMaggio's 56-game streak is the most unlikely hitting streak that anyone has put together in the history

**Table 2. PLAYERS MOST LIKELY TO HAVE A 56-GAME HITTING STREAK DURING THEIR CAREERS**

PLAYER	PROBABILITY
Willie Keeler	4.23% (1 in 24)
Tip O'Neill	3.52% (1 in 28)
Hugh Duffy	3.42% (1 in 29)
Ross Barnes	2.93% (1 in 34)
Sam Thompson	2.73% (1 in 37)
Ed Delahanty	2.20% (1 in 45)
George Sisler	1.93% (1 in 52)
Nap Lajoie	1.89% (1 in 53)
Ty Cobb	1.66% (1 in 60)
Fred Dunlap	1.43% (1 in 70)
Jesse Burkett	1.25% (1 in 80)
Al Simmons	0.91% (1 in 110)
Rogers Hornsby	0.89% (1 in 112)
Billy Hamilton	0.79% (1 in 127)
Bill Terry	0.64% (1 in 156)
Pete Browning	0.63% (1 in 159)
Lave Cross	0.61% (1 in 164)
Lefty O'Doul	0.53% (1 in 190)
Tuck Turner	0.48% (1 in 210)
Cap Anson	0.44% (1 in 226)
Chuck Klein	0.42% (1 in 241)
Harry Heilmann	0.40% (1 in 251)
Joe Jackson	0.39% (1 in 257)
Paul Hines	0.36% (1 in 277)
Dan Brouthers	0.36% (1 in 281)
Paul Waner	0.34% (1 in 295)
Hughie Jennings	0.34% (1 in 298)
Heinie Manush	0.30% (1 in 330)
Steve Brodie	0.27% (1 in 369)
Dave Orr	0.27% (1 in 374)
Babe Herman	0.26% (1 in 384)
Lloyd Waner	0.25% (1 in 408)
Freddy Lindstrom	0.24% (1 in 409)
Jim O'Rourke	0.22% (1 in 454)
Tony Gwynn	0.21% (1 in 478)
Joe Medwick	0.21% (1 in 484)
Fred Clarke	0.20% (1 in 493)
Jack Tobin	0.19% (1 in 530)
Deacon White	0.18% (1 in 545)
Rod Carew	0.18% (1 in 566)
Bobby Lowe	0.15% (1 in 651)
Cal McVey	0.15% (1 in 675)
Tris Speaker	0.15% (1 in 688)
Stan Musial	0.14% (1 in 715)
Roger Connor	0.14% (1 in 717)

Table 3. PROBABILITY OF SOME OTHER STREAKS

PLAYER	YEAR	TYPE OF STREAK	PROBABILITY
Earl Sheely	1926	extra-base hits in 7 consecutive at-bats	1 in 39,703
Walt Dropo	1952	hits in 12 consecutive at-bats	1 in 12,281
Dale Long	1956	home runs in 8 consecutive games	1 in 12,048
Paul Waner	1927	extra-base hits in 14 consecutive games	1 in 11,024

of the major leagues. It appears that it is (at least among streaks of 30 games or more). Other unlikely streaks include Tony Eusebio's 24-game streak in 2000 (there was only a 1 in 7,436 chance that he would have a streak that long that year), Pete Rose's famous 44-game hitting streak in 1978 (1 in 5,159), Rowland Office's 29-game streak in 1976 (1 in 2,136) and Ken Landreaux's 31-gamer in 1980 (1 in 1,918).

Though DiMaggio's streak seems to be the most unlikely hitting streak of the usual variety (at least one hit in the most consecutive games), there are other sorts of offensive streaks that one may consider. The following four streaks were even less likely than DiMaggio's.

The probability listed in Table 3 is the likelihood that the player would have the streak listed in the given year. Amazingly, Earl Sheely's chance of having 7 consecutive extra base hits in 1926 was smaller than Hugh Duffy's chance of having a 115-game hitting streak in 1894!

It is easy to be blown away by the sheer improbability of some of these streaks. However, given the number of players who have played major league baseball, it is inevitable that some extreme long shots would materialize.

One shortcoming in the methodology used here is that it does not take into account the number of plate appearances each player had in each game of the season, but instead assumes that his number of plate appearances per game is almost constant (except for differences of one plate appearance between games to make the averages work out right). The significance of this shortcoming is minimized by using plate appearances instead of at bats as the measure of the number of opportunities a player has to get a hit, since presumably the number of plate appearances a player has in each game varies less over the course of a season than his number of at bats does. To fix this completely would require a list of how many plate appearances

each player had in each game of the season, which is not readily available for all players. This modification would also make the computations involved considerably more complicated, and would make the resulting probabilities somewhat lower.

Finally, if one considers the probability of every major-league player in every season having a 56-game hitting streak, the overall probability of such a streak occurring at some point in the history of the major leagues from 1876 to 2002, using the method I have described, is around 39%. (If you consider National Association players, who are not included in the lists above, as major leaguers, the probability rises to 45%.) So, while one would expect that there would probably not be a 56-game hitting streak in major league history, it is not a great surprise that someone, at some time, would put together such a streak. However, the probability of such a streak occurring in the past 72 years (1931-2002) is a mere 5%, as compared to 36% for the first 55 years of major league play. (The numbers 36% and 5% do not add up to 39% because of the possibility that there would be a 56-game streak in both periods.) Thus the most surprising part of the DiMaggio streak may not be that it happened at all, but that it happened so late in the history of baseball.

#### STATISTICAL SOURCES

The calculations for this article were performed with the data from Sean Lahman's baseball database, which is available at [www.baseball1.com](http://www.baseball1.com). Some data on historical streaks were taken from Retrosheet ([www.retrosheet.org](http://www.retrosheet.org)) and from *The Sporting News Complete Baseball Record Book*. I would also like to thank Pete Palmer for providing data on sacrifice hits in 1894, which were necessary to compute the number of plate appearances for players in that year, and for clearing up some statistical issues.

## Lou vs. Babe in Life and in "Pride of the Yankees"

**B**abe Ruth and Lou Gehrig formed the most feared batting twosome in the history of baseball. Batting third and fourth, they served as the heart of the great Yankee teams that won three World Series between 1927 and 1933. Despite their heroics, Ruth and Gehrig played a different type of baseball, led decidedly different lives, and had different personalities. In this essay I would like to explore how these differences were expressed and perceived during their actual careers and in the cinematic biography of Lou Gehrig, *Pride of the Yankees*.

The friction between Ruth and Gehrig in their baseball careers developed primarily from their different personalities, their divergent public images, and from the influence of other people on their relationship. Given all of these factors, their feud seems inevitable and regrettable. By contrast, in *Pride of the Yankees* the two stars are not separated by a feud but only by their personalities and the images that result from them.

There are two related facts about Lou Gehrig's career and life: he was a great player overshadowed by the even greater and more flamboyant Babe Ruth, and he achieved immortality for his consecutive game skein and his tragic physical deterioration and death from amyotrophic lateral sclerosis, the crippling disease which is now identified by his name.

As a player, Gehrig was known for the regularity of his prodigious productivity. He hit 493 home runs, compiled a lifetime BA of .340, averaged 146 RBI and 138 runs scored for 13 consecutive seasons, was MVP in 1927 and 1936, won the Triple Crown in 1934, and batted .361 for seven World Series. Despite these amazing accomplishments, Gehrig's career performance and personality were eclipsed by the mighty

Ruth; Lou's homers did not soar in the same majestic way as the Babe's, and he did not swagger and seek publicity. As Lou remarked about himself: "I'm not a headline guy . . . I'm just a guy who's in there every day. The fellow that follows Babe in the batting order. When Babe's turn at bat is over, . . . the fans are still talking about him when I come up. If I stood on my head at the plate, nobody'd pay any attention."

While Ruth hit monumental homers, indulged all of his appetites, earned fines, and caused his physical collapse, Gehrig was the "Iron Man," a monument to clean living and steadiness, who stated in 1939 that "I've been in the business seventeen years and I don't think there were a half dozen nights . . . that I didn't average ten hours sleep every night." Fittingly, his last manager, Joe McCarthy, eulogized Gehrig as a "perfect gentleman."

An integral part of the relationship between Ruth and Gehrig was the feud which resulted in their not speaking for years. There have been a number of speculations about the reasons for their hostility, but the most plausible explanation is that Lou's mother, an outspoken and domineering woman, did not like Claire, Babe's showgirl second wife. Mom Gehrig used to allow Dorothy, Babe's adopted daughter from his first marriage, to visit her. On one occasion she noted that Claire dressed Dorothy like a nine-year-old tomboy, while she always dressed her own daughter, Julia, in the finest attire. Later, Gehrig's mother told another Yankees wife about Claire's favoring Julia over Dorothy, and this got back to Claire, who relayed it to Babe, who told Lou to tell his mother to "mind her own goddamned business!" As Robinson points out, Lou was so attached to his mother that Ruth's outburst ended their friendship: "The relationship between Babe and Lou, teetering for years over their basic differences in temperament—Lou's frugality, introversion, and need for privacy versus the Babe's prodigality, extroversion, and constant need for acclaim—chilled permanently."

Lou's consecutive game streak of 2,130 games (broken by Ripken in 1996) became the stuff of legend for

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his physical stamina and endurance. From its beginning on June 2, 1925, to its conclusion on May 2, 1939, Lou suffered severe lumbago, broke every one of his fingers, and had 17 assorted fractures of his hands which healed by themselves. As a result of his injuries, Lou remarked: "I don't think anybody else will try it again, they won't be that crazy. I am interested in it, the fans seem to be . . . enough to make me believe I ought to go as far as I can with it."

But Ruth, as a result of his break with Gehrig, gave a more scathing assessment of the renowned streak in 1937, two years after his retirement: "This Iron Man stuff is just baloney . . . I think he's making one of the worst mistakes a ball player can make. The guy ought to learn to sit on the bench and rest. They're not going to pay off on how many games he's played in a row."

Lou responded without attacking Babe personally, but he was hurt by the belittling of his record: "I'm not stupid enough to play if my value to the club is endangered. I honestly believe that I've never been tired on the field." Lou persevered until he could no longer play and was forced to relinquish his place in the lineup to Babe Dahlgren.

Ironically, it was with his premature retirement and death that Gehrig received his most enduring glory. Tristram Coffin has depicted Gehrig as the tragic warrior—hero cut down in his prime who achieves a sentimentalized heroic mythos. When he appeared in uniform for Lou Gehrig Appreciation Day on July 4, 1939, he finally and fully emerged from the shadow of Babe Ruth to gain his own measure of acceptance and adulation. As Jack Sher has stated: "Lou had the one elusive thing he had always wanted most—the wholehearted love of baseball fans and people everywhere in the world." In his typically overheated fashion, Paul Gallico captured the sentiment and poignancy of Lou's farewell when 62,000 fans assembled to pay tribute to the dying athlete: "On July 4, 1939, there took place the most tragic and touching scenes ever enacted on a baseball diamond—the funeral services for Henry Louis Gehrig. Lou Gehrig attended them in person."

Members of the famed 1927 Yankee team—Lazzeri, Meusel, Combs, Penneck, Koenig, Bengough, Dugan, Hoyt, and Pipgras—joined with the current Yankee team and Mayor Fiorello LaGuardia, Postmaster General James Farley, and Lou's parents to celebrate his retirement. Manager Joe McCarthy began by paying tribute to Lou for his brilliant play, endurance, and team spirit. Then Sid Mercer, a veteran sports-

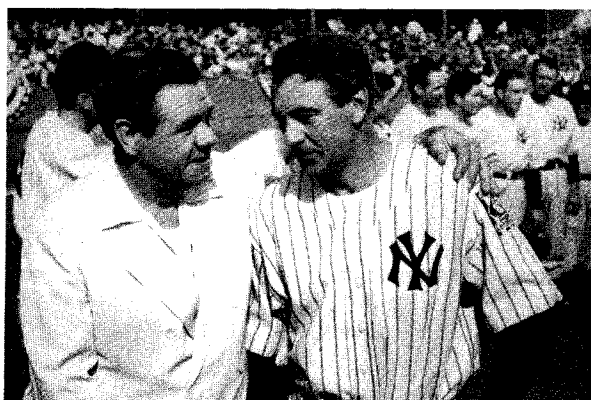
writer serving as master of ceremonies, presented Lou with gifts from the Yankees, fans, and the New York Giants. On the trophy given to him by his teammates there was inscribed a poem by sportswriter John Kieran. The poem depicted Lou as a warrior who always came through in the game, and, more important, was facing the most serious human test with graceful heroism. At this point in the ceremony, Lou was unable to convey his thanks, so he told Mercer to speak for him.

Then the fans began to chant, "We want Gehrig, we want Gehrig," and Lou dabbed his eyes with his hankie, blew his nose, and moved unsteadily to the mike. McCarthy had warned Babe Dahlgren to be ready to catch Lou if he began to falter. But Lou clearly delivered his famous farewell speech, which has been unsarcastically referred to as baseball's equivalent to the Gettysburg Address. He began with the seemingly improbable statement that he considered himself "the luckiest man on the face of the earth." To prove this, he listed all the people and blessings he had to be thankful for, including the fans, Ruppert, Barrow, Huggins, McCarthy, his teammates, his parents, and, finally, his beloved wife, "who has been a tower of strength and shown more courage than you dreamed existed . . . So I close in saying that I might have had a bad break, but I have an awful lot to live for."

At the conclusion of the speech, the crowd let out a tremendous roar, and Babe Ruth, the feud now forgotten, rushed forward and threw his arms around Lou's neck, creating an image which became the picture of the year. However, Bill Dickey, the famed Yankee catcher, claimed that this hug was one-sided on the Babe's part because Lou "never forgave him." Nevertheless, in his autobiography, Ruth described the effect of his response to Lou's speech in a different manner. He said he would never forget that day because "Lou spoke as I never thought I'd hear a man speak in a ball park. Every word he said plainly came from his heart, and [in] the . . . crowd . . . there wasn't a dry eye anywhere. . . . [W]hen he said 'I consider myself the luckiest man in the world,' I couldn't stand it any longer. I went over to him and put my arm around him, and though I tried to cheer him up, I could not keep from crying."

Lou Gehrig died two years later at the age of 39 on June 2, 1941.

One year after his death, *Pride of the Yankees*, the story of Gehrig's life, was made, starring Gary Cooper as Lou, Teresa Wright as Eleanor, and Walter Brennan



*Babe Ruth with Gary Cooper, who portrayed Gehrig in *Pride of the Yankees*. (top). Cooper was nominated for Best Actor, one of five Oscar nominations the movie garnered. At bottom, *The Babe* is pictured giving a batting tip to a young Lou Gehrig.*

as the sportswriter Sam Blake. The script was taken from a story by Paul Gallico, and the editor was Daniel Mandell, who received an Academy Award for his work. Although this film became the most successful sports movie up to 1942, it almost was never made. When the producer Sam Goldwyn first heard its plot, he thought it would be box office poison. But then he saw a news clip of Lou's farewell speech and cried profusely before agreeing to make the movie. For Goldwyn, who had immigrated to the United States at the age of 13, alone and penniless, *Pride of the Yankees* presented a "poignant fable of perseverance and humility, qualities that . . . [he] . . . admired and believed were firmly rooted in the America he loved." As the shy hero, Gary Cooper, who had just won the Academy Award for his role as another unassuming national hero in *Sergeant York* (1941), effectively provided the image of the dignified, deferential, and enduring Gehrig.

*Pride of the Yankees* concerns Gehrig's rise to baseball prominence, his love for Eleanor, his relationship to his immigrant parents, his illness and death, and his relationship with Babe Ruth. It is this last aspect that I will concentrate on, showing how the film presents the rivalry between the two great Yankees in the form of their different personalities, as depicted by the antithetical acting styles of Cooper and Babe Ruth, who plays himself as a loud, bumptious, well-liked, fun-loving, ebullient, and phenomenon. In his scenes he bursts into action and penetrates and dominates our vision, forcing us to concentrate on him. As Robinson states, although Ruth looked like a "truant from an 'Our Gang Comedy' . . . the Babe gave the movie hearty validity." Erickson praises the role as his best, made even more ingratiating by his "full-faced smile," an insight which I will emphasize in my analysis of the film.

*Pride of the Yankees* begins with an epigraph by Damon Runyon which equates Lou's heroism with the simple doggedness and bravery exhibited by American soldiers in battle. Befitting its wartime release in 1942, the movie is dedicated to showing that Gehrig's quiet, soldierly personality, herculean work ethic, and heroic acceptance of death are more commendable than Ruth's oversized mythos. In order to create this image, it was necessary to depict Ruth as an inflated ego who is more interested in promoting himself and satisfying his appetites. Ruth emerges as a media-savvy superstar, while Lou exemplifies more traditional and reputable qualities.

The relationship between Ruth and Gehrig as future superstar teammates is ironically introduced at the outset when young Lou tries to bribe his way into a sandlot game by offering the captain a Babe Ruth card. The urchin sneers at the "rookie" card, but lets Lou in the game anyway. Lou smashes a long drive through a window and is dragged home by a cop to his parents, who disapprove of his ball playing. This scene shows the difference in the ages of Gehrig, who is only a boy, and Ruth, who is already in the big leagues. Also, although Lou initially attempts to use Ruth's stature as a big leaguer to gain entrance into the game, he subsequently hits a homer and earns his way through his own proficiency.

When Lou attends Columbia University, he breaks another window with a tremendous blast which lands in the office of the football coach, who is talking to the reporter/scout Sam Blake. Blake is a cross between Paul Krichell, famed Yankee scout, and Fred Lieb, reporter and friend of Gehrig. Blake writes that Lou should be considered the "Babe Ruth of Columbia," and he convinces Lou to sign with the Yankees and give up his parentally imposed engineering aspirations.

Before his first game with the Yankees, Lou enters the empty locker room alone; sheepishly and admiringly he looks at the great names on the locker tags. When most of his teammates enter together shortly thereafter, Lou attempts to say hello by lifting his arm in greeting, but they do not pay attention to him as he sits way off in the corner. Then the Babe bursts in chomping on a hot dog, tugs at the shirt of one teammate, and pulls off the hat of another. The room is immediately galvanized by Ruth's magnetic presence, and one of his teammates asks him if the homer he hit yesterday was 38 or 39. The Babe roars, "I don't know. I'll hit 'em, and you count 'em." Lou sits on his stool lacing his spikes and smiling from ear to ear like a kid in a candy store.

Gehrig's childlike behavior continues when he steps on the field and is awed by cavernous Yankee Stadium. The Babe is playing pepper, and the ball gets by him and rolls to Lou, who picks it up and then freezes as he looks at Ruth. Ruth coaxes him twice to "give me the ball, son," as if talking to a child. Later, when Lou is told to bat for Pipp, he runs out of the dugout and slips on the bats, earning the nickname "Tanglefoot." When Lou falls down, Babe is right there, looming behind him in the dugout and laughing at this awkward rookie.

After the game, the Yankees go to a crowded restau-

rant. The Babe marches up to where the meat is being prepared on a spit and orders steak, smothered in pork chops and mushrooms. His face is as big and meaty as the food he orders. By contrast, Lou arrives quietly with Sam and allows the writer to suggest fish for dinner. This scene demonstrates their respective appetites: Ruth rushes to the food and demands a gargantuan order, while Lou is almost ascetic, accepting the waiter's biblical order of fish. The Babe's moon face looms like a planet dominating the events revolving around him, but Lou is sheepish and retiring, unable and unwilling to make the demands and exert the control that Ruth does.

When the Yankees travel by train, Ruth quickly becomes the center of attraction again. Miller Huggins asks if the Babe made the train, and then we see him striding down the aisle wearing a new straw hat. He muscles his way into the card game, warning everyone that this is his fifth straw hat and if anyone ruins it he will smash his teeth. Nevertheless, his teammates quickly pass the hat around after Babe removes it. Everyone takes a chomp out of the brim, and when it gets to Lou, the ringleader tells him if he wants to be one of the guys he will take a bite. Lou takes two for good measure, but as he does so the other culprits scatter and Ruth catches him at it.

In this episode the Babe emerges as the clown prince who, like Falstaff, is not only humorous himself but excites humor in others. The other players love to rib him because he is a great guy. They include Lou in the game only to make him the patsy caught in the act by the looming Babe, who grabs him. Ironically, the joke on Ruth involves biting chunks out of his hat, a parody of his own appetites. Hank Hammond (Dan Duryea), a sneering, cynical reporter, ends the sequence by mocking Lou's naiveté and dullness, but Sam defends Lou's character. He argues that Gehrig's steadiness is exciting; Lou creates no scandal, does his job and nothing else. He creates "fun" by playing well, and the fans like him for his dedication.

This running argument between the reporters serves, as Edelman has remarked, as the movie's substitute for the real-life feud between the two players. Hammond continually mocks Gehrig as "too good to be true," while Blake defends Gehrig's steadiness. They serve as the journalistic chorus who cue the audience to see Gehrig as more honest and commendable than Ruth. The rivalry reaches a climax in the hospital scene with the sick boy, who parallels Johnny Sylvester, the injured boy whom the Babe comforted

by giving him a ball and hitting a homer. The scene is constructed on the opposition between Ruth's and Gehrig's styles. Hank has arranged for the Babe to appear in a charitable guise with the reporters and photographers ready to report on his kindness. The signal is given, and on cue Ruth goes into action, checking to see if the cameras are rolling. Bill Dickey, playing himself, and Gehrig bow their heads uneasily as they recognize Ruth's display of meretricious showmanship. By contrast, Lou waits until everyone is gone to approach the boy, who cajoles him into promising two homers. The only other person witnessing this scene is Sam, who had hidden behind the door after everyone left. During the game, the Babe hits his homer, and Lou fulfills his promise to knock two home runs, but he makes much less of a fuss about his feat than Ruth does.

When the Yanks win the World Series, they erupt in bedlam on the train. The Babe runs wild, ripping clothes and hats; at one point his big moonface bursts into a close-up as he rushes to the front of the club car to order six hot dogs. This scene provides another example of his pushing aggressively and appetitively forward to declare his meaty presence. By contrast, Lou's celebration is more subdued and of shorter duration, as he runs off in the middle of the festivities to propose to Eleanor.

On the day that Lou retires, Babe, dressed in civvies, steps forward to embrace Lou before his speech, which reverses the order of events on the real "Lou Gehrig Appreciation Day." When Lou begins his famous speech, we see Babe's huge moon face in the left-hand corner framed by the various microphones. But as Lou continues, Babe's face, the looming planet that has overshadowed Lou's career and personality throughout the movie, disappears, finally eclipsed by Lou's heroism concerning his crippling disease. At the conclusion of his speech, he begins to walk off the diamond, and Babe, reduced to being a fan, applauds as he passes by. We follow Lou's march toward his interment in the dugout, the shadowy place of death. As he recedes, Lou gets smaller and smaller; his body disappears, but his mythos as the warrior cut down in his prime begins.

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## The Evolution of World Series Scheduling

In the early years of World Series play, game schedules were not nearly as standardized as today's format. Back then, a coin toss decided the site of the opening game as well as a possible seventh game. The order of games hosted by each league's pennant winner varied each year. And as late as 1956, the games were often played on consecutive days without any respite for travel or rest.

The four primary elements of today's World Series scheduling format have been in place since 1960 following a six-decade evolution. These four primary elements are:

- Seven-game series, winner needing four victories
- 2-3-2 format of alternating game sets between cities
- Site of the first game alternates between leagues each year
- Travel days after the second and fifth games

Since the first three elements were established within the first quarter-century of World Series play, the interesting facets surrounding their development have been masked by history. The fourth element, travel days, took more years to evolve from their intermittent use into a fixed arrangement.

**SEVEN-GAME SERIES** Of the four major elements, the 4-of-7 game format was settled upon first, in 1905. Except for three years from 1919 to 1921 when a 5-of-9 game series was conducted, this scheduling format has endured unchanged to today.

Because the first modern World Series in 1903 was privately arranged, the Boston and Pittsburgh owners

opted for a lengthy 5-of-9 game format to generate the most gate receipts possible. After the New York Giants refused to play Boston in a post-season series between pennant winners in 1904, New York owner John Brush proposed in early 1905 a set of official rules for future World Series play to be conducted under the supervision of the National Commission.

The "Brush Rules," adopted by both leagues in mid-February 1905, stipulated that "seven games shall constitute a complete series" and "the clubs shall continue to play each day according to the authorized schedule until one of them has won four games."<sup>1</sup>

Exactly what inspired Brush to include a 4-of-7 game format is unclear. Brush seemed to merely adopt a post-season format he was familiar with, that of the Temple Cup series conducted from 1894 to 1897 between the first- and second-place finishers in the National League.

The 4-of-7 game format was followed for 14 years until 1919, when the National Commission decided to lengthen the World Series to a 5-of-9 game format, ostensibly to respond to a greater demand for tickets to the World Series. August Herrmann, chairman of the commission and president of the Cincinnati Reds (bound for the National League pennant that year) stated, "The recommendation had been made for no other reason than to benefit the public by permitting a larger number of persons to see at least one of the games."<sup>2</sup>

Another reason advanced for the change in series format was that the National Commission had cut back the regular season in 1919 from 154 games to 140 games. "Now Herrmann is sorry and, with the approval and support of [Ban] Johnson, he plans to make up the loss by stretching the world series over a longer period," the *New York Times* commented in an editorial.<sup>3</sup>

The owners approved the longer World Series schedule on September 11. The 5-of-9 game format seemed doomed from the beginning, though, as the change coincided with the Black Sox scandal in that year's World Series between the Reds and the Chicago

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White Sox. Judge Landis, installed as the first baseball commissioner following the Black Sox scandal, then assumed control of the World Series. Immediately following the last game of the 1921 World Series, Landis issued a statement that he would move to reinstate the 4-of-7 game format for the World Series.

"This will be done in the belief that it is very generally accepted that the ideal world championship is decided by the winning of four games, as was the rule prior to 1919," Landis articulated. "A five-game series, the championship to be awarded the club winning three victories, is too short for a fair test. On the other hand, the present lengthy series overtaxes the patience of the public."<sup>4</sup>

Landis also mentioned a concern with public reaction to the "financial returns" generated by the 1921 World Series, which generated record gate receipts and higher player and owner shares than any previous World Series. With the longer 5-of-9 game series creating such a financial bonanza, Landis may well have thought this situation could engender another scandal like the 1919 one. In any event, why retain a series structure associated with a scandal when another better alternative (the 4-of-7 format) was readily available?

The reversion to the 4-of-7 game format was approved in December 1921. Beginning with the 1922 World Series, the 4-of-7 game format has lasted eight decades to the present day.

**2-3-2 GAME FORMAT** While the Brush Rules established the seven-game series convention, there was little specificity for precisely how the seven games should be arranged until the now-standard 2-3-2 format was adopted for the 1925 World Series.

The Brush Rules provided for a very general formula: "Three games shall be scheduled in each of the cities of the contesting clubs. The Commission shall determine by lot where the first three games shall be played." Therefore, in the early World Series schedules, only the first six games were affixed sites ahead of time. The site of the seventh and deciding game, if one was necessary, was not predetermined.<sup>5</sup>

If a seventh game was necessary, the Brush Rules furnished the principle that "the Commission shall determine the city in which the game is to be played." Brush may have worded this clause intentionally to provide for a neutral site for the seventh game, using the term "the city" rather than the phrase "which of the two cities." In any event, the possibility of a neutral

site for the seventh game was swiftly discarded after a negative reaction to the concept. In practice, a coin toss between owners of the contesting teams was used to determine the site of the seventh game.<sup>6</sup>

While the Brush Rules stipulated that the sites of the first three games were to be determined "by lot," the National Commission had discretion regarding the next three games as long as the six games were equally divided between the two cities. By 1909, the National Commission was using the following two general principles to create the format of each year's World Series schedule:

- When the contesting clubs were located in the same city or within close proximity by train, the games would alternate between the two cities.
- Otherwise, the first four games were played in sets of two in each city, then alternated between cities for the next two games.

These general principles are not readily discernible from simply looking at actual World Series play, because tie games and special situations surrounding rainouts often altered the original schedule. Of the first 14 World Series played under the 4-of-7 game format, only seven were completed as originally scheduled. Research into the actual initial World Series schedules, as summarized in the accompanying table, reveals the above general principles to World Series scheduling in the early years of the event.

After the resumption of the 4-of-7 game format in 1922 following the ill-fated 5-of-9 game experiment from 1919 to 1921, these principles were again employed for the 1922 and 1923 World Series. With the Giants and Yankees engaged in an intra-city series in both years, the home team for each game alternated between the two teams (the teams alternated last at bats for the games in 1922, all of which were played at the Polo Grounds; in 1923, the games alternated between the Polo Grounds and newly built Yankee Stadium).

When the Washington Senators won the American League pennant in 1924 to meet the New York Giants in the World Series, Landis deviated from the accepted general principles of World Series scheduling. Landis adopted a new 2-3-1 format instead of the 2-2-1-1 format that had previously been used when teams were not located proximate to each other. Landis acted on his own, according to *The Sporting News*

account of the meeting, as Landis "delegated himself as the advisory council of the major leagues, inviting neither President Heydler of the National League nor President Johnson of the American League."<sup>7</sup>

In the 16 4-of-7 game series before 1924, a seventh game had only been required twice—in 1909 and 1912. All other World Series ended in less than the maximum number of games. Traditionally, the coin toss to determine the site of the seventh game occurred before the sixth game of the 4-of-7 game series.

In 1909 American League president Johnson won the coin flip between league presidents on October 13 and chose Detroit to be the site of the seventh game. In 1912 following the completion of the fifth non-tie game, the coin toss was conducted between opposing team managers, John McGraw and Jake Stahl; the toss was won by Red Sox manager Stahl.<sup>8</sup>

This pattern was broken in the 1924 World Series, when McGraw wanted the coin toss before the fifth game in New York. Since the Giants and Senators had split the first four games, the Giants already knew they needed to go to Washington for a sixth game; McGraw wanted to know if the team might need to play the last two games on the road at Washington. McGraw lost the coin toss, and the Giants packed for two games in Washington. Although the Giants won the fifth game in New York, they lost both games in Washington.<sup>9</sup>

After the 1924 series was over, Landis concluded that the seventh game should be fixed on the initial World Series schedule (at the same site as the sixth game) rather than be both unplanned and determined by a coin toss. That December, Brooklyn president Charlie Ebbets proposed the following change to the World Series rules:

*For 1925, game 1, 2, 6, and 7 shall be played in the city of the pennant-winning club of the National League and games 3, 4, 5 in the city of the pennant-winning club of the American League, then reverse annually thereafter.*<sup>10</sup>

In a memo with the proposal, Ebbets argued that the change would: (1) make an even break of all the details every two years, (2) better suit the convenience of patrons, (3) eliminate adverse criticism which frequently results from the toss of a coin, and (4) allow the clubs to print and sell tickets for the seventh game in advance.

After both leagues approved the change in World Series format, the 1925 World Series established the 2-3-2 format that has survived intact to the present day. That is, except for special circumstances during World War II, which emulated a radical change in format used during World War I.

In 1918 due to the wartime travel restrictions of World War I that had truncated the regular season at Labor Day, the National Commission arranged the World Series to require minimal travel. The commission scheduled the first three dates in Chicago and the final four dates in Boston. In these exigent circumstances, the Brush Rules were disregarded. It was also the first time that a seventh game had been prescheduled before the World Series commenced.<sup>11</sup>

There was also special scheduling for the World Series in 1943 and 1945, when the 3-4 format used in 1918 was employed to respond to wartime travel restrictions.<sup>12</sup>

The special 3-4 scheduling would have applied in 1944 as well had either Detroit or New York won the tight American League pennant race to supply the World Series competition for the St. Louis Cardinals (who won the National League pennant by 14 games). Since the St. Louis Browns copped the American League pennant that year, and all games were played at the same site, Sportsman's Park, the home team for each game alternated between the Browns and Cardinals.<sup>13</sup>

**FIRST GAME SITE ALTERNATION** A coin toss for the site of the seventh game was not the only time this selection mechanism was employed. Before 1925, a coin toss was also used to determine the site of the first game of the World Series each year. For the 1925 World Series, Landis established the alternating pattern of the first game in the National League city one year and at the American League city the next year.

Until 1910 the National Commission determined the site of the first game either "by lot," as the Brush Rules called for, or used its discretion to pick the site.

For example in 1908, the National League pennant was still in doubt at the end of the regular season due to the confusion over "Merkle's boner" in a New York Giants victory over Chicago on September 23, which was to be replayed after the season. The National Commission determined, "If the New Yorks win, the first game will be played with Detroit here on Saturday, and if Chicago wins they will play in Detroit on Saturday and in Chicago on Sunday."<sup>14</sup>

From 1910 on, a coin toss was usually conducted between the owners of the two pennant-winning teams after each had clinched first place in its league. The coin toss was conducted with minimal fanfare.

"The question in what city will the first game be played will be decided as usual by the toss of a coin by the two club presidents," the *Boston Herald* outlined the process before the 1912 World Series. A meeting was held on September 25 at the home of New York owner John Brush, where the three members of the National Commission and the owners of the Boston Red Sox and New York Giants met for the coin toss. "Advantage of opening on home grounds was lost to Boston when at the toss of a coin by Mr. Johnson, President Brush of New York called 'tails' and President McAleer of Boston chose 'heads.' The coin fell 'tails,' " the *Boston Herald* reported.<sup>15</sup>

In 1915 the process was similar but in more fashionable surroundings. "When Joseph J. Lannin, owner of the Boston American League team, called 'tails' as a shiny, new quarter went spinning through the air at the Waldorf-Astoria today, he lost every chance at starting the world series in Boston," the *Boston Herald* reported. "William Baker, owner of the Philadelphia National League club, maintained an absolute silence and when the quarter landed on the heavy Persian rug it was 'heads up.' "<sup>16</sup>

During the period 1910-1924, when the coin toss between pennant winners was the convention, the National League received the first-game honor more often than the American League did, as nine of the 15 World Series during that period began in the National League city. Actually, the National League won only eight coin tosses during those 15 years.

There were just 14 coin tosses during the 15-year period 1910-1924, because there was no coin toss in 1916. Also, following the 1920 coin toss, the winner had to forsake first-game honors.

When Brooklyn won the NL pennant in 1916, the Boston Red Sox were automatically awarded the first game site since Ebbets Field wasn't ready to host the World Series. Brooklyn had clinched the pennant late in the season, so the club needed several days to erect increased seating for the World Series.<sup>17</sup>

In 1920 although Brooklyn lost the coin toss to Cleveland, the World Series opened in Brooklyn after preparations to enlarge League Park would not be completed in time for the first game of the World Series. Cleveland owner Jim Dunn had requested that the World Series start two days later when construc-

tion was done. The Commission denied the request and reversed the order of the original schedule.<sup>18</sup>

When Landis moved to establish a fixed system for the site of a possible seventh game beginning with the 1925 World Series, he also established the principle of alternating home field advantage between the leagues each year. The Landis rule had the National League with home field in the odd years and the American League in the even years. This system worked well for ten years, until the National League pennant race in 1935 created complications.

In 1935 three teams went down to the wire in the National League. The New York Giants seemed to have the pennant wrapped up by the Fourth of July holiday, but St. Louis and Chicago didn't give up. Chicago won 21 straight games in September to overtake both the Cardinals and the Giants, clinching the pennant only two days before the season's end.

The Chicago winning streak began on September 4 near the start of a long home stand at Wrigley Field and continued for three weeks. On September 14, the Cubs moved into first place and never relinquished it. The winning streak culminated on September 27 in a doubleheader victory by Chicago over St. Louis to clinch the pennant.

On September 17, two weeks before the end of the season, Landis had announced a deviation from the 1925 rule for the site of the first game of the World Series.

"Normally, the 1935 series would open in the city winning the National League championship, but because of a large convention in St. Louis and the complicated championship race in the senior major league, it was decided to stage the opening in the American League city," the *New York Times* reported.<sup>19</sup>

Detroit, the American League champion, was given the home field advantage for the 1935 World Series, even though it was the National League's turn. This turn of events created a new rule, the American League in the odd years and the National League in the even years.

This system worked quite well for the next 60 years, until the 1994 World Series was cancelled during a year when the National League would have had the home field advantage. In 1995, the rule reverted to the original Landis rule, the National League in odd years and the American League in even years.

**TRAVEL DAYS AFTER SECOND AND FIFTH GAMES** The off day following the second and fifth games was established by 1960 to remove the uncertainty of the World Series time span. Two reasons for this change were television scheduling and eliminating the possibility of giving a pitching advantage to one of the World Series teams.

Before 1957, World Series games were normally scheduled on consecutive days, so that the seven-game series would be played in seven days. There were two elements that could affect this scheduling pattern to create an off day:

*Where professional baseball was not legally permitted on Sunday.*

*When a lengthy train trip was necessary to travel between cities.*

Sunday scheduling was a persistent concern in the early years of the World Series, as there was a Sunday open date in the World Series in 1909 and every year from 1911 to 1918. Before World War I, only teams located west of the Allegheny Mountains could legally play on Sunday. In 1918 Washington, D.C., was the first eastern city in the major leagues to obtain legal permission for Sunday baseball, followed by New York in 1919, Massachusetts in 1929, and Pennsylvania in 1934.

While Sundays were a challenge in the early years of World Series play, travel days were not, since prior to World War I the World Series was generally played between cities located either both in the West or both in the East. The first designated travel day included on the World Series calendar was in 1910, when the Philadelphia Athletics played the Chicago Cubs.

After the first two games in Philadelphia on Monday and Tuesday, a "train trip from Philadelphia to Chicago" was planned for Wednesday to play the next two games in Chicago on Thursday and Friday. No travel days were planned after that, however. "After a fast run in a special train from Chicago to Philadelphia," the teams were to play the fifth game on Saturday in Philadelphia; then "another hurried run in a special train will be made from Philadelphia to Chicago" to play the sixth game on Sunday in Chicago.<sup>20</sup>

As it turned out, the hurried travel schedule planned after the fourth game didn't occur, because the fourth game on Friday, October 21, was rained out. Postponed games were normally simply moved ahead, but for the 1910 World Series there was a special rule

for postponements: "except that in any event the game scheduled for Sunday October 23 is to be played in Chicago." The Sunday game in Chicago was important because it also had an impact on player compensation. "If none of the first games' receipts equals those of the Sunday game in Chicago, the players' proportionate share shall be made on the basis of the Sunday game in Chicago."<sup>21</sup>

The fourth game of the 1910 World Series was played in Chicago on Saturday, October 22. Due to the Sunday exception that year, the fifth game scheduled for Philadelphia was instead played in Chicago on Sunday, October 23, where the A's won the World Series with a 7-2 win over the Cubs. Philadelphia could then take a lazy train trip back east.

Travel days were used on an intermittent basis in the World Series before World War II when an Eastern team played a Western team, such as the 1931 World Series when the Philadelphia Athletics played the St. Louis Cardinals.

After World War II, from 1947 to 1956, no travel days were included in the World Series schedule, so the World Series in each of those years was played on consecutive days. Even when Cleveland played both Boston in 1948 and New York in 1954, there were no travel dates on the World Series calendar. The teams traveled by train overnight between the cities in 1948 to reach their destinations in the morning hours of their next scheduled games. The Giants did fly to Cleveland after the second game of the 1954 World Series. As late as 1957, the New York Yankees took the train to Milwaukee after the second game in New York, arriving there by noon on the off day; the Braves had flown back to Milwaukee.<sup>22</sup>

The 1956 World Series was the last one played on consecutive days without a break. For the next three years, franchise relocations to western cities impacted World Series scheduling. In 1957 and 1958 the Milwaukee Braves, five years removed from Boston, played the New York Yankees and created the longest stretch of travel between World Series cities at the time. Then in 1959, the Los Angeles Dodgers, only two years removed from Brooklyn, won the National League pennant, requiring a lengthy trip from Chicago, the site of the American League champion.

The last World Series schedule to occur with the potential to go either way—with travel days or played on consecutive days—was in 1957. "If it is to be an East-West series—the Yankees versus the Braves, for example—days off for travel will be scheduled follow-

IT RAIN TONIGHT AND FRIDAY.  
TEMPERATURE  
on today, 12 to 16. (High 16.)  
(Low) 12.  
on Friday, 10 to 14. (High 14.)  
on Saturday, 10 to 14. (High 14.)  
on Sunday, 10 to 14. (High 14.)

# BROOKLYN DAILY EAGLE WORLD SERIES EXTRA

7 EDITION \*\* \*\* \*\* NEW YORK CITY, THURSDAY, OCTOBER 15, 1925. 34 PAGES. THREE CENTS

## RATES WIN WORLD CHAMPIONSHIP; TAKE FINAL GAME FROM SENATORS, 9-7

**ININGS**  
**ONE PLAYED**  
**DRIVING RAIN**

High Hit Homer  
Pirates Then  
Daily.

On, 14-Homer Char-  
acter, which was on in the  
Piratesburg the de-  
the World's Series  
Piratesburg then

**SCORE BY ININGS**  
SENATORS 0 0 0 0 0 0 0 0 0 0 0 0 0  
PIRATES 0 0 0 0 0 0 0 0 0 0 0 0 0

**The Box Score**  
**WASHINGTON**

	AB.	R.	H.	O.	A.	E.
Rice, c. f.	5	2	2	3	0	0
S. Harris, 2b.	5	0	0	3	2	0
Gaslin, l. f.	4	2	1	2	0	0
J. Harris, r. f.	3	1	1	4	2	0
Judge, 1b.	3	1	1	6	0	0
Stange, 3b.	4	0	1	0	0	0
Packinpaugh, a. c.	3	1	1	0	2	2
Ruel, c.	4	0	0	6	0	0
Johnson, p.	4	0	0	0	3	0
<b>Totals</b>	<b>35</b>	<b>7</b>	<b>7</b>	<b>27</b>	<b>9</b>	<b>2</b>

**PITTSBURG**

	AB.	R.	H.	O.	A.	E.
Moore, 2b.	4	3	1	2	0	1
Carey, c. f.	5	4	4	4	0	0
Caylor, r. f.	4	0	2	4	0	1
Barnhart, l. f.	5	0	1	2	0	0
Fraynor, 3b.	4	0	1	1	3	0
Wright, a. c.	4	0	1	1	3	0
Melania, 1b.	4	0	2	7	0	0
Smith, c.	4	0	1	4	0	0
Yde,	0	1	0	0	0	0
Aldridge, p.	0	0	0	0	0	0
Morrison, p.	1	1	1	0	0	0
<b>Totals</b>	<b>35</b>	<b>9</b>	<b>13</b>	<b>27</b>	<b>9</b>	<b>2</b>

### Four Racing Results at Jamaica 3 Men Killed in Subway Accident



### GERMANY ACCEPTS SECURITY COMPACT TO OUTLAW WARS

Agreement Reached at Lo-  
sanna to Be Signed by  
Germany, France and Bel-  
gium, With Great Britain  
and Italy as Guarantors.  
France Gains Right to Pro-  
tect Her Eastern Allies.  
Poland and Czechoslo-  
vakia, if Attacked.

### LATE NEWS

#### FATAL CRASH IN INTERBORO TUBE AT 110TH ST. AND LEXINGTON AVE.

Police Headquarters has been notified that three persons  
were injured in a subway accident at 110th St. and  
Lexington ave., Manhattan, about 1:40 p.m. today.  
The three men lying on the ground were taken to  
Hospitals.

#### Green Re-elected President of A. F. of L.

Atlantic City, N. J., Oct. 15 (AP)—William Green of  
Cincinnati, Ohio, this afternoon was unanimously re-elected  
president of the American Federation of Labor.

#### Minor Arrested in \$55,000 Insurance Fraud

William J. Turner of Norfolk, Ky., a well known law-  
yer, was today charged with having been killed in an explosion  
in a room at the Hotel in January, 1924, and whose family  
collected, it is alleged, \$55,000 in insurance, was arrested this  
afternoon when he arrived here on the steamship *Frederick*.

#### Two Found Slain Near Moody Auto

Knoxville, Tenn., Oct. 15 (AP)—A blood-spattered auto-  
mobile found along a highway six miles north of Knoxville today  
led to the finding of the bodies of a man and a woman  
murder, both believed to have been murdered.

### B. L. GERRY'S SARMAICUS WINS OCEANUS STAKES

By W. C. VREELAND.  
(Special to The Eagle.)  
Atlantic City, Oct. 15.—B. L. Gerry's Sarmicus won the Oceanus Stakes, a 100-yard race, at Atlantic City today. The winner of the Oceanus Stakes, valued at \$1,000 in the morning, won the race in 1:10. The race was a 100-yard race, and the winner was Sarmicus, owned by B. L. Gerry. The race was a 100-yard race, and the winner was Sarmicus, owned by B. L. Gerry. The race was a 100-yard race, and the winner was Sarmicus, owned by B. L. Gerry.

The 1925 World Series was the first year that the now standard 2-3-2 game format was used for scheduling. In the 2-3-2 format, the location of a seventh and deciding game was pre-determined prior to the beginning of the World Series rather than decided by a coin toss in the midst of the World Series, as had been the previous scheduling convention.

ing the second and fifth contests," the *New York Times* reported. "If it is to be East-East or West-West, action will be continuous, no off days, unless forced by bad weather."<sup>23</sup>

By early September 1958, both the New York Yankees and the Milwaukee Braves had their respective league pennants well in hand. Travel days were planned for the World Series even though, when the schedule was announced on September 9, Pittsburgh still had a possibility to win the NL pennant.<sup>24</sup>

The 1960 World Series was the first to have travel dates without the need for them. Plane travel was then the rule rather than train travel, so Commissioner Ford Frick decided to automatically include travel days in the 1960 World Series when New York met

Pittsburgh. "Open dates have been arranged between games 2 and 3 and between games 5 and 6," the 1960 announcement read. Travel dates had officially been transformed into open dates.<sup>25</sup>

Standard open dates after the second and fifth games had two benefits. Television benefited greatly with an automatic open date on Friday after the first game on Wednesday and the second game on Thursday, since the World Series was now guaranteed to be played on both Saturday and Sunday. With the third and fourth games played on the weekend, a large audience was sure to tune in to increase ratings. This, in turn, increased the amount of money the networks were willing to pay major league baseball to televise the World Series.

Automatic travel days also eliminated the need to use ace pitchers with minimal rest between starts, in an attempt to have them start three games within seven days, an inequity produced when travel days were not included in the World Series schedule. If the World Series combatants were located distant from each other to necessitate travel days in the train-transportation era, such as New York and Milwaukee in 1957, then a team could expect an ace pitcher to start three World Series games with decent rest if the series went to its seven-game limit. Lou Burdette started and won three games for the Braves in the 1957 World Series. Travel days arguably greatly assisted the Braves in winning the 1957 World Series. Either Warren Spahn or Burdette could have pitched three games, and the Braves didn't need to go beyond Bob Buhl.

Alternatively, if the World Series teams were located close to each other to enable the series to be contested on consecutive days, such as New York and Brooklyn in 1956, then an ace pitcher would have to pitch on two days rest between starts, in order to have three turns on the mound in a seven-game series. Otherwise, with the standard three-day rest, an ace pitcher could get in only two possible games as a starter. When the two-day rest strategy was used, the pitcher typically wasn't successful. There are numerous examples, including Johnny Sain in 1948, Don Newcombe in 1949, and Bob Lemon in 1954. In 1952, Brooklyn's Rookie of the Year reliever Joe Black did pitch three World Series games in seven days, hurling the first, fourth, and seventh games. Black won just the opening game, though, while taking the loss in the other two games. Pitching depth thus had a more significant impact on winning the World Series when no travel dates were included than when the schedule did include travel dates.

We don't know how a travel day policy would have been implemented in the jet-transportation era. Except for a New York-Los Angeles or similar East Coast-West Coast matchup, where travel days would be desirable, it is arguable that all other matchups would not have necessitated travel dates due to the ease of plane transportation between cities. In this context, where most World Series would have been played on consecutive days, we may not have witnessed several fabled pitching feats in the 1960s without the automatic open dates in the World Series schedule. Sandy Koufax came back on two days rest after the fifth game to win the 1965 World Series for the Dodgers, while Mickey Lolich did similarly for the

Tigers in the 1968 World Series to win his third game that year. In 1967, Bob Gibson also won three games, all complete (all previous three-game winners in a seven-game series were achieved in World Series having travel dates).

Lolich's third win in 1968 marked the end of the World Series as exclusive post-season play. With the playoff era ushered in for 1969, the World Series schedule was now intertwined with that of the League Championship Series.

## NOTES

<sup>1</sup>*New York Times*, February 18, 1905; *The Sporting News*, February 25, 1905; Dean Sullivan, *Early Innings: A Documentary History of Baseball, 1825-1908*. Lincoln: Univ. of Nebraska Press, 1995: 275-276.

<sup>2</sup>*New York Times*, September 3, 1919.

<sup>3</sup>*New York Times*, September 8, 1919.

<sup>4</sup>*New York Times*, October 14, 1921.

<sup>5</sup>*Early Innings*: 276.

<sup>6</sup>*Ibid.*

<sup>7</sup>*The Sporting News*, September 25, 1924.

<sup>8</sup>*New York Times*, October 14, 1909 and October 15, 1912.

<sup>9</sup>*New York Times*, October 9, 1924.

<sup>10</sup>*New York Times*, December 11, 1924.

<sup>11</sup>*New York Times*, August 27, 1918.

<sup>12</sup>*New York Times*, Sept. 12, 1943 and Sept. 28, 1945.

<sup>13</sup>*New York Times*, August 29, 1944.

<sup>14</sup>*New York Times*, October 8, 1908.

<sup>15</sup>*Boston Herald*, September 25 and 26, 1912.

<sup>16</sup>*Boston Herald*, October 3, 1915.

<sup>17</sup>*New York Times*, October 4, 1916.

<sup>18</sup>*New York Times*, September 28 and 29, 1920.

<sup>19</sup>*New York Times*, September 18, 1935.

<sup>20</sup>*New York Times*, October 4, 1910.

<sup>21</sup>*Ibid.*

<sup>22</sup>*New York Times*, October 1, 1954, and October 4, 1957.

<sup>23</sup>*New York Times*, September 10, 1957.

<sup>24</sup>*New York Times*, September 8, 1958, and the *Milwaukee Journal*, September 9, 1958.

<sup>25</sup>*New York Times*, September 14, 1960.

Table 1. ORIGINAL SCHEDULES OF THE WORLD SERIES, 1905-1925

YEAR	SUN	MON	TUES	WED	THURS	FRI	SAT	SUN	MON	TUES	WED	THURS	FRI	SAT	SUN	MON
1905	**	1-A	2-N	3-A	4-N	5-A	6-N									
1906	**		1-N	2-A	3-N	4-A	5-N	6-A								
1907	**		1-N	2-N	3-A	4-A	5-A	6-N								
1908				*	*		1-A	2-N	3-N	4-A	5-A	6-N				
1909	*				*	1-N	2-N	S	3-A	4-A	5-N	6-A				
1910	*						*		1-A	2-A	T	3-N	4-N	5-A	6-N	
1911	*				*		1-N	S	2-A	3-N	4-A	5-N	6-A			
1912	**		1-N	2-A	3-N	4-A	5-N	S	6-A							
1913	**		1-N	2-A	3-N	4-A	5-N	S	6-A							
1914			*	*		1-A	2-A	S	3-N	4-N	5-A	6-N				
1915					**	1-N	2-N	S	3-A	4-A	5-N	6-A				
1916				*	*		1-A	S	2-A	3-N	4-N	5-A	6-N			
1917					**		1-A	2-A	T	3-N	4-N	T	5-A	T	S	6-N
1918		**		1-N	2-N	3-N	T	S	4-A	5-A	6-A	7-A				
1919	*	*		1-N	2-N	3-A	4-A	5-A	6-N	7-N	8-A					
1920	**		1-N	2-N	3-N	T	4-A	5-A	6-A	7-A	T	8-N				
1921	**			1-N	2-A	3-N	4-A	5-N	6-A	7-N	8-A					
1922	**			1-N	2-A	3-N	4-A	5-N	6-A							
1923	**			1-A	2-N	3-A	4-N	5-A	6-N							
1924		*	*				1-A	2-A	3-N	4-N	5-N	6-A				
1925	**			1-N	2-N	3-A	4-A	5-A	6-N	7-N						

Numbers represent the order of games in each year's World Series

Letters represent which league had home field (A=American, N=National)

\*\* indicates that both leagues ended the regular season on the same day

\* indicates that just one league ended the regular season on that day



## Batting Average by Count and Pitch Type

### Fact and Fallacy

**M**any baseball coaches, sportswriters, and television announcers have commented on the fact that batting averages are low with two strikes or high with less than two strikes. For example, Thomas Boswell, in an article he wrote criticizing Ted Williams' theory that you should take the first pitch, noted that "an analysis of nearly 100 of the top hitters in baseball suggests that the best [hitters] bat about 70 points higher and slug 130 points higher" on 0-0.<sup>1</sup> From this Boswell claims that batters "should be swinging at a lot more first pitches," that Ted Williams was a "dumbo," and that "most hitters are idiots." Boswell defends his attack on Ted Williams by writing "Sorry, big guy. . . you made the call, so you've got to take the fall."

Thomas Boswell is not alone. During both the 2000 and 2001 World Series, Tim McCarver, broadcasting for Fox Sports, used a graphic showing Major League hitters bat over 100 points lower with two strikes. Mr. McCarver was surprised by the poor performance of major league hitters in two-strike situations.

Andrew Torrez, in his book *Off Base: New Insights into an Old Game*,<sup>2</sup> notes that the "average major leaguer hit .187 with two strikes, which is more reminiscent of the average pitcher." Torrez goes on to argue that taking 1-1 makes sense for a "free-swinger" because if he would have swung at a pitch out of the zone, the count would have gone 1-2, "where he's almost certain to be out." Torrez suggests that this subtle insight separates good managers from mediocre ones.

Finally, *USA Today* noted, "All pitchers, virtually

without exception, hold hitters to a lower batting average when the ball-strike count favors the pitcher. Batting averages tend to be about 140 points lower when the ball is put in play on a pitcher's count, as compared to a hitter's count."<sup>3</sup>

We recently tested whether these same trends hold in college baseball by calculating the batting average (AVG) and slugging percentage (SLG) by count for Stanford Baseball (both Stanford and opponents batting) from 1998 through 2001.<sup>4</sup> These results are illustrated in Figure 1.

As you can see, both SLG and AVG are much lower with two strikes. For example, with less than two strikes, AVG and SLG are around .353 and .563, respectively. With two strikes, AVG and SLG drop to .183 and .276, respectively. In other words, batters hit 170 points lower and slugged 287 points lower with two strikes than they did with less than two strikes. The overall AVG and SLG for our data set was .273 and .429, respectively. Therefore, batters hit 83 points higher and slugged 134 points higher on 0-0. That is amazing! Or, is it?

#### THE FALLACY

What is going on? Could it be that batters simply "lose it" with two strikes, as Boswell, McCarver, and Torrez conclude? Alternatively, could something else cause batting and slugging averages to be 170 and 287 points lower with two strikes?

The answer to this dilemma lies in the definition of batting average and the fact that it was not created to be used within a plate appearance. Batting average is the number of hits divided by the number of at-bats. There are *four* ways to have an at-bat with less than two strikes: hit, error, fielder's choice, or batted out (the ball has to be put in play). However, there are *five* ways to have an at-bat with two strikes: hit, error, fielder's choice, batted out, *and* strikeout (the ball is either put in play or the batter strikes out). Given that it is impossible to strike out with less than two strikes, many more at-bats occur with two strikes. In fact, based on Stanford's database, 47% of all ABs occur

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Figure 1. BATTING AND SLUGGING AVERAGE BY COUNT

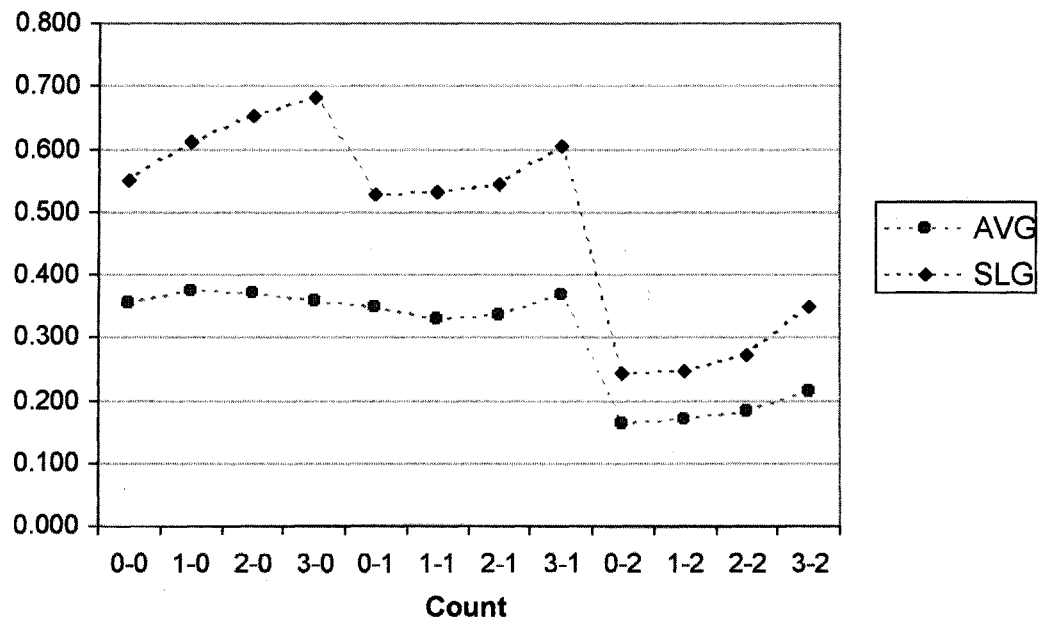


Figure 2. DEMONSTRATION OF BATTING AVERAGE BY COUNT FALLACY

Strikes	308
Fouls	35
Balls	405
Hits	79
Errors	8
Batted Outs	165
<b>Total</b>	<b>1000</b>

*Less Than Two Strikes*

$$ABs = Hits(79) + Errors(8) + Batted Outs(165) = 252$$

$$BA = Hits(79) \div ABs(252) = .313$$

*Two Strikes*

$$ABs = Hits(79) + Errors(8) + Batted Outs(165) + Strikes(308) = 560$$

$$BA = Hits(79) \div ABs(560) = .141$$

with two strikes. The remainder are more or less evenly split between the 0 and 1 strike counts. Dividing by the larger number of at-bats that occur with two strikes will produce lower AVG and SLG—even for the exact same batting performance. Let's look at an example (based on Stanford data) consisting of 1,000 pitches. Assume the 1,000 pitches break out as shown in Figure 2.

As shown above, if these 1,000 pitches were thrown with less than two strikes, they would have produced 252 at-bats and a batting average of .313 (79/252). Conversely, if these pitches were thrown with two strikes they would have produced 560 at-bats because the 308 strikes result in strikeouts! The corresponding batting average is only .141—a difference of 172 points. A SLG example would produce similar results. In the interest of space, we will focus on AVG for the remainder of this paper. However, all our arguments apply with equal force to SLG.<sup>5</sup>

In both cases, batters got 79 hits out of 1,000 pitches or, more precisely, 79 hits out of 595 strikes (.132). Although batters are performing just as well with two strikes, their batting average is much lower. Therefore, it is a fallacy to conclude that batters perform poorly with two strikes simply because their batting average is low.

AVG in total is comprised of two-strike and non-two strike counts. Therefore, it is not at all surprising that AVGs are much higher with 0 or 1 strikes (e.g., 0-0) than they are in total. Therefore, you cannot conclude, as Boswell did, that batters “should be swinging at a lot more first pitches.”

## THE REALITY

Given that batting average by count is misleading, how should we measure batters' performance by count? How does the chance of getting a hit vary by count? By pitch type?

**PERFORMANCE BY COUNT** To answer this question, we looked at every pitch thrown for a *strike* and measured how well batters handled those pitches.<sup>6</sup> For example, based on Stanford's database of over 76,000 pitches and 20,500 plate appearances, representing four seasons (1998-2001), batters took 49% of all 0-0 pitches thrown for a strike. They swung and missed 11%, fouled off 17%, put 15% in play for an out, and 8% in play for a hit. Figure 3 displays the number of hits per strike (HPS<sup>TM</sup>) for every count.<sup>7</sup>

As you can see, the chance of getting a hit with two

strikes is at least as high as every other count, except for 0-2. In fact, HPS for the two-strike counts is .123, while it is only .099 for the non-two strike counts.<sup>8</sup> That is a difference of .024. *Batters are more likely to get a hit (off a pitch thrown for strike) with two strikes than other counts.* This is exactly the opposite relationship as suggested by AVG by count.

Given that batting average by count does not measure the chance the batter will get a hit, what does it tell us? Batting average by count with less than two strikes is simply the fraction of balls put in play that went for hits. Given enough data, we could think of this as the chance of getting a hit given the ball is put in play. Conversely, batting average with two strikes is the probability of a hit given the batter puts the ball in play or strikes out. Clearly, this will be lower than the chance of a hit if the ball is put in play, since no batter gets a hit when they strike out. Notice from Figure 1 that batting average with less than two strikes (or the probability of a hit if the ball is put in play) changes slightly by count for the non-two strike counts. Let's call this the batters' In Play AVG<sup>TM</sup> or IPA<sup>TM</sup> for short.<sup>9</sup> We can calculate this statistic for two strikes by throwing out all the strikeouts and just looking at hits divided by balls put in play. We do this in Figure 4.

Batters have a .353 chance getting a hit if they put the ball in play with less than two strikes and a .326 chance if they put it in play with two strikes.<sup>10</sup> This difference of .027 is a real effect. Batters are less likely to get a hit if they put the ball in play with two strikes. However, it is hardly the dramatic effect suggested by AVG.<sup>11</sup>

We should also highlight a point that should be clear by now. Batting average that is calculated based on whether the batter is ahead, behind, or even in the count will also be misleading. For example, the batter is behind in the count on 0-1, 0-2, and 1-2. Therefore, his batting average when behind will be low because it will be dominated by 0-2 and 1-2. To see this we refer back to Figure 1. Based on our Stanford data set, batters hit .313 when ahead (1-0, 2-0, 3-0, 2-1, 3-1, 3-2) in the count, .285 when even (0-0, 1-1, 2-2), and .218 when behind (0-1, 0-2, 1-2). Is this surprising? We hope not, since this is just another form of the batting average by count fallacy. Figure 5 presents batters' AVG and IPA when they are ahead, behind, and even in count.

As you can see, hitting performance is not as poor when behind in the count as AVG suggests.

How about the chance of getting a hit if batters are

Figure 3. HOW WELL BATTERS HANDLE PITCHES THROWN FOR A STRIKE (HITS PER STRIKE OR HPS)

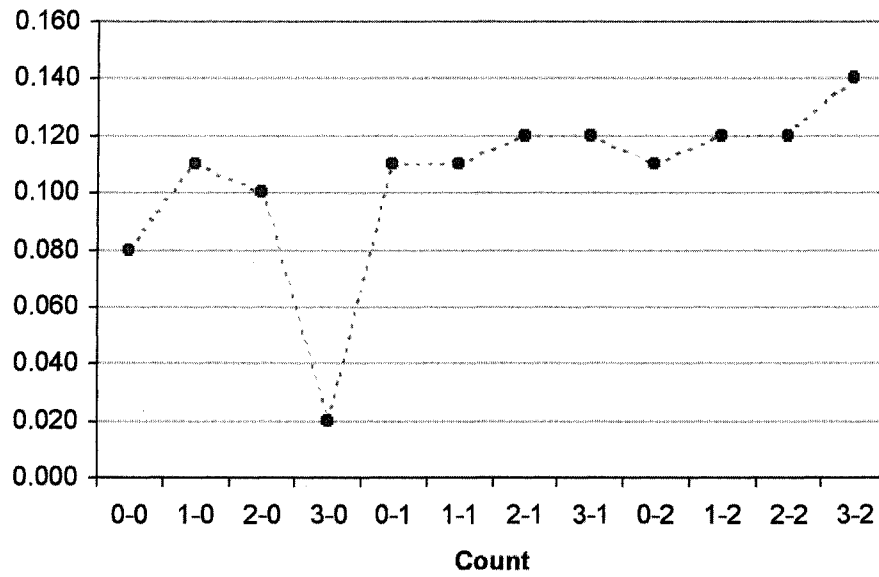


Figure 4. PROBABILITY OF A HIT GIVEN THE BALL IS PUT IN PLAY (IPA)

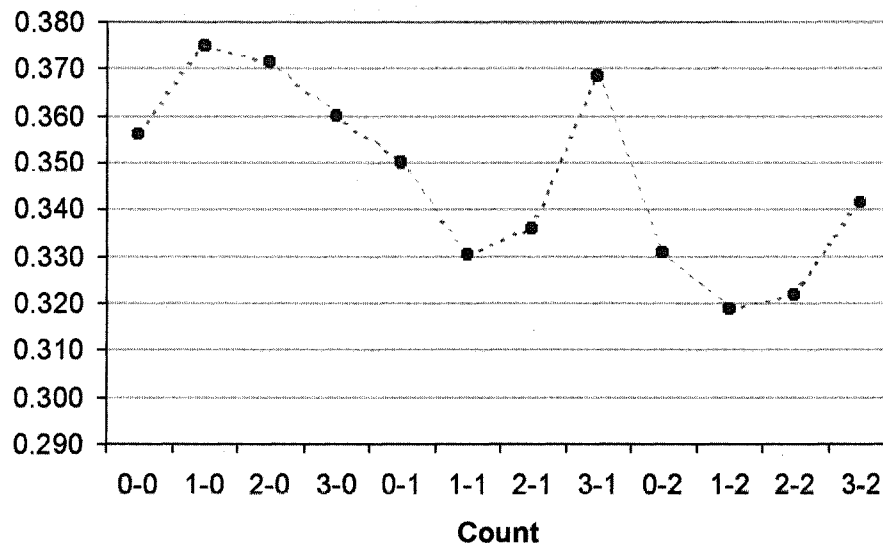


Figure 5. AVG AND IPA WHEN THE BATTER IS AHEAD, BEHIND, OR EVEN IN THE COUNT

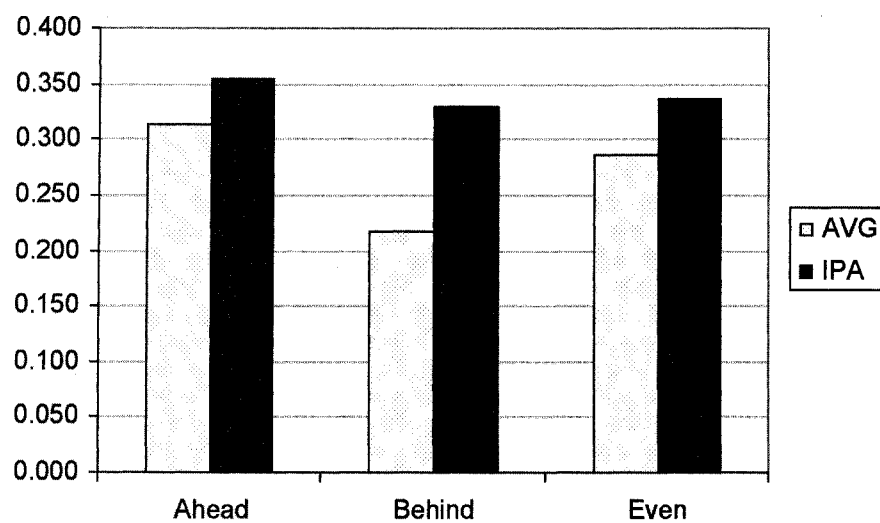
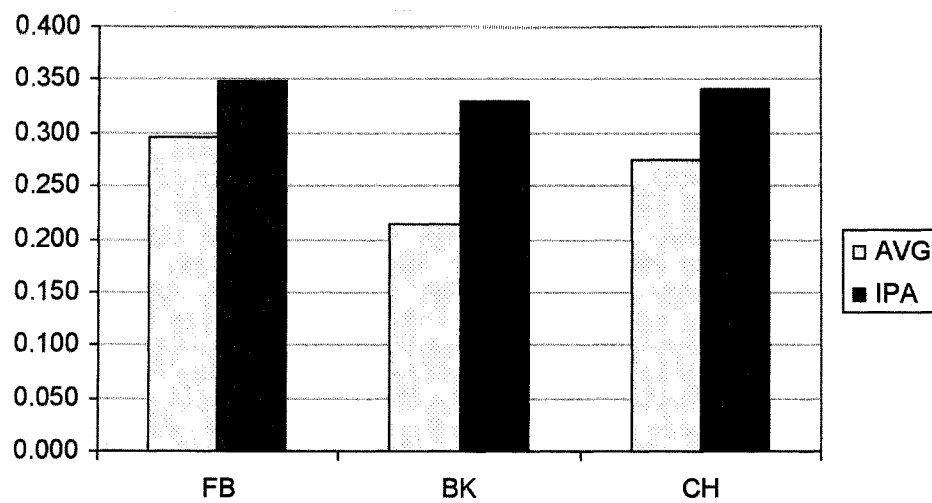


Figure 6. AVG AND IPA BY PITCH TYPE



thrown a strike when they are ahead, behind, or even in the count? Batters' HPS was .113, .114, and .094. Batters are just as likely to get a hit off a pitch thrown for a strike when they are ahead in the count as when they are behind! AVG by count has misled us, again.

**PERFORMANCE BY PITCH TYPE** Breaking down batting average by pitch type is also misleading because fewer fastballs and more off-speed pitches are thrown with two strikes. Therefore, batters will have a higher batting average off fastballs than off-speed pitches—even if they are just as likely to get a hit off of either pitch type. For example, based on our Stanford data set, pitchers throw 66% fastballs with less than two strikes and 56% fastballs with two strikes. In Figure 6 we present batters' AVG and IPA by pitch type.

Notice the large decrease in AVG for BK, as we suspected. The difference between IPAs is much lower. There is a slight decrease for BK, which we would expect—batters should be less likely to get a hit off a BK put in play than a FB. However, the large difference in AVG between pitch types is primarily related to the problem of looking at batting average by count.

In addition, batters' HPS for FB, BK, and CHs were .110, .087, and .106, respectively. In other words, batters were just as likely to get a hit off a CH thrown for a strike as a FB. The chance of getting a hit off a BK thrown for a strike is a bit lower.

**CONCLUSION** Batting average and slugging percentage by count are highly misleading, because they imply that batters perform poorly with two strikes or incredibly well with less than two strikes. The low (high) AVG and SLG numbers with two strikes (less than two strikes) are simply defects of these statistics. This problem even affects AVG and SLG by pitch type. Unfortunately, these defects are not widely appreciated and many within baseball have been misled. Thomas Boswell has even gone so far as to call the game's greatest hitter a "dumbo" based on this misunderstanding. We are afraid there is only one dumbo here and it is not Ted Williams.

The defects of AVG and SLG by count are corrected by looking at batters' HPS and IPA statistics. HPS demonstrates that batters are more likely to get a hit off a strike with two strikes than other counts. IPA highlights that batters are less likely to get a hit if they put the ball in play with two strikes or off a BK. However, this effect is much smaller than what is implied by batting average.

## NOTES

<sup>1</sup>Thomas Boswell, "And the First Shall Be Best—The numbers prove Ted Williams Wrong: You Should Swing at the First Pitch," *Inside Sports*, 15, August 1993:, 58-65.

<sup>2</sup>Andrew Torrez, *Off Base: New Insights into an Old Game*. Emoryville, CA: Woodford Publishing, 1999.

<sup>3</sup>Matt Olkin, "Keep Running Until They Tag You," *USA Today.com*, March 28, 2001.

<sup>4</sup>We do not claim that AVG and SLG are the best way to measure hitting performance.

<sup>5</sup>One real effect that shows up in SLG by count is the fact that batters average more bases per hit with fewer strikes and more balls—to see this simply divide SLG by AVG, which yields bases per hit (BPH™). BPH is a trademark of Competitive Edge Decision Systems.

<sup>6</sup>We performed this analysis using Competitive Edge Decision Systems' ChartMine™ software system and their HandleIT™ statistic. Stanford has used ChartMine since 1998. See [www.edgedec.com](http://www.edgedec.com) for more detail.

<sup>7</sup>HPS is a trademark of Competitive Edge Decision Systems.

<sup>8</sup>Weighted average based on the number of strikes thrown on each count.

<sup>9</sup>In Play AVG and IPA are trademarks of Competitive Edge Decision Systems.

<sup>10</sup>Weighted average based on the number of balls put in play on each count.

<sup>11</sup>Thanks to an anonymous referee of this paper, we understand that this trend holds in MLB as well.

CHRISTOPHER DEVINE

## Harry Wright

### The Most Important Baseball Figure of the 19th Century?

In 1999 the Society for American Baseball Research completed a poll that ranked Harry Wright as the third largest contributor to 19th-century baseball. Though hindsight is often said to be 20/20, that is questionable in this case. In fact, the 19th-century perception of that question was quite different. In a November 1893 edition of *The Sporting News*, Wright was noted as the most remarkable figure in baseball. His only competition, according to the paper, was neither Henry Chadwick nor Albert Spalding—named first and second in the SABR poll—but longtime player and manager Adrian “Cap” Anson. It is likely that 20th-century achievements and events have changed opinions over time. Chadwick, recognized as America’s original sportswriter, worked in a profession that has gained quite a bit of status in the past 100 years. Sports writing has since been applauded for its use in popularizing baseball across the country with an in-depth coverage of the game, a style originated by Chadwick. This, coupled with his effect on the changes and developments in rules, has given him credit as a founding father of the game. Though Wright failed in brief attempts at sports writing—“Composition is out of my line,”<sup>1</sup> he explained—he was as knowledgeable of, and as instrumental in the changing of the rulebook as Chadwick. Contemporary sources rank them as equals in this regard.

In Spalding’s case, much of the reverence for him may have come as a result of his 1911 book *America’s National Game*, regarded as the first history on baseball. This, of course, is a 20th-century achievement, not a contribution to 19th-century baseball. He was also a phenomenal player and powerful but ruthless magnate who established the successful Spalding sporting goods company. Wright tried his hand at the same venture but failed. However, he himself was an acclaimed ballplayer and a powerful executive of sorts in his own right. While with the Cincinnati Red

Stockings, he served as captain, center fielder, general manager, traveling secretary, and public relations department—simultaneously.

Harry Wright, if bested by those men in their areas of expertise, was not truly eclipsed. And as an all-around pioneer, he may have no match.

Though Harry Wright is not a household name today, he was a living legend for several decades in the 19th-century. Newspapers frequently referred to him as either “The Father of Baseball” or “The Father of Professional Baseball.” “You make me feel awful old when you say I am looked upon as the ‘father of the game,’” he wrote to National League President William Hulbert. “You must look farther and I am certain you will fare better. There is a gentleman in New York, Henry Chadwick Esq. who is richly deserving of the title ‘father of the game,’ for ‘the pen is mighty’ and he has invariably used it for the best interests of the game, as we all know.”<sup>2</sup>

Wright’s ready deference to Chadwick on the matter was graciously returned. After Wright’s death in 1895, Chadwick regarded him as the “most widely known, best respected and most popular of the exponents and representatives of professional baseball, of which he was virtually the founder.”<sup>3</sup> Wright’s former employer, Col. John I. Rogers, who he was often at odds with, went so far as to note, “It has truly been said, that so identified was he with the progress and popularity of the game that its history is his biography.”<sup>4</sup>

Though the complimentary attitudes of these men may have been heightened in the wake of Wright’s death, it was not uncommon to find similar ones during his baseball days. “Harry Wright is undoubtedly the best known baseball man in the country,”<sup>5</sup> declared one paper in 1886.

So how did Wright achieve this status? “Uncle Harry,” as he was often called, was both a visionary and a pioneer. He created or helped implement numerous changes now integrally linked with the baseball fabric, including the doubleheader, platooning of fielders, batting practice, farm system, pitching rotation, sacrificing of outs for runs, positioning of

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fielders according to hitters' tendencies, fielders backing up one another, throwing ahead of runners, relieving of the pitcher in order to upset the batter's timing, first patented scorecard, and the modern baseball uniform including short knickers and stockings. Due to some of these creations and his way of managing, Wright is often credited as "the originator of teamwork."

Additionally, he was instrumental in the implementation of: spring training, bunting, the hit and run, hand signals for both batters and runners, long-term contracts, and endorsements, when he lent his name to a turnstile manufacturer in the 1880s.

Of course, each of these carries a story that could be expounded upon further. For example, Wright's development of the idea of a farm system was done quite unintentionally. During his tenure as manager of the Providence Grays, in 1883, for the first time in baseball, Wright put together a second nine for the club with the intention of developing major league talent. The second nine, the Providence Reserves, would play on the Providence grounds when their parent team was away. Skeptics argued that this system would saturate the already lean Providence fan base and negatively impact economic concerns. But ultimately Wright was lauded for his brainchild and recognized as "the father of the 'reserve club' system."<sup>6</sup> Though the idea of a farm system was not truly implemented until Branch Rickey took it on decades later, Wright's status as the inventor of the concept is a matter of record.

Despite his heralded successes, Wright suffered his failures as well, most notably the "flat bat." Wright developed the idea of a new flattened club in 1880 as a way of lessening the frequency of foul balls and danger to catchers while enhancing scientific batting across the league. Wright's timing was bad, though, for there was a widespread call for offense at the time. As a result, the National League owners initially opposed the idea, but in 1885 they admitted its usage, as an optional alternative to round bats. To his dismay, reaction to the innovation was unilaterally unenthusiastic; even George Wright, Harry's Hall of Fame brother, condemned its chances of success. As he predicted, the idea fizzled and died out quickly.

Perhaps Wright's most intriguing, enduring, and confusing innovation was spring training. Did he invent it? That is difficult to say. Wright did not originate the idea of traveling below the Mason-Dixon line as spring approached, but he seems to be the first to

regard it with the modern perspective. Teams such as the Chicago White Stockings, New York Mutuals, and even Wright's Cincinnati Red Stockings frequented the South for springtime baseball in the late 1860s to 1870s. But their intention was different. Though the teams were there to get out the winter rust, the true objective of their venture South was for the money, which they could not get playing ball up in the Northern climate at that point. However, Wright saw a different benefit to the "Southern trip," as spring training was referred to in those days. "I'll tell you, there's nothing like it," he said in 1890. "Besides getting in good training, the men all learn each other's play—get into each other, as it were. In this way they don't lose the first six weeks of the regular season, as in the case with the teams which began the circuit with 'raw' men. I'm satisfied that by another year all the League clubs will play a six or eight weeks' Florida in February and March."<sup>7</sup>

In fact, other nines had begun to follow his Philadelphia club's lead by 1890, including Chicago, New York, Brooklyn, and Philadelphia of the Players League. Wright's Philadelphians first made the trek to Charleston, South Carolina, in 1886. (The Cleveland and Detroit nines opted for Savannah, Georgia, while Pittsburgh practiced in Nashville, Tennessee.) Wright was tempted to venture farther to Florida the next spring, but settled for Savannah. He was hesitant to travel that far a distance.

The competition in these trips was mostly against local nines that often included professional talent such as Mike "King" Kelly, who could use the trips as much for profit as training. Practice was daily and games were played a minimum of five times per week. Players were under no obligation—but a great deal of pressure—to attend. Wright would solicit each player to come along, and each had the option of responding with a letter indicating his willingness to go. In 1887, four Philadelphia players resisted the trip as a reaction to salary disputes. Wright tried to convince his club's pitcher/second baseman Charley Ferguson to come South, but Ferguson held firm and the club trained without their star player.

While there, each player was constantly occupied. At 6:00 he awakened to a saltwater bath and a vigorous rub with coarse towels. A half hour later, the team took a brisk three-mile walk along the beach until 7:00. As the sun rose, a large, full breakfast was served. Afterward, they headed to a large hall for indoor practice that Wright had procured. The players



exercised by working with "Indian clubs" and dumbbells, as well as their defense on grounders and line drives. After eating lunch, the men took a walk from 3:00 to 4:00. Once supper was eaten, the players sat in their quarters playing checkers and "swapping lies" before bedtime at 10:00.

After an unsuccessful spring in Cape May, New Jersey, Wright accepted Florida as an accessible site in 1889 due to a better financial enticement. "In former years it was rather expensive [to train in Florida], but now the twelve-club Southern League will offer good guarantees to the League team, and I think the trip will be taken by most of the league teams."<sup>8</sup> Quickly Florida, Jacksonville specifically, became recognized as the "headquarters for winter baseball." Wright, with his shrewd business sense, readily embraced the city. "I want the people [of Jacksonville] to understand that the Philadelphians are here to identify themselves with Jacksonville. They mean to uphold the reputation and honor of the city as far as base ball is concerned. For the present, therefore, my team is practically a Jacksonville club."<sup>9</sup>

The Southern trip quickly began drawing attention. As Philadelphia sailed out of a New York port toward Jacksonville in 1889, a cheering assemblage, including Brooklyn club president Byrne, New York manager Jim Mutrie, star pitcher Tim Keefe, and Henry Chadwick, stood on the docks. Two years earlier, the *Philadelphia Record* had employed Wright to cover Southern trip exhibitions on a freelance basis for \$3 a day. Wright could not hide his doubt that people would be interested in a game that essentially meant "nothing," but nevertheless predicted that "the score of each fine winning practice game will be greedily scanned by the enthusiasts here."<sup>10</sup>

Hoping to capitalize on the success of these exhibitions, the Philadelphia management—which had been reluctant to permit Wright to take the Southern trip—set up a visit to Los Angeles in November 1887. Wright opposed the idea from the onset. The players would be drained, he argued, and unfit to play well in 1888. Additionally, he feared—correctly—that players would enjoy the California atmosphere so much that they would settle there and leave Philadelphia behind. The upshot of the trips was a disaster. The players were drained, some *did* desert, their lackluster play was criticized heavily in the press, and Charley Ferguson left with a lame arm.

Wright's instinct for success was evidently keen. He excelled in a wide range of areas, from all spectrums

of the baseball operation. As a manager he was heralded as the "best captain that ever took a base ball organization in hand."<sup>11</sup> As an athlete, he "gave a superior performance in any kind of physical activity,"<sup>12</sup> according to Harry Wright, Jr., his third son. This included cricket—his first love—baseball, skating, track, hunting, and fishing. In 1872, Wright and his brother George were described as "the best exponents of batting *as a science* in the country. These players know *when* to strike, *how* to strike, and where to put the ball."<sup>13</sup>

Wright's rapid development as a baseball player was quite remarkable. He began as a professional cricketer with the St. George's Dragonslayers of Hoboken, New Jersey, in 1850 at the age of 15. His father, Sam Sr., was already a member and one of the best cricketers in the country. Harry discovered baseball in 1858 and quickly honed his skill as a member of the New York Knickerbockers, a club that participated in the first recorded baseball game 12 years earlier. Just 12 days after his debut with the Knicks, Wright headed a New York nine in the famed Fashion Course Matches. The Matches were a three-game series stretched over the summer of 1858 between picked nines of New York and Brooklyn, perhaps best thought of as a vintage All-Star Game. At the time the series was revered for its conversion of many spectators to die-hard baseball fans, but today it is more significant for the unprecedented act of charging an admission fee. The money went not to any players—since professionalism was taboo at the time—but instead for groundskeeping. When money first did—at least openly—reach the hands of a player but a few years later, the recipient was Harry Wright, when he earned \$29.65 for a benefit game to honor his family.

Wright's name is perhaps the one most deservedly linked to professionalism. He was, after all, the manager and figurehead of the first openly all-professional baseball club, the 1869 Cincinnati Red Stockings. Though Wright and the Cincinnati were initially condemned in the newspapers for their transition, by the end of their year-and-a-half-long undefeated streak, professional nines had sprung up all over the country. In that span of time, the Red Stockings traveled from coast to coast, first led by Wright to face all of the main competition in the Northeast before taking the revolutionary step of venturing out to California for a Western tour.

Historians note that Wright's leadership of the professional movement lent a good name to its cause that,

if lacking, might have jeopardized or delayed its existence. A sense of distrust had overtaken the perception of money and baseball working alongside, in light of frequent scandals and player corruption. Wright's scrupulous character and reputation helped spur professionalism as an acceptable element of baseball. For the first time it was disassociated from hoodlums and crooks, and instead represented by a man as respected as any amateur involved with the game. Wright was far from the archetypal money-hungry professional. He had no tolerance for gambling; in fact, Wright's idea of a bet was to "name as a 'wager' the pride and superiority in the manly exhibition of our National Game."<sup>14</sup> In 1882, he upped the ante to a leather medal from Mutrie, hardly incriminating evidence.

Wright was a man of temperate habits who did not swear, smoke, or drink. In fact, he went so far as to station a police officer in the ballpark while with Philadelphia to put a stop to smoking and insults. Nevertheless, peers admired him for his manner of acting morally without condescension.

Wright was also renowned for his honesty, which he carried onto the ball field even when detrimental to his team's cause. In an 1868 game between Cincinnati and the Unions of Morrisania, the umpire made an erroneous decision to favor the hometown Red Stockings. Wright knew the call was an effort to appease the crowd, and so he stepped onto the field and overruled the umpire, in what proved to be a Cincinnati loss.

Years later, with Philadelphia, outfielder Ed Andrews took a 20-foot shortcut inside third base en route to a run. To most onlookers, getting this by the umpire—there was only one on the field in those days—was a sign of cleverness. Wright did not have that reaction. When Andrews returned to the bench, his manager was pale. "Ed," he said, staring intently into Andrews' eyes, "don't ever let me see you do that again. I don't want any games won that way."<sup>15</sup>

Trust for Wright was so strong that he occasionally umpired National League games—while managing other league teams. As *The Sporting News* put it, "There was no figure in base ball more creditable to the game than dear old Harry."<sup>16</sup>

In 1896, the *Reach Guide* wrote, "Every magnate in the country is indebted to [Harry Wright] for the establishment of baseball as a business, and every patron for fulfilling him with a systematic recreation. Every player is indebted to him for inaugurating an occupation in which he gains a livelihood, and the

country at large for adding one more industry . . . to furnish employment."<sup>17</sup>

Wright's contributions to 19th-century baseball included both specific and general breakthroughs that have been vital to the development of baseball and to its establishment as the national pastime. His achievements as a player, manager, and visionary can still be seen in the game today. Was Harry Wright the most important baseball figure of the 19th century? "An opinion settles nothing unless the truth of the assertion is either self-evident or demonstrated," he once said.

"Have I put this so you can understand me? and if so, how does it strike you?"<sup>18</sup>

## NOTES

<sup>1</sup>*The Chadwick Scrapbooks*

<sup>2</sup>December 29, 1874, letter to William Hulbert

<sup>3</sup>*The Chadwick Diaries*

<sup>4</sup>*Ibid.*

<sup>5</sup>*The Chadwick Scrapbooks*

<sup>6</sup>*The Sporting Life*, December 12, 1883

<sup>7</sup>*The Chadwick Scrapbooks*

<sup>8</sup>*The Sporting News*, January 13, 1893

<sup>9</sup>*The Chadwick Scrapbooks*

<sup>10</sup>Voight, p. 194

<sup>11</sup>*The Chadwick Scrapbooks*

<sup>12</sup>*The Sporting Heritage*, March/April 1987

<sup>13</sup>*The Chadwick Scrapbooks*

<sup>14</sup>October 12, 1878, letter to Robert Morrow

<sup>15</sup>Ryczek, p. 178

<sup>16</sup>*The Sporting News*, October 12, 1895

<sup>17</sup>*The Chadwick Scrapbooks*

<sup>18</sup>March 26, 1875, letter to the *New York Clipper*

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## Early RBI Leaders in the International League

It is obvious that the game of baseball has changed drastically over the years. With the value of RBI compilations accepted now as a matter of course the serious historian must take note of their prominence in league history—and by extension, baseball itself. As far as the International League is concerned, the 1920s mark the heyday of RBI totals—individually and team-wise.

The 1930s was another strong decade for scoring and RBI, but by the 1940s and 1950s, 100-RBI accumulations began to dwindle. After 1960 Runs Batted In totals in excess of 100 have been rare.

Runs Batted In as a baseball statistic is a relatively recent phenomenon. Reported as early as 1880 by the *Chicago Tribune*, it was not kept as an official statistic by the major leagues until 1920, and the International League the year after. Most newspaper box scores did not note the statistic until 1930.

This study explores the early RBI totals in the International League from 1884 through 1921. Using old newspapers and sports publications, I tabulated RBI accounts in the circuit from 1884 to 1921. Such a task is not as cut and dried as it seems. Marshall Wright, in his brilliant *The International League Year-by-Year Statistics, 1884-1953*, notes that even the date the International League began (as well as its continuity) is open to question. The earlier league (the Interstate Association) disbanded in 1883 and reopened its doors in 1884 using the name Eastern League. Most observers accept that campaign as the beginning of the circuit now known as the International League. However, there is a dilemma concerning the 1885 season and how it affects the league's continuity. As Wright points out, there were two antecedents of the International League in 1885; the New York State League and the Eastern League.

In a shortened season, the Syracuse Stars won the New York State title, and Mike Scanlon's Washington Nationals were the Eastern League Champions. The question is: which of the two is the legitimate forerunner of the International League?

In 1935 the International League itself (under Frank Shaughnessy's guidance) accepted Syracuse's win in the New York State League as the rightful second year in the circuit's history. However, some historians question this, and are more apt to accept the Eastern League as a valid predecessor. Regardless, the confusion leaves the door ajar for debate. I will accept Shaughnessy's view of the dilemma for the sake of clarity. Wright's treatise also insists that there is a similar perplexity regarding the 1886 season. There is another dichotomy: Utica won the New York State League pennant (the third year of the International League) and Newark's Little Giants ran away and hid in the Eastern League. Again, for the sake of clarity, I will accept Utica as the third-year champs.

Let us assume that the International League began play in 1884. J. W. Coogan of Newark won the batting title with a mark of .380, while Wilmington's Tom "Oyster" Burns led the league in home runs (11) and RBI (94). Coogan was a close second with 92. In the abbreviated 1885 campaign, Syracuse's Mike Griffin won the RBI crown with a mere 70. In 1886, Rochester's Doc Kennedy drove in the most runs—again, with 94. Buffalo's Mike Lehane edged his teammate Frank Grant, the Bisons' early black star, for the 1887 RBI title—the first time we had yearly totals in excess of 100.

Jake Drauby, a teammate of Jimmy Collins in Buffalo in 1894, was a long-time International League slugger in the 1890s. Toronto's Buck Freeman had a two-year reign as a slugger before returning to the National League in 1898. In 1901 he jumped from the Boston National League team to the new Boston Americans. In 1903 he became the first player to lead both leagues in home runs when he hit 13 for the Americans. In addition, he led the AL in RBI totals in 1902 and 1903.

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Another early International League slugger of note was Abel Lezotte of Wilkes-Barre and Syracuse. Three times his RBI counted exceeded 100. Worcester's Kitty Bransfield had a dream season in 1900, giving every promise of major league stardom.

However, it was not to be. In 1901 he joined the Pittsburgh Pirates, one of the greatest teams of that period. Bransfield became a "good field, no hit" worker among his more illustrious teammates. However,

his rookie year provided his best offensive numbers of his career, as he hit .295 with 91 RBI and 92 runs scored. After hitting .223 in 1904, he was swapped with two other to the Phillies for first baseman Del Howard. The Pirates would continue to have problems at first base for the next 15 years, blaming it on the "Bransfield Curse."

The yearly totals of RBI in the early years in the circuit are shown on the following lists.

## INTERNATIONAL LEAGUE RBI LEADERS, 1884-1921

<b>1884</b>		<b>1888</b>		<b>1893</b>	
Tom Burns, Wilmington	94	Ollie Beard, Syracuse	116	Frank Bonner, Wilkes-Barre	116
J. W. Coogan, Newark	92	Mike Lehané, Buffalo	111	Joe Knight, Binghamton	114
Jacob Goodman, Lancaster	87	Henry Simon, Rochester	104	Daniel Stearns, Buffalo	106
John Shetzline, Trenton	86	John Rainey, Hamilton	102	Jake Drauby, Buffalo	106
Charles Bastian, Wilmington	82	Charles Marr, Syracuse	101	Joe Visner, Albany	100
		Patsy Donovan, London	98	Ted Scheffler, Troy	98
<b>1885</b>		Rasty Wright, Syracuse	94	John Shearon, Erie	97
Mike Griffin, Syracuse	70	Joe Knight, Hamilton	92	Bill Bottenus, Springfield	96
Charles Osterhout, Syracuse	66			Jim Daly, Buffalo	94
Doc Kennedy, Rochester	64	<b>1889</b>		Peter Gilbert, Springfield	88
Charles Withney, Rochester	62	Bill Hoover, Toronto	104	Bill Wolf, Buffalo	87
Joe McGuckin, Binghamton	61	Joe Knight, Hamilton	102	Fred Scheibeck, Erie	86
		Perry Werden, Toledo	101	Bill Eagan, Albany	86
<b>1886</b>		Eddie Burke, Toronto	90		
Doc Kennedy, Rochester	94			<b>1894</b>	
Joe Visener, Rochester	92	<b>1890</b>		Jimmy Collins, Buffalo	126
Jon Morrison, Toronto	90	Don Casey, Hamilton	55	Jake Drauby, Buffalo	123
Henry Simon, Syracuse	88	Charles Campau, Detroit	53	Phil Nadcau, Springfield	114
Sandy Griffin, Utica	85	Buck West, Saginaw	53	John Shearon, Erie	111
Bill Schindle, Utica	84	Pat Friel, London	51	Ed Breckinbridge, Troy	106
Mike Griffin, Utica	81	Jim Connor, London	50	Harry Lyons, Providence	104
				Bill Clymer, Buffalo	102
<b>1887</b>		<b>1891</b>		Charles Bassett, Prov.	101
Mike Lehané, Buffalo	118	Ted Scheffler, Buffalo	102	Ted Scheffler, Troy	98
Frank Grant, Buffalo	114	Doc Kennedy, Rochester	94	Fred Betts, Wilkes-Barre	96
Jim Knowles, Rochester	111	Harry Lyons, Buffalo	90	Jim Rogers, Providence	94
Harry Jacoby, Syracuse	108	Joe Hornung, Buffalo	88	Bill Johnson, Scranton	92
Mike Slattery, Toronto	104	Joe Mack, Buffalo	87	Dan Minnehan, Syracuse	88
Henry Simon, Syracuse	104			Henry Lynch, Springfield	87
Rasty Wright, Hamilton	102	<b>1892</b>		Jim Field, Erie	86
Ollie Beard, Syracuse	101	Joe Knight, Binghamton	100	Bill Bottenus, Springfield	85
Ned Crane, Toronto	98	Sam Wise, Rochester	94		
Tom O'Brien, Jersey City	96	Ted Scheffler, Troy	85		
Gus Alberts, Toronto	94				

# THE BASEBALL RESEARCH JOURNAL

## 1895

John Shearon, Buffalo	118
Abel Lezotte, Wilkes-Barre	114
Judson Smith, Toronto	112
Jim Daly, Rochester	108
Harry Lyons, Rochester	104
Joe Knight, Providence	102
Dan Minnehan, Syracuse	101
Henry Simon, Syracuse	98
Bill Lush, Rochester	96
Sam Wise, Buffalo	94
Buck Freeman, Toronto	92
Howard Earl, Wilkes-Barre	90
Bill Clymer, Buffalo	88
Jim Field, Buffalo	87
Ed Lytle, Wilkes-Barre	86

## 1896

Jake Drauby, Providence	120
Abel Lezotte, Wilkes-Barre	120
Charles Dooley, Rochester	111
Chick Stahl, Buffalo	109
Ted Scheffler, Springfield	106
Fred Betts, Wilkes-Barre	104
Joe Knight, Providence	100
Ollie Beard, Rochester	98
Frank Bonner, Wilkes-Barre	97
Jim Daly, Rochester	94
Jim Canavan, Providence	92
Jim Field, Buffalo	91
Harry Lyons, Providence	88
Peter Gilbert, Springfield	87

## 1897

Dan Brouthers, Sprngfld.	132
Buck Freeman, Toronto	120
Dan McGann, Toronto	111
Larry Gilboy, Buffalo	108
Abel Lezotte, Syracuse	102
Tom Bannon, Syracuse	101
Dan Green, Springfield	97
Curtis Weigand, Providence	96
Frank Bonner, Scranton	94
Judson Smith, Syracuse	90
Charles Dooley, Montreal	88
Reddy Grey, Buffalo	86

## 1898

Buck Freeman, Toronto	131
Reddy Grey, Toronto	102
Jim Casey, Toronto	98
Bill Massey, Ottawa	96
John Barry, Montreal	92
John O'Brien, Syracuse	88
Frank Bonner, Ottawa	87
Ed Canivan, Providence	86

## 1899

Charles Kuhn, Worcester	94
John Walters, Providence	94
Harry Davids, Providence	93
Bill Schindle, Hartford	92
Tom Campbell, Springfield	91
Judson Smith, Toronto	90
Reddy Grey, Toronto	88
Jim Hannivan, Toronto	86

## 1900

Kitty Bransfield, Worcester	131
John Cassidy, Providence	119
Pat Dolan, Springfield	111
Harry Davis, Providence	106
Frank Bonner, Rochester	96
Harry O'Hagan, Rochester	96
Ed Householder, Rochester	94
Mal Kittredge, Worcester	86

## 1901

Frank Bonner, Toronto	116
Ed Gremminger, Rochester	110
Jim Bannon, Toronto	102
Bill Lush, Rochester	99
George Barclay, Rochester	94
George Smith, Rochester	92
Joe Delahanty, Montreal	92
Homer Smoot, Worcester	91
Reddy Grey, Rochester	89
Harry O'Hagan, Rochester	88

## 1902

Jocko Halligan, Jersey City	116
Myron Grimshaw, Buffalo	104
Dave Brain, Buffalo	102
Bill Massey, Toronto	93
Jake Gettman, Buffalo	92
Bill Clancy, Worcester	88
Joe Delahanty, Worcester	86

## 1903

Moose McCormick, Jersey City	116
Tom Jones, Baltimore	103
John Hayden, Baltimore	94
Matty McIntyre, Buffalo	90
Pat Crisham, Rochester	86
Mike Doolin, Jersey City	84

## 1904

Myron Grimshaw, Buffalo	110
Tim Jordan, Baltimore	94
Ernie Courtney, Buffalo	91
Bill Clancy, Montreal	88
Herm McFarland, Balt.	87

## 1905

Frank LaPorte, Buffalo	110
Jake Gettman, Buffalo	82
Tim Jordan, Baltimore	80

## 1906

Jack Thoney, Toronto	106
Jim Murray, Buffalo	103
Bill Clancy, Rochester	96
John Kelly, Baltimore	94
Jake Gettman, Buffalo	88
George Smith, Buffalo	86

## 1907

Bill Abstein, Providence	100
Jim Flanagan, Rochester	96
Walt Clement, Jersey City	94
George McConnell, Buffalo	92
Ambrose McConnell, Prov.	88
Phil Poland, Providence	86
Jack Thoney, Toronto	83

# THE BASEBALL RESEARCH JOURNAL

## 1908

Bill Abstein, Providence	106
Harry Arndt, Providence	101
Jim Jones, Montreal	98
Ed DeGroff, Jersey City	94
Steve Evans, Montreal	94
Bud Sharpe, Newark	88
Harry Hoffman, Providence	86

## 1909

Jake Gettman, Newark	104
John Kelly, Newark	101
George Simmons, Rochester	100
Ben Houser, Toronto	98
Jack White, Buffalo	93
Harry Hoffman, Providence	91
Myron Grimshaw, Toronto	88
Dan Moeller, Jersey City	86

## 1910

Otto Deininger, Jersey City	103
Al Shaw, Toronto	100
Butch Goode, Baltimore	98
Wilfred Osborn, Rochester	94
Dan Moeller, Rochester	92
John Kelly, Newark	91
Ernie Johnson, Jersey City	88

## 1911

Tim Jordan, Toronto	132
Clayton Perry, Providence	122
Al Shaw, Toronto	111
Charles Hanford, Montreal	104
Butch Schmidt, Baltimore	103
John Kelly, Newark	102
Chick Gandil, Montreal	101
Otto Deininger, Jersey City	100
Mickey Corcoran, Balt.	99
Ed Miller, Montreal	96
Ray Demmitt, Montreal	94
Bill Bradley, Toronto	91
Herb Moran, Rochester	88
Curt Elston, Providence	87

## 1912

Tim Jordan, Toronto	130
Jim Murray, Buffalo	121
Al Shaw, Toronto	114
Cozy Dolan, Rochester	108
Ed Murphy, Baltimore	104
Harry Swacina, Newark	102
Art Bues, Buffalo	101
Ernie Johnson, Rochester	101
Butch Schmidt, Baltimore	98
Art McCabe, Buffalo	96
Jack Lelivelt, Rochester	94
Bill Collins, Newark	88
Mickey Corcoran, Baltimore	87
Joe Breen, Jersey City	86
Frank Truesdale, Buffalo	85
Bill Bradley, Toronto	84

## 1913

George Simmons, Rchstr.	110
Ray Demmitt, Montreal	104
Al Shaw, Jersey City	98
Charles Hanford, Buffalo	98
Jim Murray, Buffalo	96
Ed Zimmerman, Newark	94
Otto Deininger, Jersey City	91
Ed Lennox, Montreal	88
Harry Swacina, Newark	86
Hal Paddock, Rochester	84

## 1914

Wally Pipp, Rochester	120
Tim Jordan, Toronto	114
George Whiteman, Mon.	111
Alf Platte, Providence	110
Joe Schultz, Rochester	104
Ed Onslow, Providence	104
John Flynn, Montreal	102
Guy Tutweiler, Providence	100
Ed Zimmerman, Newark	98
Bob Fisher, Toronto	96
Cuke Barrows, Baltimore	94
Leo Callahan, Newark	93
Clarence Kraft, Newark	91
Frank Gilhooley, Buffalo	89
Bill O'Hara, Toronto	88
Dave Shean, Providence	86

## 1915

Clarence Kraft, Harrisburg	118
George Whiteman, Mon.	114
John Flynn, Montreal	101
Charlie Jamieson, Buffalo	98
Bob Clemens, Rochester	96
Hal Ireland, Montreal	84
Chick Shorten, Providence	84
John Bates, Richmond	83
Les Channell, Buffalo	82

## 1916

Will Bankston, Richmond	104
George Twombly, Balt.	104
Henry Damrau, Montreal	96
Guy Tutweiler, Providence	96
Walt Reh, Providence	92
Swede Carlstrom, Buffalo	91
Les Channell, Buffalo	88
Bill Wagner, Montreal	87
Tim Hendryx, Richmond	87
George Jackson, Buffalo	86
Merwyn Jacobson, Roch.	84
Joe Slattery, Montreal	83
Dawson Graham, Toronto	82

## 1917

Napoleon Lajoie, Toronto	134
Turner Barber, Baltimore	122
George Whiteman, Toronto	111
Merwyn Jacobson, Toronto	104
Henry Damrau, Montreal	104
Art Bues, Baltimore	102
Ed Zimmerman, Montreal	100
Will Bankston, Richmond	92
Merlin Kopp, Buffalo	91
Ross Youngs, Rochester	88
Frank Fuller, Newark	84
Hank Eibel, Richmond	84

## 1918

Howard McLarry, Bing.	82
Earl Smith, Rochester	78
Bill Estes, Rochester	73

# THE BASEBALL RESEARCH JOURNAL

## 1919

Merwyn Jacobson, Balt.	130
George Kelly, Rochester	123
Fritz Maisel, Baltimore	118
George Whiteman, Toronto	116
Joe Boley, Baltimore	108
Howard McLarry, Bing.	104
Frank O'Rourke, Bing.	102
John Honig, Baltimore	98
Ed Barney, Buffalo	94
Jack Bentley, Baltimore	94
Ed Miller, Newark	88
Frank Wiglesworth, J. C.	86
Ed Onslow, Toronto	84
Otis Lawry, Baltimore	82

## 1920

Jack Bentley, Baltimore	161
Frank Brower, Reading	148
Bill Holden, Baltimore	134
Jimmy Walsh, Akron	133
Merwyn Jacobson, Balt.	126
Mike Konnick, Reading	124
Fritz Maisel, Baltimore	114
Benny Kauff, Toronto	111
Jim Thorpe, Akron	106
Pete Shields, Akron	101
Otis Lawry, Baltimore	98
Frank O'Rourke, Toronto	97
Joe Burns, Reading	96
Henry Long, Rochester	94
Tom DeNoville, Jersey City	93
Bill Zitman, Jersey City	92

## 1921

Jack Bentley, Baltimore	152
Fred Merkle, Rochester	143
Fred Thomas, Reading	138
Homer Summa, Rochester	134
Jewel Ens, Syracuse	122
Ed Goebel, Reading	119
Bob Fothergill, Rochester	117
Jimmy Walsh, Newark	111
Merwyn Jacobson, Balt.	106
Fritz Maisel, Baltimore	106
Norm McMillan, Rochester	104
Joe Boley, Baltimore	102
Ed Onslow, Toronto	102
John Schulte, Syracuse	101
Beauty McGowan, Newark	96
Bob Witterstaetter, Syracuse	94
Frank Gilhooly, Buffalo	92
Ed Barney, Buffalo	88
Max Bishop, Baltimore	86



*Hall of Famers Dan Brouthers (left) and Nap Lajoie (right). After their ML careers were over, each player led the International League in RBI, Brouthers in 1897, and Lajoie, as a player-manager, in 1917. Brouthers reappeared briefly with the New York Giants in 1904, thus becoming the first four-decade player in the major leagues.*

From 1884 through 1959, Baltimore (72) and Buffalo (70) have had the greatest number of players who have reached or surpassed 100 RBI in one season. Rochester has 48 (and still counting), Toronto bowed out with 45, and Montreal had 38. Providence was a leader in the early years. Since 1960 Rochester has had a mere six players who have reached the 100 RBI total in one season. Richmond and Columbus have had five and Tidewater (Norfolk) four. In 1970 Rochester's Roger Freed had 130 RBI—the top total since 1960. Recently, in the merger of the leftover American Association teams with the International League, RBI totals have made a comeback. Prior to 1960 only six players had won the International League RBI title with less than 100 RBI, and on two of these occasions (1890 and 1918), the season had been shortened. In 1943 Baltimore's George Staller could muster only 98 in that war-torn year, struggling with one of the deadest balls known to man. Subsequent to 1960 the RBI leader has had less than 100 on twenty occasions.

Who knows what the future holds for minor league baseball? Over the winter months of 1997-1998, the American Association passed out of existence. Its member cities were dispersed between the International League and the Pacific Coast League. Those of us who love minor league baseball mourn the death of the Association. Both the Pacific Coast League and the International League are cumbersome reminders of how oblivious the powers-to be seem in regard to tradition—which has been the bedrock of baseball's popularity for most of the preceding century. This account has introduced the fan to early RBI tabulations in a vibrant minor league. It is also an attempt to remind the public that one of baseball's real strengths is its ability to harken back to a bygone era.

## NOTES

<sup>1</sup>*The International League Year-by-Year Statistics, 1884-1953*, Marshall D. Wright, pg. 3.

<sup>2</sup>*Ibid*, pg. 10.

<sup>3</sup>*Ibid*, pg.13.

<sup>4</sup>*Ibid*, pg. 14

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*Spalding Athletic Library*, American Sports Publishing Company. New York, NY: 1885-1938.

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Wright, Marshall D., *The International League, Year-by-Year Statistics, 1884-1953*, Jefferson, NC: McFarland, 1998.



## Identifying 19th-Century Player Dick Higham...Perhaps!

**B**ecause it seemed both helpful and important to attempt to round out Richard "Dick" Higham's story (see *TNP* 2000 and *TNP* 2001) with photographs. I researched libraries, archives, newspapers, and magazines, etc. Identifying 19th-century baseball players in 19th-century photographs can be trying. Finding such pictures and attempting to determine whether you have actually succeeded in identifying the players depicted in them can be both exasperating and elating. However, the exercise below may, hopefully, offer some encouragement to those who would undertake a similar task.

Since I do not have a family photograph of Dick Higham for a direct comparison, it became necessary to weigh the credibility of what was found. In addition, just viewing and comparing one picture to another is not sufficient. For each photo, I had to consider the source, condition when found, available historical background, and possible comparisons of the team and/or other individual players depicted, of each. When making a simple comparison of Higham as depicted in one photo with another, I also used techniques suggested to law enforcement agencies.<sup>1</sup>

While these are for the most part forensic considerations, it was also most helpful to engage in discussions with fellow researchers. I located photographs of four teams on which he was a member, taken during his playing career, 1870 through 1880, at the time he was a member of each. Two of them name him, one of them does not identify anyone depicted, and the last one, I believe, misidentifies him as another player. The photographs are of the 1872 Lord Baltimores,<sup>2</sup> the 1877 Syracuse Stars,<sup>3</sup> the 1876 Hartford Dark Blues,<sup>4</sup> and the 1870 New York Mutuals.<sup>5</sup> It appears each was taken inside a photographer's studio. The results can be described as being anywhere from "murky" to "rather clear" to "I know it's him, for sure."

**HARRY HIGHAM** is a Great Grandson of Dick Higham and has been a SABR member since 1997. He studies 19th century Base Ball and umpires vintage baseball games.

### 1872 LORD BALTIMORES

This is the earliest photograph which identifies a pictured player as Dick Higham. He would have been 21 years of age when it was taken. SABR member James Bready, who has published it more than once, has told me that he acquired the photograph from the Baltimore Public Library, but when he did, someone had already placed the names of the players on its face.

In this photograph it appears the light source used was stationed on the extreme right. Drawing an imaginary vertical line down the middle of the photograph, note the dark shadows, in particular, on the right corner of the backdrop and on the faces of the five players on the right. Those on the left have softer shadows and some have less defined features. The figures of Higham and Hall have the least clarity, with flatter faces and seemingly bulging eyes.

For the purpose of making comparisons with the following photographs, assuming the figure identified is Dick Higham, our benchmark is a "narrow" face, with "medium lips" and "close ears." As an example of others' attributes, Tom York and Bobby Matthews can be said to have "narrow" faces with "medium" lips but "out" ears. William Craver can be described as having a "narrow" face, "medium" lips and "medium" ears.

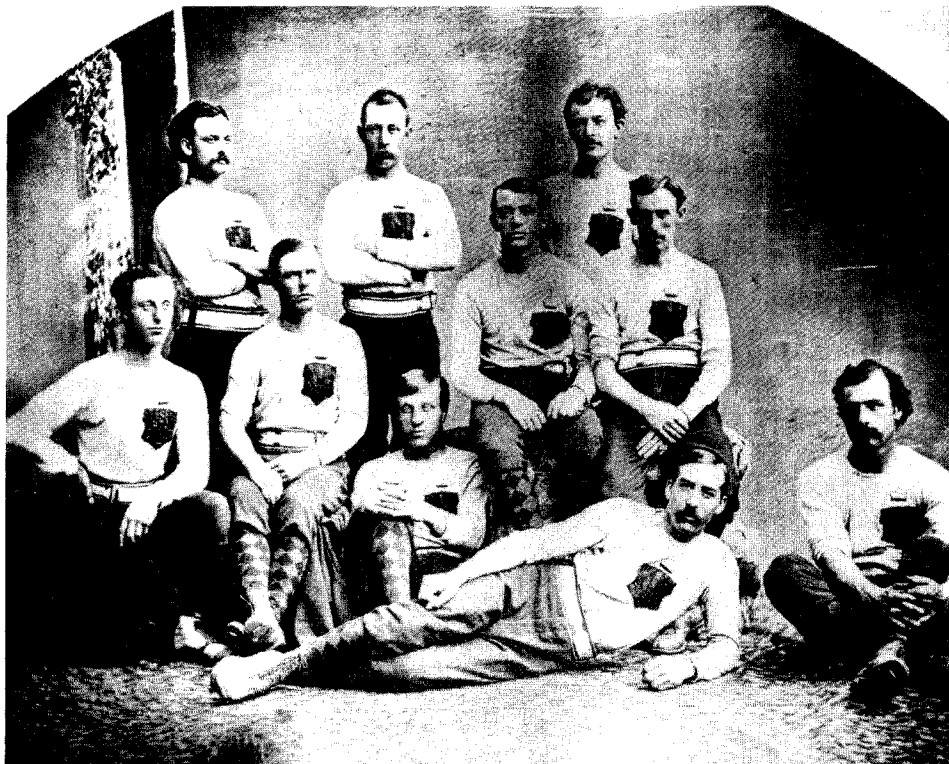
Close-ups of the Higham face and of the figure alone have been used by SABR to accompany two previously published articles<sup>6</sup> concerning Dick Higham. However, as I recollect the men on my father's side of the family all having black or dark hair, I would have to question whether it is him. Of course, the photograph may have been taken by an inept photographer with poor equipment and/or due to harsh handling of the photograph itself, over time, his hair may have become lightened. Finally, some one may have simply made a mistake when affixing the players' names.

### 1876 HARTFORD DARK BLUES

No player in this photograph was identified anywhere on it. It was necessary to compare this photograph with a photograph of the 1875 Hartford Dark Blues,<sup>7</sup>

**1872 LORD BALTIMORES**

Back row: Lipman Pike,  
Cherokee Fisher, Tom Carey.  
Middle row: George W. Hall,  
John J. Radcliff, Dick Higham,  
Tom York, Bobby Mathews.  
Front row: William H. Craver,  
Everett Mills



**1876 HARTFORD DARK BLUES**

Back row: Tommy Bond,  
Candy Cummings. Middle row:  
Tom Carey, Everett Mills, Bob  
Ferguson, Bill Harbridge,  
Tommy York. Front row: Dick  
Higham, Jack Burdock, Jack  
Remsen, Doug Allison



NATIONAL BASEBALL HALL OF FAME LIBRARY, COOPERSTOWN, N.Y.



**1877 SYRACUSE STARS**

Back row: M.R. Mansell, Bill

Carpenter, Pete Hotaling.

Middle row: Henry McConnell,

Al McKennon, Speed Clinton,

Buzz<sup>7</sup> Higham, Pep Hall. Front

row: Will Geer, Jack Farrell



**1870 NEW YORK MUTUALS**

Back row: Nelson, 3B; Martin,

RF; Swandell, 2B; Eggler, CF.

Front row: E. Mills, 1B;

Hatfield SS; C. Mills, C;

Wolters, P; Patterson, LF.

on which the players' names appeared. Fortunately, the rosters of the two teams were the same in almost all respects for both years (note also Captain Bob Ferguson's location) except for the addition of Dick Higham in 1876. The 1875 photograph pictured ten players, and the 1876 photograph pictured the same ten plus one. Mark Rucker, who had previously published the 1875 photograph, with the players' names, and to whom I sent a copy of the 1876 photograph, generally agreed with the above identifications.

The photograph is actually taken from a "Base Ball Carte," a copy of which had to be enlarged and digitally restored. Viewing the actual "Carte" from right to left shows increasing marring, scraping and dirt which consequently the restorers had to deal with as best they could. Note the seated players on the right side are the clearest and the two standing in the back remain somewhat blurry. Interestingly, in this photograph Tom Carey's features are better defined, and both Tom York and Dick Higham, at least in 1876, now parted their hair in the middle. The Dick Higham figure once again has a "narrow" shaped face, "medium" lips, and "close" ears. He would have been 25 years old here.

### 1877 SYRACUSE STARS

This is the second photograph in which he is named. It is the clearest of all the photographs I have been able to locate. He would have been 26 years of age at the time. SABR member Ron Gersbacher, who told me about this photograph, believes he is accurately identified as the third player from the left sitting down. Ron relies not only on the names as found on the back of the photograph, but also a common practice of the day to sit the captain of the team, which Dick Higham was in 1877, in the middle row close to the center of a team photograph. As opposed to the previous photograph, here he is sitting in a chair instead of on the floor, his arms are folded and he is wearing a team cap. I would not venture to say that the bit of hair showing by his left ear, from under the cap, clearly shows he had dark hair. However, the face, lips, and ears appear the same as above. I would believe this is a picture of Dick Higham.

### 1870 NEW YORK MUTUALS

When I first saw a copy of this photograph, dated only "1870s" on its reverse, at the Hall of Fame and Museum in Cooperstown, I felt an error had been made. I knew the player identified as Swandell could

not be anyone else but Richard "Dick" Higham. This was evident to me, at that time, because the pictured player so closely resembles my grandfather, his son, Harold Higham. In this picture he is 19 years of age.

To confirm it was indeed a picture of him required a bit of extra digging and help. I needed to not only date the photograph, if possible, but also to demonstrate he was a member of the team at that time, that the player named could not be the one pictured, and that the one pictured could be him. I believe I have succeeded. As you can guess, I do not even have a comparison photograph of Marty Swandell on which to rely.

An important clue came from SABR member David Nemec. He pointed out in correspondence concerning the picture that C. Mills (Charlie) and E. Mills (Everett) were misidentified, each referred to as the other. Charlie Mills last played for the Mutuals in 1872, which means the photograph must predate 1873. In addition, Everett Mills, who also appears in the pictures of the 1872 Lord Baltimores as well as the 1875 and 1876 Hartford Dark Blues, did not play for the New York Mutuals in 1871 or later.<sup>8</sup> Therefore, the photograph could not have been taken after 1870.

John Martin "Marty" Swandell was on the 1870 roster of the New York Mutuals. Richard "Dick" Higham had begun the 1870 season with the Morrisania Unions, but later came over to play for the Mutuals. The first game in which Dick Higham played for the Mutuals took place on September 24, 1870, in Trenton, New Jersey. He played third base and Marty Swandell was at second base. This infield combination continued for three more games. On October 26, against the Red Stockings, Swandell was not in the lineup and Higham played second base. Swandell returned for only one more game that season, on November 10 against the Athletics. When Rynie Wolters did not appear, "Phoney" Martin was moved to pitcher, Swandell took center field, and Dick Higham remained at second base.<sup>9</sup>

The above photograph also shows that the player standing second from the right is not quite as tall as the first player on the right. Dave Egger<sup>10</sup>, the player on the right was reportedly 5'9" tall. The player on the team that year who comes closest to that height without being quite as tall is Dick Higham at 5'8½". Marty Swandell's height has been reported as being at least 5'10½". If Swandell were standing next to Dave Egger,<sup>10</sup> the difference of one and a half inches in height would be readily apparent. In addition, while Dave Egger played with the New York Mutuals

through 1873, Marty Swandell did not play for the New York Mutuals after 1870.<sup>11</sup> Therefore, it appears the picture was probably taken no earlier than July 31, 1870 and no later than the end of that season. During this time frame Dick Higham had joined the team and Marty Swandell never played for them again.

Last, below is an exhibit of a photographic comparison of a close-up and enlargement of the face of the player standing second from the right in the Mutuals' photograph and that of my grandfather Harold Higham, taken at about age 42. I suggest this comparison seals it.

### DOUBLE PHOTOGRAPH

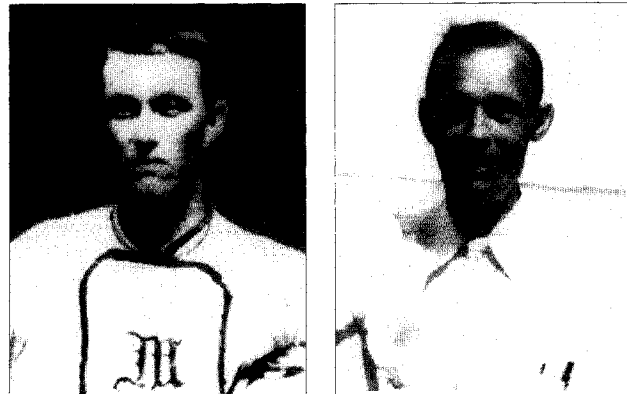
When I brought the photograph of the Mutuals and one of my grandfather to a photographer's shop for the comparison work to be performed, the technician upon viewing the side-by-side comparison photograph as it came out of the machine remarked: "The difference between the two pictures is that in the first one he's not smiling and in the second one he is." To which I replied: "The real difference is the gentleman on the right is the son of the gentleman on the left."

Hopefully, with this article and the two previously published in *The National Pastime* taken as a whole, the reader has the fullest biography of Richard "Dick" Higham, one of major league baseball's earliest great players and umpires, as can be presently assembled.

History, as it always does, discloses more and more of itself as we continue to review and critically question the available record as it is uncovered. So is it also with our national pastime, its participants, observers and fans alike.

### NOTES

<sup>11</sup>McDonald, Hugh C., *The Classification of Police Photographs*. Los Angeles: De Voss & Co., 1941: 18, 23, 39, 59. The primary classification is height, which in this analysis will play a part, but because of the poses in some of the photographs will not be totally helpful. The secondary classification of face, here narrow shape, medium lips, and close ears, described in the main piece, will be most helpful. As no side view is presented, the profile and nose classifications are not available. Likewise for obvious reasons, color of eyes can not be utilized. Throughout, the reader should keep in mind, "the final classification of the hair, the build, and the complexion or color . . . while important, will be considered as having less importance. . . . The reason for this lesser degree of importance lies in



the fact that these three characteristics are likely to change radically over a comparatively short period of time."

<sup>2</sup>Bready, James H., *Baseball in Baltimore*. Johns Hopkins Univ. Press, 1998, Baltimore: 19. A drawing of the team members as it appeared in the *New York Clipper* that year appears on page 16.

<sup>3</sup>This photograph is from the collection of the Baseball Hall of Fame and Museum at Cooperstown, New York.

<sup>4</sup>This photograph is from the Archives of the Connecticut State Library in Hartford, Connecticut, and Baseball Hall of Fame and Museum at Cooperstown, New York.

<sup>5</sup>This photograph is from the Spalding Collection of the New York Public Library. A comparison of this photograph with the one which appears in *America's National Game*, (Spalding, Albert G. Univ. of Nebraska Press, Lincoln, 1992), p. 164, show the latter to have been sharpened in player and uniform definition. This was a common practice for advertising and distribution purposes. The copy shown in this piece would be the original as it was taken. The reader will also note the lack of the appearance of the legs of the four players standing in the rear, which is due to the fact that the team was posed behind a front drop through which they poked their heads and hands and on which their uniforms as well as their bats and hats were drawn. For similar example, see a photograph of the 1876 St. Louis Grays, on page 88, of *The Great Encyclopedia of 19th-Century Major League Baseball*, Nemec, David. New York, Donald I. Fine Books, 1997.

<sup>6</sup>*Baseball's First Stars*, Frederick Ivor-Campbell, Robert L. Ticman, Mark Rucker, eds. Society for American Baseball Research, 1996, p. 77; and *The National Pastime*, Society for American Baseball Research, 2000, p. 23.

<sup>7</sup>Rucker, Mark, *Base Ball Cartes*, Transcendental Graphics 1988, p. 58.

<sup>8</sup>*Total Baseball*, Seventh Edition, John Thorn, Pete Palmer, Michael Gershman, eds. New York: Total Sports Publishing, 2001. 1020.

<sup>9</sup>*New York Times*, October 26, 1870. *New York Clipper*, November 5, 1870. An item published in *The Fireside Book of Baseball*, Charles Einstein, ed. Simon and Schuster, New York, 1956, pp. 46-47 purports to be Henry Chadwick reporting on a game between the Red Stockings and the Mutuals held on October 26, 1869, in which Higham replaced

Swandell. If this were true, it would appear the Higham/Swandell substitution took place twice in two different years. The item is taken from *Chadwick Scrapbooks*, Vol. 1-6, Spalding Collection, New York Public Library. Reading that entry on microfilm reveals that it can not be identified by newspaper or date of publication on its face. Rather, it appears the editor of the scrapbooks, perhaps Henry Chadwick himself, placed the notation "69" on the artifact in pen and ink, and it was taken as the year of publication. the *New York Times* does not report any baseball game in 1869 as having been played anytime from October 24 through the end of the month. An actual reading of the 1870 *New York Clipper* edition, dated November 5, contains Chadwick's Wednesday, October 26, 1870, report of the game.

<sup>10</sup>For comparison purposes, see a later picture of Dave Eggler, p. 168 of *America's National Game*.

<sup>11</sup>*Total Baseball*, p. 1,216.

## Best of Times, Worst of Times

### Superlative & Dismal Ten-Year Team Performances

**N**ot many fans are still around who remember when the Chicago Cubs compiled the best ten-year record in major league baseball history over the past century. That's because it happened from 1903 through 1912. The Windy City Cubs—yes, those Cubs who haven't made it to the World Series since 1945—won 980 games way back then in a ten-year period. Five times in that stretch the Cubbies won 100 games or more, and that was when teams played just 154 contests a season. In fact, they had just a 138-game schedule in 1903.

The highlight of the run, of course, came in 1906, when the Cubs won 116 games, the all-time MLB record tied in 2001 by the Seattle Mariners. It all happened not when the Cubs played home games at Wrigley Field, but West Side Grounds, their diamond until 1916. That's when they moved to Cubs Park, which had its name changed to Wrigley Field in 1926.

The Cubs are among nine clubs—six in the National League and three in the American—that posted at least one .600 record in a ten-year period since 1900. The 980-533 win-loss mark (an average of 98 wins a year!) figures out to a .648 percentage for the Cubs.

The next best compilation was .642 by the New York Yankees of 1934-43. That was with two more wins but 14 more defeats than the Cubs. Only the Cubs, Yankees, New York Giants, and Pittsburgh Pirates have ever had 400 more wins than losses in a ten-year stretch.

Thirty-five teams—19 in the AL and 16 in the NL—played at least ten years in the majors in the past century and are listed here with their best and poorest ten-year records through 2002.

To the City of Brotherly Love, Philadelphia, goes the dubious honor of having put up with the poorest ten-

year records in both the American and National leagues since 1900. They would be the AL Athletics of 1915-24 (.354) and the NL Phillies of 1936-45 (.335), the only team to ever win or lose more than 1,000 games—1,016 to be exact—in a ten-year period. Seven times in the period the Phils lost 100 or more, including five years in a row.

Only five teams in history have failed to win at least half their games in some ten-year period, and just one is still around—the San Diego Padres. The old Boston Braves, St. Louis Browns, Washington Senators II, and Kansas City Athletics never had a ten-year stretch above .500.

All but two clubs—yes, even the Yankees—have suffered through below-average stretches. Before they began what developed into a dynasty, those Yankees played just .450 ball, 52 games below .500, from 1908 through 1917. But that was BR—Before Ruth. Milwaukee's Braves and the Los Angeles Dodgers are the only clubs without a losing ten-year record ever.

The Braves spent thirteen summers on Lake Michigan (1953-65), always had at least six more wins than losses, and compiled a .559 record in their worst ten consecutive years. In contrast, and at about the same time, were the Kansas City Athletics—formerly of Philadelphia and in Oakland since 1968—who in thirteen years (1955-67) were always at least six wins short of a .500 finish.

While many of the "bests" and "worsts" were recorded early on, the Atlanta Braves, Houston Astros, Seattle Mariners, and Texas Rangers each posted their best decade in history most recently.

Though the Yankees had their best ten-year record from 1934 to 1943, it was from 1935 through 1944 that they dominated their league like no other team in history, finishing 141 games ahead of the second-place Detroit Tigers and 416 in front of the last-place Philadelphia Athletics in the American League.

The biggest winning margin in the National League over a ten-year stretch came in 1912-21 when the New York Giants "edged" the Chicago Cubs by 113.5 games. But earlier (1903-12) the Cubs finished 449.5 games

**SCOTT NELSON**, like the Minnesota Twins, survived the contraction threat and continues to write. He recently completed a sports history and record book for the Mankato, MN high school, where he taught English and Journalism for twenty-six years before retirement.



ahead of the tail-end Boston Braves in the NL.

There have been close "races," too. The Yanks edged the A's by just three and one-half games (.604 to .602) from 1924 to 1933, and the Blue Jays won over the Tigers by the same margin from 1981 to 1990. That Yanks-Athletics ten-year similarity adds fuel to the claim still made by some that Connie Mack's club of that time was as good if not better than the 1927 Yankees, whom some point to as the best of all time.

The honor for closest ever, though, goes to the Cubs and Cardinals from 1926 to 1935 in the NL. They compiled the same three-digit percentage, but the Cards lost one more game than Chicago to finish one-half game back in the ten-year "pennant" race.

More recently the San Francisco Giants edged the Reds by one game from 1963 to 1972, and the Expos beat the Cards by the same margin from 1979 to 1988.

**BRAVES CLAIM SIXTH BEST** Atlanta's Braves may have just one World Series title to show for it, but they recently compiled the sixth-best MLB regular season record in a ten-year period over the past century. The Braves, with eleven straight NL East titles through 2002 (none awarded in 1994), played .615 ball from 1991 through 2000, winning 955 games and losing 599. Add the 66 games canceled in the 1994-95 strike, and Bobby Cox's club might have come awfully close to winning 1,000 games. Their pitching Big Three through the stretch was 449-228—.663. Greg Maddux was 145-60—.707 (in eight years), Tom Glavine 175-84—.676, and John Smoltz 129-84—.606.

**BEST TEN-YEAR PERIOD, AMERICAN LEAGUE**

TEAM	YEARS	WON-LOST	PCT.
N.Y. Yankees	1934-43	982-547	.642
Phil. A's (1901-54)	1905-14	909-593	.605
Cleveland Indians	1947-56	928-613	.602
Balt. Orioles (1954)	1968-77	952-652	.594
Boston Red Sox	1909-18	879-616	.588
Wash. Sen. I (1901-60)	1924-33	878-651	.574
Chicago White Sox	1952-61	879-669	.568
Tor. Blue Jays (1977)	1982-91	914-705	.564
Detroit Tigers	1979-88	865-700	.553
KC Royals (1969)	1973-82	862-699	.552
Minn. Twins (1961)	1962-71	891-726	.551
Oakland A's (1968)	1968-77	885-725	.550
Seattle Mariners	1993-02	840-711	.542
Mil. Brewers (1970)	1978-87	824-739	.527
Texas Rangers (1972)	1990-99	807-747	.519
Anaheim Angels (1961)	1982-91	828-792	.511
SL Browns (1902-53)	1920-29	762-769	.498
Was. Sen. II (1961-71)	1962-71	679-932	.421
KC A's (1955-67)	1957-66	652-932	.412

**POOREST TEN-YEAR PERIOD, AMERICAN LEAGUE**

TEAM	YEARS	WON-LOST	PCT.
Philadelphia A's	1915-24	528-963	.354
Boston Red Sox	1923-32	544-988	.355
Wash. Senators I	1902-11	549-936	.370
St. Louis Browns	1931-40	581-948	.380
Kansas City A's	1956-65	630-948	.399
Seattle Mariners	1977-86	641-924	.410
Wash. Senators II	1961-70	677-936	.420
Chicago White Sox	1926-35	643-881	.422
Detroit Tigers	1993-02	664-889	.428
Cleveland Indians	1983-92	711-909	.439
New York Yankees	1908-17	686-838	.450
Oakland Athletics	1977-86	705-861	.450
Kansas City Royals	1993-02	700-851	.451
Toronto Blue Jays	1977-86	711-850	.455
Milwaukee Brewers	1970-79	738-873	.458
Minnesota Twins	1978-87	716-849	.458
Anaheim Angels	1968-77	744-868	.462
Texas Rangers	1980-89	720-839	.462
Baltimore Orioles	1954-63	751-810	.481

\*Study covers 1901-2002. Dates following teams in "Best" listings refer to tenures or starting dates.



## BEST TEN-YEAR PERIOD, NATIONAL LEAGUE

TEAM	YEARS	WON-LOST	PCT.
Chicago Cubs	1903-12	980-533	.648
N.Y. Giants (1901-57)	1904-13	973-555	.637
Pittsburgh Pirates	1901-10	945-545	.634
St. Louis Cardinals	1940-49	960-580	.623
Atlanta Braves (1966)	1991-00	955-599	.615
Bkln. Dodgers ('01-57)	1946-55	948-595	.614
Cincinnati Reds	1972-81	927-629	.596
Mil. Braves (1953-65)	1953-62	888-662	.573
L.A. Dodgers (1958)	1972-81	889-672	.570
S.F. Giants (1958)	1962-71	914-708	.564
Philadelphia Phillies	1975-84	872-693	.557
New York Mets (1962)	1982-91	876-741	.542
Houston Astros (1962)	1993-02	841-714	.541
Montreal Expos (1969)	1979-88	825-736	.529
S.D. Padres (1969)	1982-91	807-812	.498
Boston Braves ('01-52)	1943-52	756-778	.493

## POOREST TEN-YEAR PERIOD, NATIONAL LEAGUE

TEAM	YEARS	WON-LOST	PCT.
Philadelphia Phillies	1936-45	511-1,016	.335
Boston Braves	1903-12	528-980	.350
St. Louis Cardinals	1902-11	577-913	.387
Brooklyn Dodgers	1904-13	594-924	.391
Pittsburgh Pirates	1946-55	605-934	.393
San Diego Padres	1969-78	651-959	.404
New York Mets	1962-71	660-957	.408
Cincinnati Reds	1928-37	629-903	.411
Chicago Cubs	1953-62	652-895	.421
Montreal Expos	1969-78	705-907	.437
Houston Astros	1962-71	713-905	.441
Atlanta Braves	1981-90	696-862	.447
San Francisco Giants	1976-85	734-834	.468
New York Giants	1940-49	724-808	.473
Los Angeles Dodgers	1981-90	819-746	.523
Milwaukee Braves	1956-65	880-694	.559

## SOURCES

*Big League Baseball Electronic Encyclopedia*, Franklin Electronic Publishers.

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*Sporting News Complete Baseball Record Book*.

**It's a Dirty Job, but...** From *The Sporting News* of January 14, 1893: "The plan of having the duties of manager and captain separated and performed by two men, has so manifestly many advantages over the other one, that it is in vogue in a majority of professional clubs. In the National League and American Association, for example, only five clubs employed player-managers, namely, Chicago, Baltimore, Cincinnati, Brooklyn, and Cleveland, and in the cases of several of these clubs some official of the club accompanies the team on its trip away from home to look after the finances. A captain's efficiency is seriously impaired if he is obliged to keep one eye on his men and the other eye on the ticket office, and at the same time play his own position satisfactorily. The policy of having one man especially engaged to look after the business affairs of the team leaves the captain free to devote all his attention and energies to handling the men on the field, appears to be the wisest; at least it is so regarded by base ball professionals."

— ROBERT H. SCHAEFER

JOE DITTMAR

## Baseball's Most Unbreakable Records

### Polled from SABR's Records Committee

**M**ore than any other sport, baseball as we know it today is infatuated with numbers. Every movement, whether from defensive positions, the pitcher's mound, or the batter's box, is examined, analyzed, and quantified. As a result, we are treated to "quality starts," "holds," and batting averages with two-strike counts or on artificial turf in night games. Statistics not even dreamed of 50 years ago may now be woven into player contracts or even influence managerial decisions. Computers allow us to analyze not only current performances by way of intricate mathematical formulas, but also to resurrect and compare those of more than a century earlier. Spawned by this fascination with records, those best-worst, longest-shortest, most-least measurements now engorge a multitude of books and test the wits of ardent fans.

The national pastime is unique in that its daily meanderings have been recorded with surprising consistency since 1871, when the first professional league was born. The 19th century brought formation and self-realization for the professionals, and as such precipitated endless tinkering with the rules. The resulting rampant rule changes make comparison with 20th century performances a conundrum. Can we fairly compare strikeouts by pitchers throwing underhanded or from a distance of 50 feet with those of today's hurlers? During 1880, Providence's George Bradley issued only six free passes in 196 innings pitched. At the time, however, eight balls were required for a walk.

Performance expectation was also shockingly different in baseball's adolescence. Substitutions were rare, pitchers were expected to complete games regardless of the number of innings, and players often competed despite injuries. Such was the case in 1877, when

Louisville's Jim Devlin pitched every inning (559) of every one of his team's games.

In addition, equipment and playing arenas make comparison difficult. Is it reasonable to compare the spongy, blackened baseballs being hit to bare-handed fielders with the projectiles currently being served to the plate? Ballparks with distant outfield limits were once commonplace, as were fans lining playing perimeters. And what may now be bemoaned as fan interference was often accepted as simply another dimension of the early game.

These variables should be considered while making any pronouncement of the most or least of any aspect of the game. Nevertheless, it is exactly because of these significant differences that we marvel at statistics of bygone eras. And when many of those record-setting statistics are taken out of context and placed in today's atmosphere, they do indeed appear unfathomable and unbreakable.

For all of the reasons mentioned above, most of the records considered in this treatment were of a 20th-century nature, or at least subsequent to 1893, when staffs were hurling overhand and from a distance of 60'6". A few exceptions were tolerated, such as the fact that the venerable Cy Young won 72 of his games and tossed more than a thousand innings at a distance less than the current one. But for the most part, benchmarks established prior to 1893 are beyond the scope of this analysis.

Just what records, then, are unbreakable? The lists accumulated from members of the SABR Records Committee range from the familiar to the esoteric, from Joe DiMaggio's 56-game hitting streak to Connie Mack's seven *consecutive* eighth-place finishes. Most remarkable was the sheer *number* of records considered by members to be unbreakable. Initial polling revealed several dozen marks, but as more lists rolled in, new depths in obscurity were probed, resulting in more than a hundred benchmarks that may be considered safe from the ravages of future challenges. For the sake of space, and sanity of the tabulator, an attempt was made to limit the listing to generally

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accepted and understood categories.

Following are lists of standards that members considered unbreakable, divided into ten very general categories. While most records result from a combination of circumstances, these were the major factors:

- Performance expectations
- Scoring/playing rules
- League structure/rules
- Ballpark configurations
- Tightened crowd control
- Equipment
- Game strategy
- Outside influences
- Outright superb performance
- Alignment of the stars

**DIFFERENT PERFORMANCE EXPECTATIONS** This was the largest category of untouchable records submitted by committee members. Most were established in an era so different from today, they strain the limits of credulity. We can only shake our heads and marvel at the litany of numbers left by Cy Young—games started, games won and lost, complete games, innings pitched, and batters faced. Less well known but equally staggering are the marks of Jack Taylor, who labored 1,727 consecutive innings, including 187 complete games, without being relieved; of Joe McGinnity, who tossed five complete doubleheaders in his career; or of pitchers Leon Cadore and Joe Oeschger, who each went the distance in a fabled 26-inning marathon. Two Boston clubs, 1901 NL and 1904 AL, went the entire season while employing just five moundsmen. Today's hurlers, asked to throw hard for as long as they can, and who anticipate relief when their fastballs lose five miles per hour off the radar gun, simply are not expected to approach the stamina limits of their predecessors. The availability of relievers and concern for injury, as well as career length, earning potential, and long-term contracts all limit the efforts of the modern-day hurler.

While most benchmarks relative to performance expectations concern pitching accomplishments, not all of them are positive. During the first several decades of the century, even when pitchers were underperforming, they were expected to remain in the fray and "take their medicine." Thus Dolly Gray bore the ignominy of issuing a record seven consecutive walks, and Eddie Rommel was once shelled for 29 hits in a single game.

**CHANGES IN SCORING/PLAYING RULES** Rule changes made throughout the century provide safe harbor for many previously established "records." For example, pinch-hitters can no longer be credited with two pinch hits in the same inning as they once were. There are many of these instances in the books, but a rule instituted in the 1950s precluded a player from pinch-hitting for himself if he stepped to the plate a second time in the same inning. A second at-bat by the same pinch hitter now is considered as that player batting for himself, not for another player.

Another rule change, one of defensive indifference, will likely keep safe the mark shared by the Senators of 1915 and the Phillies of 1919. Each club stole eight bases in one inning, the Nationals doing it in the first inning against sore-armed Cleveland catcher Steve O'Neill, and the Phillies notching eight in the ninth inning of a lost game. The rule was changed in 1920.

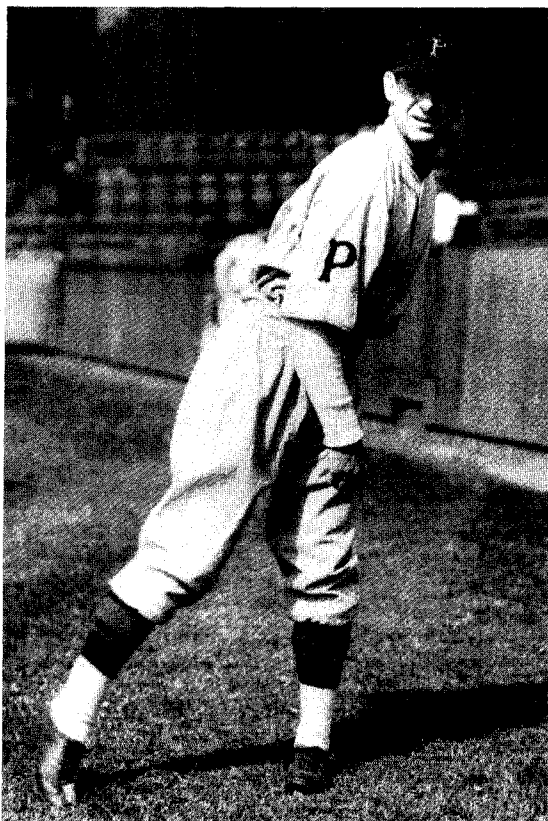
**CHANGES IN LEAGUE STRUCTURE/RULES** Early in the 20th century most clubs employed very few players. The entire roster of the 1904 Boston American League club contained the names of only 18 players, five of them pitchers. The five moundsmen remain the minimum mark.

**BALLPARK CONFIGURATIONS** When the Pittsburgh Pirates set their 20th-century team record of 129 triples in 1912, they played half their games in cavernous Forbes Field. There the distant outfield limits measured LF 365', RF 376', CF 435', and were well suited for circling the bases on line drives. The biggest contributor that season was Owen "Chief" Wilson with 36. His single-season record, however, may more suitably belong in the category of "Alignment of the Stars," since his second best campaign netted just 14 three-baggers.

Fielding records, too, were influenced by ballpark dimensions. Chuck Klein's 44 outfield assists in 1930 were not only the result of his fine arm but also the towering wall in right field just 280' from home plate. Even right-center was a scant 300' from the batters, affording ample opportunities for playing caroms and nipping frisky baserunners.

Finally, the advent of lights in stadiums locked forever the mark of 10 tied games by the Detroit Tigers in 1904.

**TIGHTENED CROWD CONTROL** On July 12, 1931, the Cubs invaded St. Louis, and Cardinal fans turned out in record numbers. So many attended, in fact, that they spilled from the stands onto the field, reducing the



*Heinie Meine, a.k.a. "The Count of Luxemburg," absorbed 10 consecutive hits.*



*Johnny Burnett had an opportunity for his 10th hit of the game but flied out in the 17th inning.*

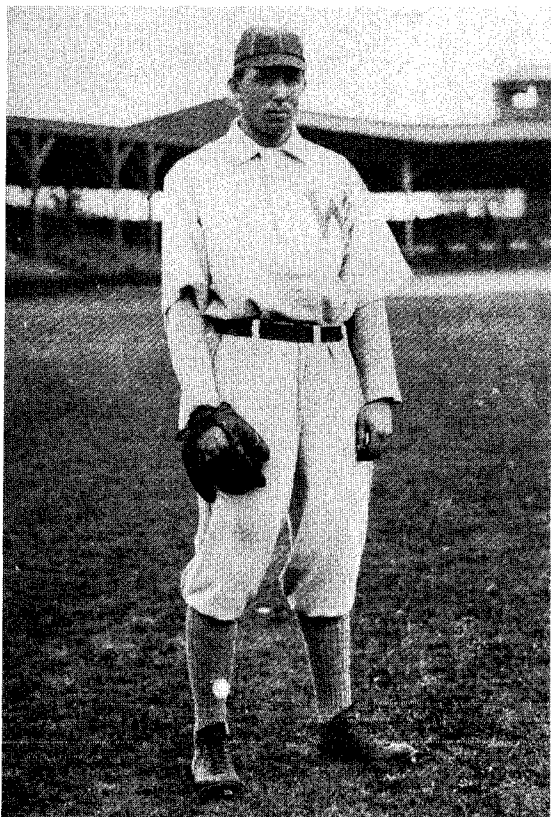
playing dimensions to schoolboy proportions. Police were woefully outmatched as fans collected souvenirs on routine fly balls hit to the outfield. This necessitated a hastily made rule of the day considering as a double any ball hit into the crowd. Although a double-header was played, the second game alone produced 23 doubles, another mark that likely will stand the test of time.

**CHANGES IN EQUIPMENT** No doubt the size and shape of modern baseball gloves has altered fielding averages. But perhaps the most pronounced impact on records has been dealt by the constitution of the ball. The dead ball era was so called because of the softness of the ball, which in turn influenced strategy. Runs were scored one at a time, and home runs were uncommon. The dead ball put the advantage into the hands of the men who stood on the mound. Sacrifices also held great importance, ERAs collapsed, and shutouts were more common than in today's game. During this era Grover Alexander garnered 16 shutouts in a single

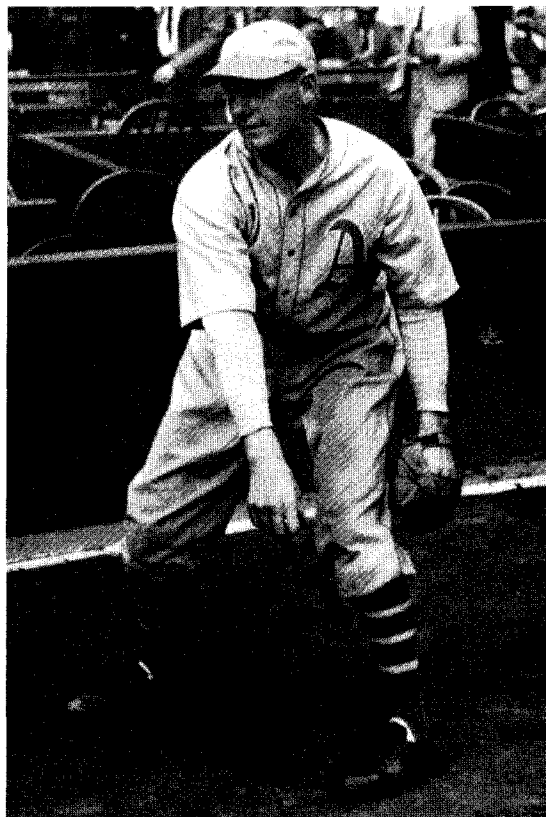
season, and Ray Chapman collected 67 sacrifices, both marks that still stand.

**CHANGES IN GAME STRATEGY** Changes in the liveliness of the ball also fostered corresponding alterations in strategy. John McGraw's gritty management style in the dead ball era fostered an abundance of stolen bases. The Giants of 1911 still retain the modern single-season team stolen-base record of 347, the same year the Yankees stole 15 in one game. Ten years later, with the advent of the live ball and the spectacular impact of the home run, the Giants, still under McGraw, stole only 137 bases. Strategy was more blunt that year as Ruth amassed an astonishing 457 total bases, still the all-time benchmark.

Today's infatuation with power hitters and the home run has encouraged more players to swing for the fences. Recently we've seen one of the game's most glamorous records, Roger Maris's 61 home runs, buried beneath a barrage of long ball clouting. But this environment has also enabled quality pitchers to



*On his record-setting day, Dolly Gray tossed a one-hitter but lost 6-4.*



*Eddie Rommel relieved in the second inning and became the winning pitcher in the 17th.*

take advantage of the free swinging, and thus we marvel at the inconceivable 5,714 lifetime strikeouts by Nolan Ryan. This unbreakable record appeared on most lists submitted by Record Committee members.

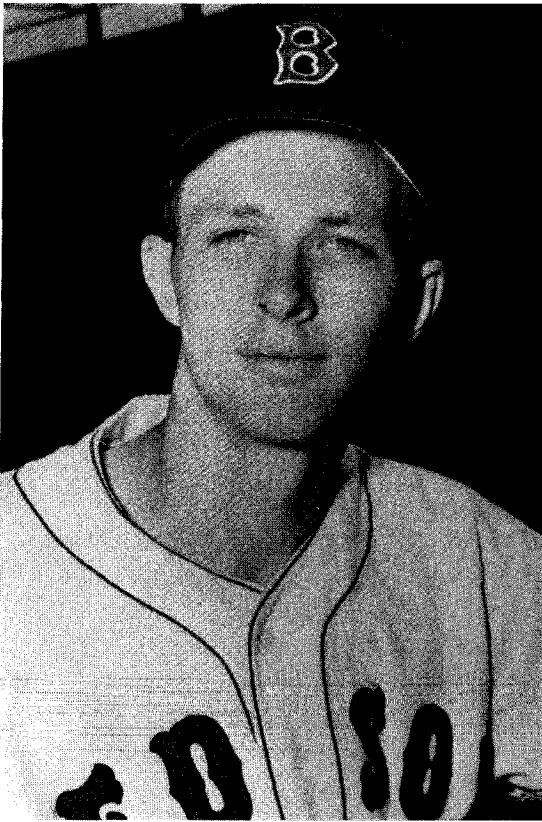
**OUTSIDE INFLUENCES** The strength of the players union will undoubtedly keep safe many records of the past. Coupled with owner's financial considerations, it is doubtful we will ever again witness the 44 doubleheaders played by the White Sox in 1943; the nine consecutive doubleheaders played by the Boston Braves in 1928; or the tripleheader (three complete games) played in one day on three occasions.

Before radio and television imposed their demands on game times, play was generally more brisk. Astonishing in today's context is the safe record of the nine-inning game played in only 51 minutes between the Phillies and Giants in 1919.

**OUTRIGHT SUPERB PERFORMANCES** As noted, few records can be attributed to a single reason, but some are the result of a singular performance by an exceptional player. Although a little luck can't be ruled out, and the lack of dominant relievers helped, Joe DiMaggio's 56-game hitting streak made the "unbreakable" list of most Records Committee members. In the same category would be Ruth's lifetime slugging average. These accomplishments are so far beyond the runner-up as to render them in the unbreakable category.

Also included in superb performances would be the .440 batting average by Hugh Duffy, Hornsby's .402 five-consecutive-year average, or the consecutive no-hitters by Johnny Vander Meer. Today's pitchers rarely toss three consecutive complete games, let alone three consecutive no-hitters needed to shatter this mark.

Lesser-known marks such as Joe Sewell's 115 consecutive games without striking out or his mere four strikeouts in 155 games in 1929 should also weather the test of time.



*Gene Stephens, filling in for Korean War pilot Ted Williams, collected three of his season's 45 hits in one inning.*



*Walter Holke's 42 putouts in a single game surpass the second highest total by 10.*

**ALIGNMENT OF THE STARS** Although this is a dangerous category to consider unbreakable, it is difficult to imagine anyone topping the outrageous one-day anomalies of some lesser-known players. Could anyone collect four hits in an inning needed to break the record of three established by Boston's Gene Stephens in 1953? Or score four runs in one inning to break Sammy White's mark set in the same game? What about Fernando Tatis's mark of two grand slams in one inning? Johnny Burnett's nine hits in an extra-inning game? In order to better Rennie Stennett's record, someone would need to collect eight consecutive hits in a nine-inning game. These and others of their ilk appear safe.

For those wishing to view a more comprehensive list of records considered "unbreakable" by members of the Records Committee, the following list is offered. It should be kept in mind, however, that a half-century ago, prognosticators confidently predicted the immutability of many marks no longer found on this list, such as Gehrig's consecutive-games-played streak

and Ruth's single-season and lifetime home run benchmarks. Five years ago, who could have fathomed Barry Bonds's spectacular assault on the record books? So will some of the following be displaced too? Ironically, some may fall not because of a superior accomplishment on the field of play, but because of superior research by some of these same members of the Records Committee. Why, recently, the record for triples by a rookie was surpassed. Several committee members teamed, through excellent research, to increase the 1899 standard set by the Pittsburgh Pirates' Jimmy Williams from 27 to 28. Which of the following will be the next to fall?

## BASEBALL RECORDS LEAST LIKELY TO BE BROKEN

- |   |  |
|---|--|
| <p>.301 Lowest batting average for league leader (C. Yastrzemski 1968).</p> <p>.343 Highest team batting average single season (Philadelphia 1894).</p> <p>.366 Highest career batting average (T. Cobb).</p> <p>.402 Highest batting average during a five-season period (R. Hornsby 1921-25).</p> <p>.408 Highest single-season average for non-leader (J. Jackson 1911).</p> <p>.440 Highest single-season batting average (H. Duffy 1894).</p> <p>.690 Highest career slugging average (B. Ruth).</p> <p>1 Most doubleheader shutouts (E. Reulbach 1908); Fewest hits by both clubs in nine-inning game (Dodgers-Cubs 1965); Fewest left on base by both clubs in nine-inning game (Dodgers-Cubs 1965); Fewest walks by both clubs in doubleheader (several); Fewest hits by one team in an extra-inning game (several).</p> <p>2 Most pinch hits in one inning by one player (many); Most consecutive no-hitters (J. Vander Meer 1938); Most teams played for in a single day (M. Flack &amp; C. Heathcoate 1922; J. Youngblood 1982); Most grand slams in one inning (F. Tatis 1999); Fewest hits by one club in a doubleheader (Cleveland 1992).</p> <p>3 Most games played in one day (3 occasions); Most hits in one inning (G. Stephens 1953); Most runs scored in one inning (S. White 1953); Most times faced pitcher as batsman in one inning (many); Fewest hits allowed in three consecutive complete games (J. Vander Meer 1938).</p> | <p>4 Most saves in one World Series (J. Wetteland 1996); Fewest strikeouts in a season while appearing in 150 games (J. Sewell 1925 &amp; 1929).</p> <p>5 Most complete doubleheaders pitched (J. McGinnity); Fewest pitchers used in a season (1904 Bos AL. 1901 Bos NL).</p> <p>6 Most HRs allowed while emerging victorious (L. Benton 1930 &amp; H. Thurston 1932).</p> <p>7 Most consecutive walks allowed (D. Gray 1909); Most no-hitters, career (N. Ryan).</p> <p>8 Most stolen bases by one club in one inning (Was 1915. Phi NL 1919); Most walks allowed by one pitcher in an inning (D. Gray 1909); Most bases on balls received in a doubleheader (M. Bishop 1930 &amp; 1934).</p> <p>9 Most consecutive years pitched 300 or more innings (W. Johnson); Most consecutive doubleheaders in a season (Bos NL 1928); Most consecutive years leading in batting average (T. Cobb); Most hits in an extra-inning game (J. Burnett 1932); Most runs batted in accounting for all team's runs (M. Greenwell 1996); Most consecutive hits by pinch-hitter (D. Philley 1958); Most HRs hit by a pitcher, single season (W. Ferrell 1931); Most triples by one club in a game (Baltimore 1894).</p> <p>10 Most consecutive hits allowed in a game (B. Reidy 1901 &amp; H. Meine 1930).</p> <p>11 Most walks to one club in one inning (Yankees 1949).</p> <p>12 Most years leading in batting average (T. Cobb); Most years leading league in HRs (B. Ruth).</p> <p>15 Most years played all club's games (C. Ripken).</p> |
|---|--|



# THE BASEBALL RESEARCH JOURNAL

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|------|--|-----|--|
| 15.8 | Youngest player to appear in a major league game (J. Nuxhall).   | 38  | Most 1-0 games won lifetime (W. Johnson); Most HRs hit by a pitcher, lifetime (W. Ferrell).              |
| 16   | Most years pitched 300 or more innings (C. Young); Most shutouts in single season (G. Alexander 1916).   | 39  | Most consecutive complete games pitched in a season (J. W. Taylor 1904).                                 |
| 17   | Most consecutive innings scoring a run (Bos AL 1903).  | 41  | Most pitching victories in a single season (J. Chesbro 1904).  |
| 18   | Most innings in complete-game shutout (several); Fewest players used in a season (1904 Bos AL); Most wins in relief in single season (E. Face 1959).                     | 42  | Most putouts in one game by one player (W. Holke 1920).  |
| 18½  | Most innings pitched in relief in one game (Z. Zabel 1915).  | 44  | Most doubleheaders in season (ChiSox 1943); Most assists by an outfielder in a single season (C. Klein). |
| 19   | Most consecutive batters reaching base safely in one inning (Dodgers 1952).  | 48  | Most complete games in a season (J. Chesbro 1904).   |
| 20   | Most consecutive years hitting 20 or more HRs (H. Aaron); Most left on base by one club in nine-inning game (NY AL 1956).  | 50  | Most steals of home, career (T. Cobb); Most hit by pitch in a single season (R. Hunt 1971).              |
| 22   | Most consecutive games with one or more bases on balls (R. Cullenbine 1947).   | 51  | Most hits by both clubs in a nine-inning game (Phils-Cubs 1922).   |
| 23   | Most doubles by both clubs in a game (Cards-Cubs 1931); Most consecutive years batting .300 or better (T. Cobb); Most years with one club (B. Robinson, C. Yastrzemski). | 56  | Most consecutive games batted safely (J. DiMaggio 1941).   |
| 26   | Most innings pitched in a game (L. Cadore & J. Oeschger 1920).   | 58  | Fewest pitches to complete a nine-inning game (R. Barrett).  |
| 27   | Most years pitched (N. Ryan).  | 67  | Most sacrifices in a single season (R. Chapman 1917).  |
| 29   | Most hits allowed in extra-inning game (E. Rommel 1932).   | 110 | Most career shutouts (W. Johnson).   |
| 30   | Most walks by both clubs nine-inning game (Tigers-A's 1916).   | 115 | Most consecutive games without striking out (J. Sewell 1929).  |
| 32   | Most doubles in doubleheader by both clubs (Cards-Cubs 1931).  | 124 | Most career wins in relief (H. Wilhelm).   |
| 36   | Most triples, single season (O. Wilson 1912); Most hits allowed in nine-inning game (J. Wadsworth 1894).   | 191 | Most RBI in a single season (H. Wilson).   |
|      |  | 196 | Most runs scored in single season (B. Hamilton 1894).  |
|      |  | 206 | Most hit batsmen in a career (W. Johnson).   |



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208	Most innings pitched in relief in one season (M. Marshall 1974).	818	Most starts in career (C. Young).
312	Most triples in a career (S. Crawford).	1,001	Most consecutive innings pitched without allowing a HR (E. Killian 1903-07).
313	Most games lost in career (C. Young—includes 1890-92).	1,727	Most consecutive innings pitched without relief (J.W. Taylor, 1901-06).
350	Most grounded into double plays in career (C. Ripken).	2,297	Most RBI in a career (H. Aaron).
425	Most team errors in single season (Detroit 1901).	2,632	Most consecutive games played (C. Ripken).
450	Most assists by an outfielder, career (T. Speaker).	2,795	Most walks allowed in career (N. Ryan).
457	Most total bases in a single season (B. Ruth).	3,215	Most singles in a career (P. Rose).
464	Most innings pitched on one season (E. Walsh 1908).	3,347	Most consecutive at-bats without hitting a HR (T. Thevenow 1926-38).
511	Most games won in career (C. Young—includes 1890-92).	4,256	Most hits in career (P. Rose).
511	Most sacrifices in a career (E. Collins).	5,714	Most strikeouts in a career (N. Ryan).
751	Most complete games in a career (C. Young—includes 1890-92).	6,856	Most total bases in career (H. Aaron).
792	Most doubles in a career (T. Speaker).	7,377	Most innings pitched in a career (C. Young—includes 1890-92).
802	Most games pitched for one club in career (W. Johnson).	14,053	Most at-bats, lifetime (P. Rose).
		15,890	Most plate appearances, lifetime (P. Rose).

STEPHEN BOREN

## Bill Doak's Three "No-Hitters"

**T**here have been only a handful of major league pitchers who threw three no-hitters: Larry Corcoran, Cy Young, Bob Feller, Sandy Koufax, and Nolan Ryan. Similarly, only Johnny Vander Meer, Allie Reynolds, Virgil Trucks, Jim Maloney, and Nolan Ryan threw two nine-inning no-hitters in a single season. Bill Doak almost joined these two elite circles. Unfortunately, his fielding stupidity cost him three no-hitters and caused him to become a forgotten player. Ironically, he revolutionized baseball fielding with his development of the modern fielding glove.

William Leopold Doak was born January 28, 1891, in Pittsburgh, Pennsylvania. He was one of the last legal spitball throwers. His professional career began with Wheeling of the Central League (Class B) in 1910, where he led the league in losses and runs and remained with them in 1911. In 1912 he pitched with Akron of the Central League, Columbus of the American Association and then broke in with the Cincinnati Redlegs on September 1, 1912, as a 21-year-old pitcher. Unfortunately, after pitching just two innings, he was relieved. He was with Akron again in 1913 and returned to the majors with the St. Louis Cardinals. In 1914 he was a 20-game winner,<sup>1</sup> led the National League in ERA, and pitched seven shutouts. He won 20 games again in 1920. In 1921 he led the league in ERA and won-loss percentage. His overall record was a respectable 170-157 with a 2.98 ERA. Considering he was pitching for bad to mediocre Cardinal teams, this record is quite remarkable. Of note, he pitched 32 shutouts for the Cardinals from 1913 through 1923. Dizzy Dean pitched but 26, and only 23 were with the Cardinals.

Bill's first "no-hitter" occurred August 10, 1920, against the Philadelphia Phillies in Baker Bowl. The

Phillies were far removed from their 1915 pennant, and would finish in the cellar again that season.

Winning 3-0 going into the bottom of the seventh, Doak walked Bevo LeBourveau. Catcher Verne Clemons threw out Johnny Rawlings, as the runner advanced to second. Then Cy Williams hit a grounder between Rogers Hornsby at second base and Jack Fournier at first base. Fournier dove for the ball but missed it. Fortunately, Hornsby was able to field it. Unfortunately, Doak had remained on the pitcher's mound and failed to cover the bag. Thus, Hornsby had no one to throw to at first base. Williams got a cheap hit, and LeBourveau advanced to third, where he subsequently scored on Irish Meusel's sacrifice fly. There were to be no more hits off Doak. His failure to cover first base cost him the no-hitter, as well as another shutout.

Bill was a slow learner. On May 11, 1922, at Sportsman's Park, Bill Doak faced Shufflin' Phil Douglas and the New York Giants. The Giants would go on to win the pennant by seven games and have a team batting average of .305 that season. The leadoff batter was Dave Bancroft, who would bat .321 that year. He bunted down the first-base line. Neither Jack Fournier nor Bill Doak was there to field the ball. Thus, Bancroft had a leadoff single, which would be the only hit for the Giants. Thanks to a pair of runs in the eighth inning, the Cardinals won 2-0. Douglas would go 11-4 with a 2.63 ERA that year, but was permanently banned from baseball that August after offering to throw games.

Apparently, Bill Doak had not learned his lesson from two years before. Had he fielded the bunt, he would have had a no-hitter. Instead, he had his second one-hitter.

On July 13, 1922, at Sportsman's Park, Doak had a third chance for a no-hitter. He was facing the Philadelphia Phillies again. Although they would finish seventh for a change, they had a team batting average of .282 that year, and led the majors with 116 home runs. John Singleton pitched a great game for the Phillies. He walked two men and gave up only six

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hits. The two pitchers matched shutout ball for 4½ innings. Then in the bottom of the fifth, a double by Jack Fournier, a wild pitch, and a bloop single gave the Cardinals a run.

Bill Doak carried the 1-0 lead into the seventh without giving up a hit. Then Curt Walker, a .337 hitter that year, led off with a routine grounder between first and second base. Doak apparently thought that Rogers Hornsby at second would field it. However, Jack Fournier, the first baseman, grabbed it. Unfortunately, Bill Doak again was standing on the mound, watching the play. Like Hornsby in 1920, Fournier had no one to throw the ball to. That would be the only hit for the Phillies.

Singleton ended up losing the game 1-0. He would go 1-10 with a 5.90 ERA that year, which was his only major league season. His one victory was a shutout.

Thus, for the third time in three years, Bill Doak lost a no-hitter because he failed to field his position. Twice were because he failed to cover first base on grounders to infielders. The third time he lost the no-hitter because he failed to field a bunt.

Doak never threw another one-hitter again. On June 13, 1924, he was traded to the Brooklyn Dodgers for pitcher Leo Dickerman (19-24, 3.95 ERA over three seasons<sup>2</sup>) and was 11-5 for the Dodgers that year. He retired to Florida to enter the real estate business for two years. He spurned a lucrative offer to return to baseball (\$15,000) and stayed out of the majors until 1927. After playing for the Dodgers in 1927 and 1928, he was released. He went 1-2 for the 1929 Cardinals.

Doak's role in the development of the modern baseball glove has been long neglected by baseball historians. In 1919 he visited the Rawlings Sporting Goods Company in St. Louis and explained his idea for a novel type of baseball glove. In 1920 Rawlings produced the first "Bill Doak model" glove. This had a multi-thong web laced between the first finger and thumb, which created for the first time a neutral pocket. No longer was a glove a mere protective device for a player, but now was a true fielding aid. The glove was so popular that Rawlings produced it until 1953.

Despite the use of his special glove, Doak was not a good fielder. The highest he ranked in National League pitchers' fielding percentage was 14th, and averaged about 31st. His lifetime fielding average was a mediocre .960.

## NOTES

<sup>1</sup>The *Baseball Encyclopedia* lists Doak as winning 20 in 1914; *Total Baseball* and *The Sports Encyclopedia: Baseball* by Neft & Cohen list him with 19 wins.

<sup>2</sup>*Total Baseball* lists Dickerman at 19-27, 4.00 ERA.



*Bill Doak ranks second to Bob Gibson on the Cardinals' all-time list of shutouts pitched.*

VICTOR DEBS, JR.

## The King Is Dead

*"It is no bad thing to be a king."*

—Homer

**O**n a cool October afternoon in Boston in 1914, the Red Sox hosted the Yankees at three-year-old Fenway Park. On the mound for the Sox was rookie left hander George Herman Ruth, already referred to as "Babe" by teammates and press. Ruth was pitching in his third major league game, having split his first two decisions. Enjoying a 9-2 lead, batter Babe began the home seventh with a double, then scored following a sacrifice bunt and sac fly. Ruth hurled a complete-game, six-hit victory against the team with which he would gain renown the following decade.

For both clubs the ballgame was unimportant, as Mack's A's had already won the 1914 flag. Modern historians find significance in it, though. Ruth's tally was his first of a still-standing American League record 2,174 runs scored; the double his first major league hit. How appropriate that baseball's "Sultan of Swat" attained these two milestones against a pitcher with the equally worthy sobriquet "King."

Leonard Cole had earned the regal title four years earlier when he won 20 with the Cubs; it is a feat only 18 other rookies achieved in the 20th century. Cole's league-best .833 winning percentage in 1910 ranks fourth among all NL hurlers with 20 or more wins, and is the best by any rookie. His 1.80 ERA makes him one of nine NL rookies to finish the season with an ERA under 2.00. He is one of only 50 NL pitchers to toss a shutout in his first major league start and one of 14 senior-circuit hurlers. He is the only rookie to hurl an abbreviated no-hitter. King Cole competed in the 1910 World Series, and the slender six-footer pitched well in Chicago's sole victory against the A's.

Following a sophomore season only slightly less

superb, Cole's career sank as suddenly as the *Titanic*. He won only three in 1912, was a minor leaguer in 1913, and a second-stringer with the Yankees when he opposed Ruth in the final week of the 1914 season. Cole's nickname seemed a misnomer by the spring of 1915 as he prepared to fight for a starting position. By the end of the year, Cole was fighting for his life.

Barnstorming with the Boston Bloomer Girls wasn't an exhilarating experience for a young male ballplayer of the early 20th century, especially if it included wearing a lady's wig and trousers, but it was a way of earning money while playing ball. Having female teammates wasn't particularly distressing either. Smoky Joe Wood and Rogers Hornsby endured the carnival-like atmosphere and hilarity from spectators and used the Bloomer Girls as a stepping-stone to the majors. So, too, would Cole.

Leonard Leslie Cole was born on April 15, 1886, to parents Keury and Cora in the small rural town of Toledo, located in central Iowa approximately 60 miles northeast of Des Moines. After establishing a reputation as a talented local pitcher, Leonard left Toledo to join the Bloomers in 1907. In 1908 he played for semi-pro clubs in Ottumwa, Iowa and Tecumseh, Michigan. Following an exhibition game against Bay City in 1909, the six-foot two-inch 180-pound fireballer was signed by the manager of the local Class D team in the Southern Michigan League. He became a standout starter, finishing the season with a 21-7 record. Cole complemented his artistry on the mound with part-time work as a tonsorial artist, and proficiency in both professions soon earned him the nickname "Bay City Barber."

While pitching in a late-season game in 1909, Cole was spotted by Chicago Cub scout George Huff. Huff had played an important role in building the powerful Chicago team, one that won three straight pennants and two world championships from 1906 to 1908. Huff recommended Cole to player-manager Frank Chance, who signed Cole. He then tested him on October 6 with a starting assignment in the opener of a season-ending twin bill against the Cardinals. Any

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misgivings Chance might have harbored were assuaged when the 23-year-old righthander hurled a six-hit shutout, becoming only the ninth NL pitcher in the century to grab a whitewash in his major league debut. The King fanned one and walked three and displayed a good sinker as infielders Johnny Evers and Joe Tinker combined for nine assists and one double play. Cole was equally impressive with the lumber, stroking three hits, including a triple, in four at-bats.

Assured of a major league contract for 1910, Cole married a resident of Bay City with the surname Seder, and continued barbering during the winter while keeping in shape by running and exercising in preparation for the upcoming season.

Fred Clarke's Pirates, led by Honus Wagner's league-leading .324 average and 100 RBIs, had snapped the Cubs' string of consecutive pennants in 1909, prompting Chance to shore up his pitching staff by acquiring veterans Harry McIntire and Lew Richie. Otherwise, the club was about the same as it had been for the past four seasons, with the exception of Cole.

The Cubs were confident of regaining the pennant in 1910, an optimism not unfounded. By midseason, they held a seven-game lead over the Giants and Pirates, with Cole the leading pitcher on the staff. King had won his first seven decisions, not taking his first loss until June 15 in a Brooklyn marathon that featured Dodger starter Cy Berger's matching Cole pitch for pitch through 13 innings. After retiring the Cubs in the 14th, Berger came to bat with the winning run at second and drilled a game-ending single. In what was reported as unprecedented at Washington Park, fans rushed on the field and carried hero Berger to the clubhouse.

*The Sporting News* commented, "Cole of the Cubs is certainly some pitcher. He is easily the sensation of the kid crop of the National League." The rookie continued impressing. At the end of July, Chicago faced the Cardinals in a doubleheader in St. Louis. Cole was working on a no-hit shutout in the nightcap when Umpire Hank O'Day called play after seven innings due to darkness. The no-hitter was the only one thrown in the senior circuit in 1910.

Already referred to as "King" and "Hi," Cole went undefeated in August, won his first decision of September, and survived a sloppy outing against Cincinnati, in which he walked five, and another against Pittsburgh when he yielded a dozen hits and four passes. His winning streak was snapped at Brooklyn's Washington Park on September 17. Tied at

two in the tenth, Cole faced a second-and-third situation with one out. Right-handed batter Bob Coulson dribbled a comebacker to Cole, who, after a momentary juggle, threw to the plate. Brooklyn manager Bill Dahlen was certain the game was over but umpire Bill Klem called the runner out, prompting Dahlen's charge to the plate and subsequent banishment to the clubhouse. Following his expulsion, a shower of projectiles emanated from the stands, mostly in the form of soda bottles; none found their intended target and ballpark police quickly restored order. Given a reprieve, Cole appeared to have escaped the jam when Humpy McElveen, a .225 hitter, rolled a grass cutter to short, but Tinker dumped Humpy's ball at the feet of first baseman Chance, whose fumble led to the game-winning tally.

Pitching at the Polo Grounds in his next start on September 23, Cole hurled a shaky but scoreless first frame, then was given a 2-0 lead in the second courtesy of Tinker's poke into the stands. The Giants squared the game in the home half, then knocked Cole from the box with a pair in the third. The Cubs rallied to tie, taking the King off the hook, but lost when Fred Snodgrass tagged a McIntyre fastball over the head of center fielder Hofman for an inside-the-park homer.

The Cubs' 1910 lead remained seven following their loss to the Giants on September 23. By October 1, Chicago could clinch the pennant with a victory in Cincinnati. With Cole on the mound, the Cubs grabbed a 1-0 lead and added a pair in the fourth. The Reds got one back in the bottom of the inning, but Chicago tallied twice in the fifth and Cole coasted to a 9-6 victory. Despite winning the battle for the flag, the Cubs lost the war for the World Series. In the fifth inning, baserunner Evers collided with Cincy catcher Tommy Clarke at home and broke his ankle. The Cubs' spirited second baseman watched the Series from the stands. His replacement, Heinie Zimmerman, would lead the league in batting two years later, but was still a green 23-year-old part-timer in 1910, and his play in the Series was mediocre. The A's trounced the lackluster Cubs four games to one, outscoring the losers by a count of 35-15.

For Chicago, old sol shined in the Series solely when King Cole took the mound in game four. Having won his final start of the season on October 9—a complete-game 4-3 decision in which he walked ten Cardinal batters, hit a batter, and tossed a wild pitch—Cole's arm was fully rested by the 22nd. Cole surrendered a run in the third, two in the fourth, but was otherwise

effective in his eight innings' work. The Cubs trailed 3-2 and were two outs from elimination when Chance drove a triple over the head of A's center fielder Amos Strunk, chasing home Frank "Wildfire" Schulte. Chance was stranded at third, but the Cubs won it for reliever Three Finger Brown in the tenth on a double and two-out single.

It had been a splendid season for Cole. The rookie won 20 of 24 decisions. Cole led all regular starters in winning percentage (.833), ERA (1.80), opponents' batting average (.211), and average hits allowed (6.53/nine innings). He pitched four shutouts, a no-hitter, and allowed five hits or less in 12 of his 29 starts. Despite his club's loss in the Series, Cole returned triumphantly to his Bay City home, where a car manufacturer presented the local hero with an automobile. The Wolverine workhorse had exploded out of the gate in 1910, and much was expected from him in 1911.

Cole did not disappoint, and was only slightly less effective in his second season. He accumulated 18 victories against seven defeats, with his .720 winning percentage third best in the league. His ERA rose to 3.13, his opponents' batting average to .236, but most N.L. pitchers suffered as well as the league ERA jumped from 3.02 in 1910 to 3.39 in 1911, the league batting average from .256 to .260. His combined record for 1910-1911 of 38-11 gave him a winning percentage of .776, second only to Doc Crandall's .780 for the first two seasons, was the best on the Cubs staff, and was superior to such renowned winners as Christy Mathewson and Rube Marquard. *The Sporting News* labeled Cole "the pitching find of the National League."

He was also somewhat of an oddball, quickly gaining a reputation as a jokester. Cole's humorous personality made him a natural on the vaudeville stage, and perhaps a longer life would have afforded Cole as much renown as ballplayer-comics Nick Altrock and Germany Schaefer. Cole's free-spirited manner would arouse criticism by managers and sportswriters, who pointed to the King's predilection for training improperly and breaking rules. In addition, Cole had the unusual and unfortunate habit of sleepwalking. Teammates would tease him after each somnambulistic episode, not all of which were harmless. During the spring of 1914, a nightly promenade on a Pullman left Cole with a severe cut on his right leg that required several stitches.

Whether due to a flippant attitude toward training,

off-the-field distractions, the beginnings of a fatal disease, or simply an overworked arm, Cole's career began its nosedive in 1912. In the first two months he appeared in eight games for the Cubs and won once. His ERA of 10.89 contrasted sharply with his combined 2.45 for his first two seasons. In 19 innings pitched, Cole surrendered 36 hits and eight walks. Batters were feasting off his fastball at a .409 clip. Though he maintained his popularity with fans, teammates began resenting his antics and work ethic. Rumors of dissension arose. By mid-May, Chance suggested to owner Charles Murphy that Cole be traded.

Murphy found a sucker in Pittsburgh's scrupulous owner Barney Dreyfuss. Cole was shipped to the Pirates along with outfielder Solly Hofman for two veterans: former 20-game winner Lefty Leifield and longtime Buc Tommy Leach. Dreyfuss had been impressed with Hofman's versatility as a semi-pro player in Belleville, Michigan, in 1903. He signed the infielder to a Pirate contract but later released him. He was now happy to have Hofman back. As for Cole, Murphy assured Dreyfuss that his arm was sound and that a change of scenery was all the pitcher needed.

Ruing the swap a few months later, Dreyfuss accused Murphy of deceiving him regarding Cole's arm. Revenge was realized a year later. Murphy's callous treatment of such popular players as Chance and Evers (Chance was fired as manager in 1912, and replacement Evers was gone the next season), Tinker and Ed Reulbach (traded), and Brown (banished to the bushes), further alarmed fellow owners already fidgety over the threat of the newly established Federal League's pirating of disgruntled major leaguers. Regarding Murphy as somewhat of a renegade anyway, fellow NL magnates welcomed President John Tener's decision in the winter of 1913 to force Murphy to sell his club.

Fred Clarke had patrolled the outfield for Dreyfuss teams for 18 seasons, first as a member of the Louisville Colonels, then as a Buccaneer. As player-manager for Pittsburgh from 1900 to 1911, "Cap" Clarke guided the club to four pennants including a world championship in 1909. His team finished third the next two years and was already badly trailing the defending champion Giants by June of 1912. Clarke expressed optimism that the trade for Cole would help narrow the gap.

But Cole continued struggling in Pittsburgh and by July was demoted to the role of mop-up reliever. On the 2nd, he entered a game with his former club com-

fortably ahead and allowed seven hits, two walks, and five runs in as many innings. Six days later, he pitched the final frame in a Philly rout of the Pirates. By then Cole had thrown in 13 games, allowing a generous 76 hits and 19 walks. Not what was expected of a king.

Cole's scoreless inning against Philadelphia earned him a start the following week. He pitched effectively against the Dodgers and held a 4-2 lead after eight frames. But Cole allowed two runs to score in the ninth and was removed for a pinch-hitter in the bottom of the inning, as the Pirates won in the tenth.

If the outing encouraged Cole, his optimism was short-lived. In his next appearance on July 25, King relieved in the ninth and surrendered three hits and the go-ahead run to the Dodgers. He was not involved in the decision, as the Pirates tied the game in the bottom of the inning and won in the tenth. Clarke showed reluctance in using Cole thereafter, and in early August instructed his floundering fireman to remain in Pittsburgh while the team headed east on an extended road trip. Cole left town instead, and when Clarke was informed by scouts that Hi was having a high old time, the Pirate skipper suspended his AWOL hurler for an "indefinite" period. Cole reacted defiantly, heading home to Bay City while declaring he was through with major league baseball.

A week later, both Cole and Clarke relented. King joined the team in New York, and on August 22 made his first appearance in four weeks, pitching a perfect inning in relief against the Giants. The next day, he entered the eighth with the score tied at one and yielded a run on a walk, single, and double before pitching a perfect ninth. On the 27th, Cole started against the Braves in Pittsburgh and was rocked for four runs and five hits in a third of an inning. If Clarke's decision to bring back Cole had been for the purpose of shopping him around, his pitcher's flops weren't helping. After Cole's early exit against the Braves, Clarke came to another decision. Cole sat on the bench through September as the Bucs finished strongly, taking twelve straight and second place.

With no big league clubs interested in Cole, the Pirates sold him to Columbus of the minor league American Association. It was a fortuitous banishment for the King. After spending part of the winter in Chicago and opening a barber shop in the Corn Exchange Bank Building adjacent the Cubs' executive suite, the rested righty reported to Columbus and had the best season of any pitcher in the AA that year. He accumulated a 23-11 record for his sixth-place club,

and proved his arm sound by leading the league in innings pitched. Cole became one of the few hurlers to pitch a no-hitter in both the majors and minors when he defeated the league-leading Brewers 3-1 in Milwaukee, the unearned run a result of a walk, error, and sacrifice fly. By season's end, every major league club was bidding for Cole's services, one offer being as high as \$10,000.

One of the interested teams was the New York Highlanders, or Yankees as they were alternately referred to, now managed by former Cub skipper Chance. The Peerless One had accepted a mammoth offer of \$40,000 in 1913 from owner Frank Farrell, who was desperately trying to boost the image of his bottom-berth ball club in a town where that perennial pennant winner of the rival league, the Giants, shared the same Polo Grounds. During the 1913 season, Chance heard about Cole's resurgence and sent a scout for a look-see. Receiving a favorable report, Chance pressed Farrell to acquire his former ace. Farrell outbid other team offers and acquired Cole from Columbus in September. With a week remaining in the big league season, Cole was instructed to join the club the following spring.

It was now a question of whether Cole would report. Rumors circulated that King still resented Chance's trading him to the Pirates in 1912, and he was quoted as saying he would never again play for his former skipper. Cole later denied making the statement and maintained he was committed to pitching for the Yankees. Perhaps he was, but an old teammate would soon change his mind.

Prior to the start of the 1914 season, the upstart Federal League was making moves to become a serious challenge to the majors by pirating former major league stars. Among the club owners looking to pilfer was Chicago Whales president Charles Weeghman. The restaurant entrepreneur especially savored the prospect of landing an established and popular Cub as player-manager. With that in mind, he approached castoff Joe Tinker. Tinker had resented Evers' appointment as manager of the Cubs in 1913 and demanded a trade. He got it, but liked even less playing in Cincinnati. When he was shipped to Brooklyn at season's end, the idea of moving from one loser to another did not appeal to Tinker either. What did appeal was Weeghman's suggestion that Chicago was his kind of town, especially when it included the opportunity to pique former employer Murphy and former teammate Chance. Tinker jumped at the offer.

Upon hearing the news of the Yankees' most recent, high-priced pitching purchase, Tinker visited Cole in December and presented him with a three-year contract to play for the Whales at a salary greater than that being offered by the Yankees. Cole thought about it, then signed. Immediately, Tinker made public the acquisition.

It was now the Yankees' turn. An infuriated Farrell asked for help from his close friend Art Irwin. Irwin and Farrell had been the shortstop-second base combo on the Providence Grays of the National League and played in what is regarded by some as the first World Series, with Providence defeating the American Association's New York Mets three games to nothing in 1884. Today, Irwin is credited with having been the first to use a fielder's mitt and to participate in the first squeeze play. He was somewhat inventive off the field as well. After his presumed suicide in 1921 (he boarded a steamer but was not among the passengers that got off), it was discovered that good old Arthur had been a bigamist.

Farrell sent his 56-year-old crony to Chicago to talk some sense into Cole. Irwin appealed to Cole's sense of fair play. How could he do this to his former manager? Hadn't he already agreed to report to the Yankee camp in the spring? Then there was the tentative nature of the Federal League. It could never seriously compete with the majors. When the Feds folded, Cole would be out of a job. There was security playing at the major league level.

Irwin's efforts met with success. Cole returned to New York and pledged his allegiance by signing a Yankee contract. There followed bickering from Tinker and Weeghman, who insisted their contract with the Michigan right hander was binding. The issue never went to court. When the Yanks' spring training camp opened in Savannah in early March, Cole and Chance were reunited.

Encouraging reports came from the South regarding Cole's comeback bid. A *Sporting News* article stated, "Chance seems very well impressed with the ex-Chicago star, and rumor has it that he is so good he may pitch the opening game of the season for the New Yorkers." Cole did show flashes of his old form in 1914, but he proved unreliable both as starter and reliever. By the time Farrell fired Chance in September in favor of Roger Peckinpaugh, Cole was a .500 pitcher with little speed on his fastball and erratic control. His main success had come against the White Sox, but Chicago broke the hex in their last confrontation on

September 18 by exploding for seven runs in the fifth. After surrendering Ruth's first-ever double and run scored on October 2, Cole's record for the year stood at 11-9 with an ERA of 3.30. One local writer commented, "We trust that Bay City has not a surplus of barbers at this time, for Cole is apt to hear the call of his old trade any day now."

Still, Cole's season had not been a complete flop. After all, he finished two games above the break-even point on a team with a 70-84 record. He was among a group of American League All-Stars who played a series of barnstorming exhibitions after the season, and it was reported that Cole "did fine work." The hurler had every reason to be optimistic, especially after the announcement in January that he would be among the group of pitchers invited to Savannah for 1915 spring training. First, he would have to report to Yank scout Joe Kelley for winter work in Hot Springs, Arkansas.

Before the winter ended, Farrell sold the Yanks to beer baron Jacob Ruppert and army engineer T. L. "Cap" Huston for \$460,000. The new owners immediately pushed for changes. They pressed Connie Mack for the purchase of slugging star Home Run Baker, a deal not realized until the end of the season. They consulted with AL president Ban Johnson over the site of a new park, and during the season inspected a particularly desirable location in the Bronx, although the need to build Yankee Stadium would not be felt by the magnates until Ruth donned pinstripes.

Huppert and Huston liked Peckinpaugh, who at 23 was the youngest manager in history, but preferred more experience at the helm. Immediately following the acquisition, they relieved Peck of managerial duties while retaining him at shortstop. They hired former NL hurler Wild Bill Donovan, who gladly relinquished his managing position with the minor league Providence club, where he had instructed southpaw Babe Ruth on the finer points of pitching before the youngster was recalled by the Red Sox in September of 1914. Donovan brought with him from Providence trainer Jimmy Duggan.

By the first of March, most of the Yankee players had assembled at Penn Station in New York to accompany Donovan on the trip south. Cole and his fellow Hot Springs hurlers joined the team in Savannah the following week, and Duggan assessed his king as being "just as fit as possible at this stage of the training season." Yet while the team was playing its first intra-squad game, Cole complained of having a sore



arm and feeling fatigued and did not take the field. He seemed fine the next day and made his initial appearance of the spring, allowing only one hit and no runs in three innings in the "Regulars" defeat of the "Yannigans" in another intra-squad contest. Two days later, Cole gave up one run and five hits in five frames.

Cole's work impressed Donovan sufficiently to include him with five other pitchers on a first team that would travel to Daytona for a series with Brooklyn and likely continue north afterward. Two days prior to departing for Florida, Cole pitched against a local club from Savannah, allowing two hits and no runs in a rain-soaked three innings.

Cole had been scheduled to start the first game of the Brooklyn series but instead watched from the bench as the two teams played to a 6-6 tie. He took the mound the next day and was in control throughout his six-inning stint, surrendering one run, five hits, and one walk. On April 2, he blanked the Cubs on one hit through four innings, while fanning four. The *New York Times* wrote the next day, "Donovan was much elated over King Cole's great pitching. Cole is the best conditioned of the New York pitchers, and has toyed with his opponents all Spring."

The Yanks continued their march north with a stop in Richmond on April 7. They defeated the local competition by a score of 8-3, with Cole hurling the final four frames.

For the first time all spring, Cole did not look sharp as he allowed two runs and walked three against the bush leaguers. The team arrived in Brooklyn on the 9th to play a two-game set against the Dodgers, but Cole sat out both games and began complaining about pains in his groin. He was taken to a New York hospital, and an examination revealed a tumor. The surgeons gave a grim prognosis following its removal. The 30-year-old's ball-playing days were over, they said, and his life expectancy measured in months.

Cole remained in the hospital for two weeks following the operation, then returned home to Bay City to recuperate. If the medical experts were counting him out, Cole wasn't listening. He worked hard to get back in shape, then surprised Donovan and his Yank teammates by showing up in Chicago at the end of May and declaring he'd be ready to contribute in a few weeks. On July 9 Cole rejoined the team, reporting himself fit to resume his starting role.

The right hander's opportunity came in the second game of a Sunday doubleheader in Detroit on July 13. It was a disaster. The Bengals clawed King for two

runs in the first, another three in the second, and the reeling righty was finished after an inning and two-thirds, replaced by 24-year-old Bob Shawkey, who tamed the Tigers the rest of the way while the Yanks came back to win. Cole relieved the next day and in two innings yielded three hits, two walks, and a hit batsman, although sloppy fielding led to two of the three runs.

The two shaky outings thwarted Cole's comeback. Donovan's Yanks had been surprising baseball followers by playing competitive ball. The rookie manager was as sentimental as the next fellow and had been pulling for the cancer-stricken ballplayer to come through, but the team came first. For the next few weeks Donovan resisted any temptation to use Cole.

Another obstacle would delay Cole's return to action. On July 24, the Yanks were scheduled to play the White Sox at Comiskey Park in Chicago. At about 7:40 that morning the steamer *Eastland*, docked at a pier located on the Chicago River between LaSalle and Clark streets in the center of town, was preparing to take passengers on a 35-mile excursion across Lake Michigan to Michigan City, Indiana. *Chicago Herald* reporter Harlan Babcock had planned on boarding the *Eastland* but decided to take the next steamship, feeling Commander Henry Pederson was "taking awful chances in so overcrowding the boat." A wise decision. The ship began to list, then capsized. Many among the 2,500 passengers plunged into the harbor, while hundreds more clung to the upper railing of the overturned vessel before falling in. Desperate rescue attempts were made. Life preservers were thrown from the dock and from a nearby steamer, whose crew manned lifeboats and pulled frantic swimmers aboard. Their efforts kept to a minimum the number of fatalities, at first reported to be 1,800; today, the estimate is 800.

Perhaps it is because the catastrophe took place within the confines of a harbor where assistance could immediately be given, not in the dark dreary isolation of the Atlantic, or because most aboard were middle-income passengers rather than society's elite, or because the ship held no title of "unsinkable," that the *Eastland* disaster has not retained the same notoriety as has the *Titanic* tragedy. Nor is it considered as historically significant as the sinking of the *Lusitania*, which less than three months earlier had been an innocent wartime target of a torpedo. The *Eastland* incident was nonetheless a calamity of immense proportions made more horrific by its occurring in broad

daylight in front of hundreds of spectators.

In April 1912, news in New York of the *Titanic* sinking had been so depressing that attendance for the Giants' home opener at the Polo Grounds was held to 13,000. The *Eastland* tragedy was sufficiently shocking for normally frugal Chicago owner Charles Comiskey to immediately postpone the White Sox-Yankee game of the 24th and the doubleheader the next day. Donovan may not have used Cole anyway, but the lost games prevented the possibility.

Cole's next chance came a week later as the Yanks hosted the White Sox at the Polo Grounds. Pitching eight innings, he yielded two runs, five hits, and whiffed six batters before leaving for a pinch-hitter. Trailing 2-0, the Yanks won with three in the ninth. On August 10, Cole started the second of a twin bill and held a 2-1 edge over the Indians. He faltered in the final frame as the Tribe tallied twice on a walk, sacrifice, double, and error, giving the King a complete-game, three-hit loss.

Three days later, Cole pitched what might have been the best game of his career. His opponent was Philadelphia, and despite Home Run Baker's absence (he was sitting out the season due to a contract dispute with Connie Mack), the A's lineup remained formidable and included newly acquired Nap Lajoie. Nevertheless, Cole limited the opposition to two runs in nine innings and continued pitching as the game remained tied at two in the twelfth. After holding the A's in the top half, Cole was aided by fellow moundsmen Ray Caldwell, who won it with a pinch-hit RBI single. Cole's game stats read: 12 innings, two runs, eight hits, five strikeouts, and two walks. A *New York Times* article noted Cole's brilliant effort. "It wouldn't do to forget King Cole. He pitched a heady game, and was not in the least flustered because two Quaker runs came in the second inning, helped by a wild throw."

The effort culminated a solid stretch where Cole had won one, lost one, with a no-decision in three consecutive starts, and had yielded seven runs, 16 hits, eight walks, and 14 strikeouts in 29 innings. It now appeared Donovan had another reliable starter. Cole was embraced by teammates, who were inspired by his courage. The press, critical of his lifestyle in past years, praised his newfound dedication. Wrote *The Sporting News'* Joe Vila in the August 19 issue, "Since Chance got him from Columbus a year ago last winter, the King has lived cleanly and also has been in high favor with the Yankee owners. Persons who circulated untruthful stories about this goodhearted fellow did

him a rank injustice and I take this means to set him right in the eyes of the public. Cole has come back with a vengeance. He was passed up as a permanent invalid and everybody felt sorry. But Cole refused to allow the doctors to count him out."

The Cole comeback continued in his next start in Chicago on August 19. As investigations continued into the cause of the *Eastland* fiasco, fans filled Comiskey Park and watched the King reign through seven innings. Cole fanned five and limited the Pale Hose to two singles while retaining a 2-1 lead going into the eighth, at which time he self-destructed. Three walks, three hits, and two runs later, he was relieved by Shawkey, who yielded a bases-loaded single to Eddie Collins, bringing home another pair. An inning earlier, Cole appeared to be adding another notch to his comeback belt. But managers back then weren't interested in seven-inning starters. What Donovan saw was a 5-2 flop for Cole, with game stats that included five runs, six walks, and a wild pitch.

Still, King was given his regular turn on August 28 in Detroit. The Tiger assault was thorough and quick. In the first inning, a single, Ty Cobb hit, and Sam Crawford RBI single brought home a run, and another came on a sure-triple-turned-sac-fly thanks to a circus catch by Skeeter Shelton, who was playing in one of ten major league games in a fleeting career. In the second, Cole's first out came sandwiched between three singles and a run. Cobb's hit tallied another, but Bobby Veach's comebacker allowed the comeback king to nail runner Cobb at the plate. Though trailing 4-0, Cole was within an out of being out of the inning. Alas, George Burns burned Cole with a ribby single, sending the righty to the showers. The game marked his final appearance as a starter.

Two days later, Cole pitched well in allowing one run and four hits in six innings of relief. What did not sit well with Cole was Donovan's decision to remove him from the rotation. When he failed to show up for an exhibition game in Providence, the rebel Yank drew a suspension. Yet he was still among the pitchers on the roster in the second week of September, and his suspension was lifted by the 16th when he made his next relief appearance. In a 2-2 tie with Chicago at the Polo Grounds, Cole pitched a perfect ninth, then watched the Yanks pin a loss on shine-ball artist Eddie Cicotte.

On September 20 at the Polo Grounds, Cole made his tenth appearance of 1915. It would be the last of his career. Entering the eighth with the game tied at

two, Cole held the White Sox to no runs and one hit in two innings, and collected his 56th career win when New York scored a run in the ninth. For years Cole had struggled vainly to regain the success he had known as a rookie, making ironic his triumphant swan song.

In August, Vila had written about Cole, "In my opinion, his illness was exaggerated. He had a small growth in his groin which the physicians said was a tumor."

By the end of October, the severity of Cole's ailment was obvious to the Yankee owners, who spurned the pitcher's request for a contract renewal. But Cole had been counted out before. He returned to his wife in Bay City with the intention of spending the winter recuperating and exercising, then joining the Yankees in Savannah in the spring.

When the hunting season opened in early November, Cole grabbed his rifle and headed north. Two days later, he aborted the trip and returned to his home at 2001 Broadway complaining of pain and weakness. The cancer had reached its final stage. For the next seven weeks Cole's health deteriorated and he was confined to his bed most of the time. By New Year's, doctors were measuring Cole's life expectancy in days. At 7:30 on the morning of January 6, 1916, Cole succumbed. The death certificate reported the official cause as "scrofula lymphnaucous of the lung." Cole's wife made arrangements for his body to be transported to Tama, Iowa, two miles south of Toledo, where he was interred in the Cole family plot.

T. S. Eliot wrote about the world ending not with a bang but a whimper. In the world of baseball, it is not altogether rare for a ballplayer to make noise early, only to peter out soon afterward. Of the 68 Rookie of the Year winners selected from 1947, the award's inaugural year, through 1980, 35 went on to have what could be described as average major league careers. Sixteen had careers which spanned fewer than ten seasons. Included among the phenom-to-flop ballplayers were Joe Black, Bob Grim, Don Schwall, Mark Fidrych, Butch Metzger, and Joe Charboneau.

Despite a career tragically cut short, Cole's pitching performance of 1910 ranks as one of the best of the century. His success was transitory, but Cole was king for a season. And after all, it is no bad thing to be a king, however brief the reign.

## ACKNOWLEDGMENTS

Special thanks to researchers at the National Baseball Library for providing news clippings from various newspapers and periodicals along with a copy of Cole's death certificate. Additional research was gathered through use of the SABR Lending Library, which provided microfilm of *The Sporting News* and *Baseball Magazine*—1909 to 1916.

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## Home Runs: More Influential Than Ever

**T**he baseball media have made a lot of noise the past two seasons about how baseball's home run explosion possibly reached its zenith in the 2000 season, since the number of home runs per game in the 2001 and 2002 seasons was lower than in 2000. Even the number of runs scored per game was lower, too. Batting averages, on-base percentages, and slugging percentages all declined; ERAs did, too. The new, larger strike zone had contributed to the leveling of the playing field between batters and pitchers. Or so the story went.

But although all those things occurred, they didn't convey the larger truth—that the influence of home runs continued to increase, as it has for most of the last 100 years. A plot of the number of runs scored per game in each league as a function of year is shown in Figure 1 (statistics from the Union Association—1884; the Players' League—1890; and the Federal League—1914-15, are not included in any of the Figures used in this article. None of those leagues existed long enough to contribute in a meaningful way to the long-term trend discussed). There has been quite a bit of fluctuation over the 127-year history of major league baseball, with runs scored per game varying by roughly a factor of two from its liveliest years (the mid-1890s) to its deadest era only 15 years later (the late-1900s). And the variation has been anything but monotonous.

The first decade and a half (1876-1892) fluctuated wildly, with changes from year to year sometimes as large as 33%. For example, National League and American Association teams were scoring more than 12 and 13 runs per game, respectively, in the high-scoring 1887 season, then declined to the 9 and 10 run per game range the following season, 1888. And then

they bounced back to around 12 runs per game in the very next season, 1889!

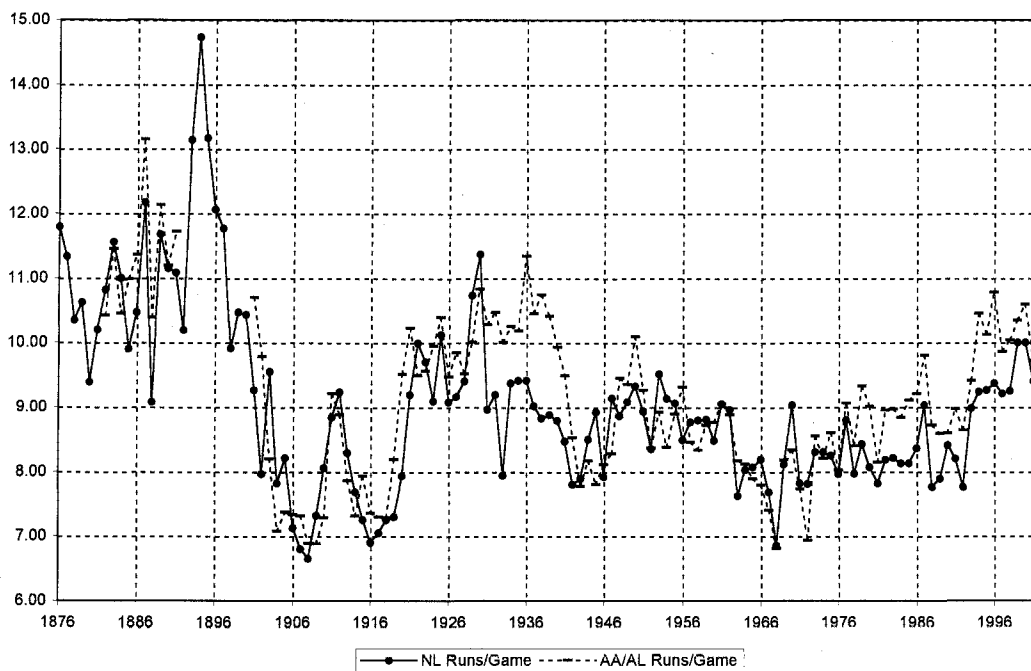
After the American Association folded (following the 1891 season), the NL saw higher and higher scoring games for a couple of years, reaching the all-time peak of nearly 15 runs per game in 1894. But then scoring in the NL (and the American League, which came on board in 1901) tailed off nearly every year thereafter until it reached its nadir of about 6.5 runs per game in 1908. Then a steady rise for four years, followed by a steady decline for four. That was followed by the climb back to about 10 runs per game that was reached in the early 1920s. The AL and the NL parted ways in the 1930s, with the AL teams scoring anywhere from one to two runs per game more than their NL counterparts during that period. Both leagues declined during the WWII years, bounced back in the 1950s, and declined again in the 1960s.

The 1970s and 1980s were pretty steady (with the AL and its DH always scoring more). Then another climb began in the 1990s, in particular 1993. And, as can clearly be seen in Figure 1, there was indeed a decline in 2001 and 2002, just as the media told us. What they didn't emphasize, though, was that the scoring levels in those two seasons were still higher than they'd been at almost any time during the entire 40-year period between the early 1950s and the early 1990s. And because the number of runs scored per game in the late 1990s and early 2000s is not at record high levels, many baseball people think there's no cause for concern. In fact, many fans think high scoring is exactly what the game needs to keep it competitive with football and basketball. In terms of home runs, the whole truth is even more elusive.

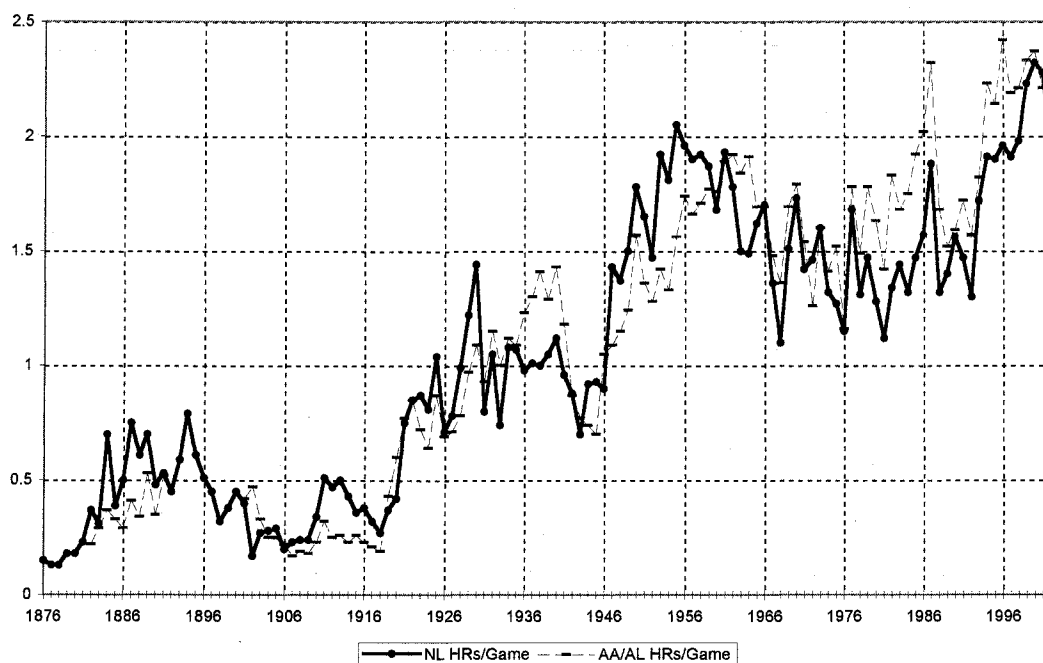
Figure 2 shows a plot of the number of home runs per game in each league as a function of year. The general pattern of increase is quite obvious just from a quick glance at the figure. There are the expected peaks and valleys throughout baseball's rich history, but it is clear that, except for the 1987 season, there have never been more home runs per game than in the last few seasons. But the media pointed to those last

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**Figure 1. RUNS/GAME THROUGHOUT PROFESSIONAL MAJOR LEAGUE HISTORY (1876-2002)**



**Figure 2. HRS/GAME THROUGHOUT PROFESSIONAL MAJOR LEAGUE HISTORY (1876-2002)**



three pairs of data points and claimed that the tide had turned, that baseball has come to its senses and is returning to an appropriate balance between its offenses and its defenses.

However, a closer look shows that the influence of home runs has continued to grow. Figure 3 is a plot of the number of runs per home run. After a brief love affair with the home run in the 1880s and 1890s, the leagues began the deadball era. In that period there were nearly 47 runs scored for every home run (1902 NL), and still as many as 15-20 when Babe Ruth, in 1919-1920, revolutionized the way the game was played. Ever since, though, the influence of home runs has been in near steady ascension (with the usual exception of the WWII years).

The all-time lowest number of runs scored per home run was recorded in 2001 in the National League—4.12. That number—one home run for every four runs scored—should be alarming to baseball purists. In fact, if we extrapolate from the trend in the NL the last 15 years (by using a simple least-squares linear regression program to find the best-fit straight line to the data in Table 1), then we come up with the startling conclusion that in the year 2028 the ratio of runs scored to home runs will be 1.00. Every single run scored in the NL will be the result of a home run! All other hits and walks will be meaningless!

Is this the path that baseball wants to travel? It's analogous to saying that every basket scored in the NBA will come from a dunk or that every point scored in the NFL will be the result of a 50-yard TD pass. Those plays, like home runs, are exciting, but only because they don't happen too often.

Can the trend shown in Figure 3 be supported by any other numbers? Yes. The history of the ratio of hits per home run is plotted in Figure 4. The plot looks nearly identical to Figure 3, indicating a steady increase in the fraction of hits that are home runs. An extrapolation of the NL's previous 15 years' worth of hit/HR ratios (see Table 2), similar to that described above for the ratio of runs/HR, leads to the frightening conclusion that every hit in the NL will be a home run by the year 2021! This hypothetical scenario is even more alarming than the one stated in the preceding paragraph because there wouldn't even be singles, doubles, or triples to break the monotony. It would be the equivalent of bringing the outfield fences in so close that they'd be right behind the infield. (The trends in the American League are not as severe as those in the NL, but they trail the NL only by about a

decade—2038 and 2028 would be the corresponding years for the AL to reach these freak show situations.)

Table 1

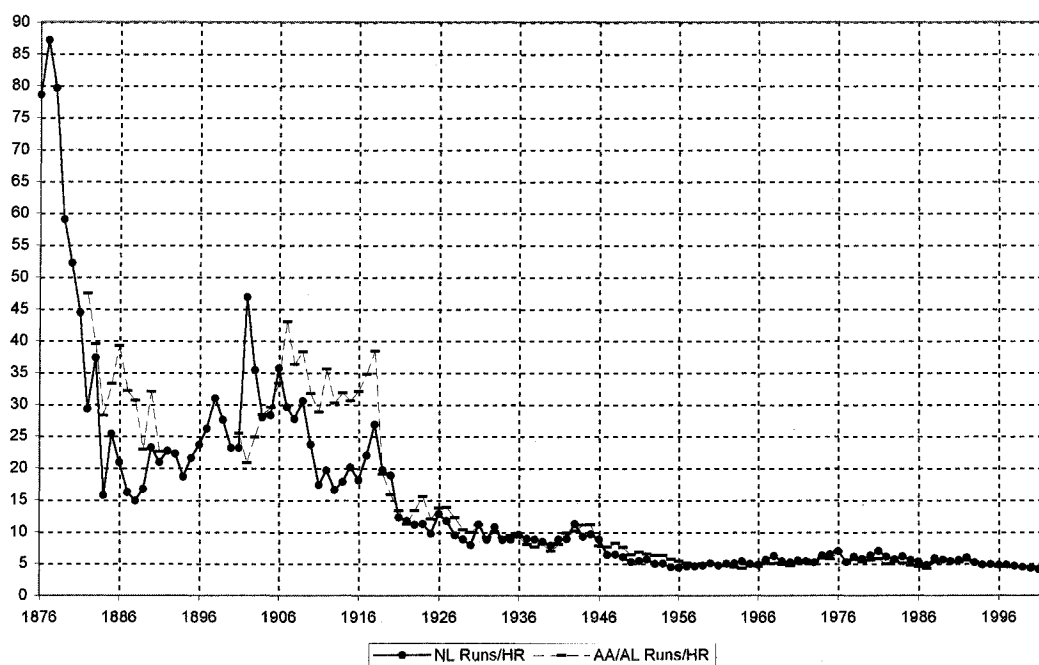
YEAR	NL RUNS/HR	AL RUNS/HR
1988	5.88	5.19
1989	5.64	5.65
1990	5.39	5.41
1991	5.58	5.22
1992	5.97	5.50
1993	5.22	5.17
1994	4.84	4.69
1995	4.87	4.73
1996	4.78	4.45
1997	4.82	4.50
1998	4.67	4.54
1999	4.48	4.44
2000	4.31	4.47
2001	4.12	4.40
2002	4.44	4.42

Table 2

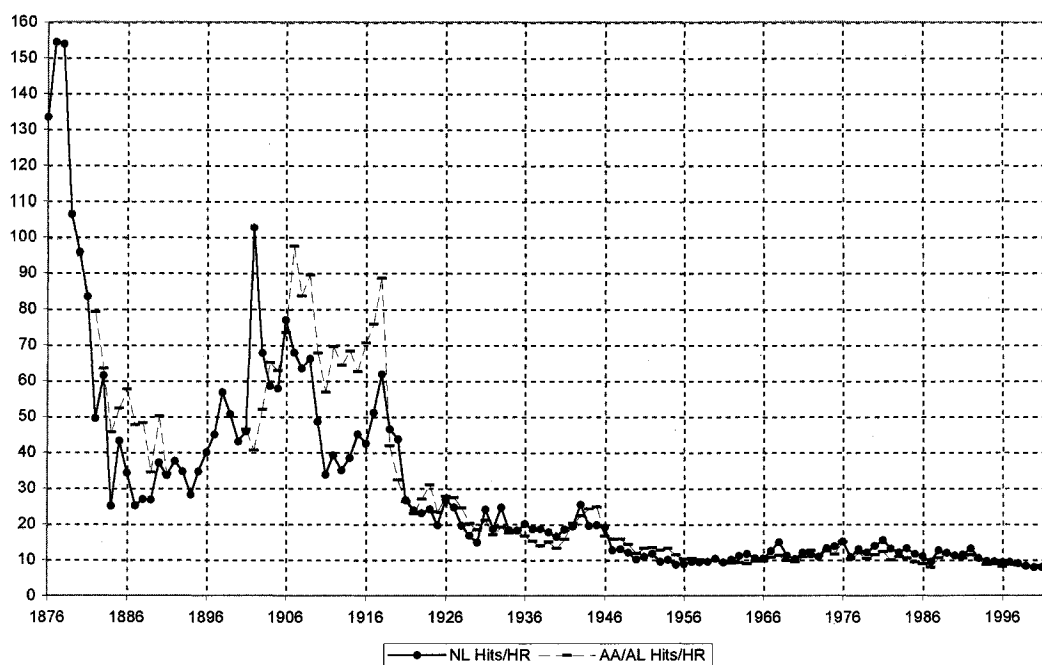
YEAR	NL HITS/HR	AL HITS/HR
1988	12.73	10.50
1989	11.88	11.69
1990	11.12	11.08
1991	11.44	10.34
1992	13.10	11.26
1993	10.44	9.96
1994	9.59	8.48
1995	9.49	8.68
1996	9.19	7.99
1997	9.39	8.55
1998	9.05	8.51
1999	8.25	8.14
2000	7.85	8.06
2001	7.80	8.32
2002	8.77	8.33

I realize that these extrapolations are extremely unlikely to happen. But the mere fact that the numbers point in this direction should be enough to cause baseball's bigwigs to rethink their love affair with the home run before it's too late, before baseball becomes all too predictable and a mere shell of its former exciting and unpredictable self.

**Figure 3. RUNS/HR THROUGHOUT PROFESSIONAL MAJOR LEAGUE HISTORY (1876-2002)**



**Figure 4. HITS/HR THROUGHOUT PROFESSIONAL MAJOR LEAGUE HISTORY (1876-2002)**



## The Most Exciting World Series Games

### A Mathematical Approach

In baseball there are many kinds of excitement. Seeing great catches and timely hits by legendary players, watching your favorite team crush the opposition, having a record set—most fans would be excited by such occurrences. However, we are interested here in the “edge-of-your-seat, who’s going to win the big game” type of excitement.

The reader may reasonably argue that the importance of a game inherently affects its excitement. Also, a fan of a particular team, say the Yankees, might find a Yankees game (especially a victory) more exciting than a game between two other teams. While not denying that viewpoint, this article describes the development of a quantitative model for measuring the excitement of any baseball game using only minimal information, not including the teams involved or when the game was played. That approach is then applied to World Series games, where the importance of each game is consistently high.

**ASSUMPTIONS** The intent was to develop a model that quantified the excitement level of baseball games based solely on the line scores: how many runs each team scored each inning over the duration of the game. With this goal, four assumptions formed the basis for the model:

- The most exciting games are those in which the score is close for most of the game.
- Lead changes add to the excitement of a game.
- Closeness in score and lead changes are more important toward the end of the ball game.
- It is not inherently significant how the individual runs are scored during a game.

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Overall, the first assumption is the most important. The closeness of the score enhances the importance of all other factors. For example, a remarkable diving catch will seem more exciting in a tie game than in a 13-2 slaughter.

The second assumption expands on the first. Although excitement is tied to how close the score is, it increases when one team overtakes the other team for the lead. Certainly it is exciting to see a team rally for 11 runs in an inning after being behind 6-0. However, the swing in the score is not optimal in terms of sustained excitement; although the second assumption of the model is upheld (i.e., the lead changes hands), the first assumption is violated. The game is not considered very exciting up until this dramatic comeback because it was so lopsided, and it was also not very exciting after the turnaround because it had become lopsided in the opposite direction. Therefore, although lead changes add to the excitement, it is also important that the score is close both before and after the lead change.

The third assumption leads to weighting the end of a game more heavily in the calculations of the model. Similar to the hypothetical situation with the first assumption, a fabulous catch or close play in the first inning is not regarded as exciting as the same exact catch toward the end of a close game. This is not to say that the first half of the game is not important in the calculations of the model. What makes a game the *most* exciting is a game that not only has a thrilling ending, but was also very close and tense throughout the duration of the entire game.

The final assumption of the model might be the most controversial. When fans are asked about the most exciting way for a run to be scored, many will answer “home run.” Yet it can be equally thrilling to watch the winning run score from first on a double, or score on a sacrifice fly with a close play at the plate. In fact, some would argue that these methods of scoring are more exciting than a home run because the duration of the play is longer; perhaps the runner in the latter case walked, stole second, and moved to third



on a grounder to the right side. The tension is sustained, and the outcome during the play is largely uncertain.

The model does not consider *how* runs score, only *when* runs score. In addition, the model does not attempt to factor in an individual player's performance or records that are broken. Certainly, it can be exciting to witness those things, but the model quantifies the excitement level of a game based solely on its merits as a *game*, not on the merits of individual achievements, such as no-hitters, multiple home runs, etc. Plays that result in outs rather than runs, such as runners thrown out at home, are also beyond the scope of the model.

Based on these four assumptions, a mathematical model was developed. It accepts as input a line score, and assigns a rating or score to that particular baseball game, which could then be ranked against any other individual baseball game. Details on the construction and mathematical specifications of the model are given in the appendix at the end.

**RANKING OF WORLD SERIES GAMES** The model was used to rate all games in the history of the modern World Series (i.e., since 1903). However, in reporting the results, each game is classified by its number in the given series (game 1, game 2, etc.). In that way, seventh games are not directly compared to second games, and so on. For those who would argue that seventh games, for example, are more important than first games, and hence more exciting, this approach keeps game importance as comparable as possible within a given category. The results are shown in Table 1. For each "game" category, the top ten ranked games (and the number of innings) are presented.

The 1991 World Series between the Twins and Braves, which most contemporary observers agree was one of the greatest ever, has four of its games ranked among the top ten by category: games 3, 4, 6, and 7. The recent 2001 series, between the Diamondbacks and Yankees, has three ranked games; these include the incredible Yankee rallies in games 4 and 5, and the Diamondback ninth-inning comeback in game 7. The famous Red Sox-Reds World Series of 1975 also has three ranked games, including the terrific 7th game and the 6th game with the Fisk home run in the 12th inning.

Two older, but classic, World Series had the top two seventh games. The 12-inning Senators victory over the Giants in 1924 finished first; Walter Johnson finally won the championship after an heroic effort in relief. The incredible 10-inning Red Sox victory (also over the Giants!) in 1912 came in second; Snodgrass' famous "muff" contributed to Christy Mathewson's loss against Smoky Joe Wood in the finale. Each series also had a second ranked game.

The recent five-game series between the Yankees and Mets in 2000 had two ranked games, including the top-ranked game 1, an extra-inning thriller. Also with two ranked games was 1926, with the top-rated game 5 (a 3-2 ten-inning nail biter), as well as the famous game 7, when Old Pete Alexander of the Cardinals came off the bench to fan the Yankees' Tony Lazzeri with the bases loaded.

Other observations are left to the reader. Given that the model uses only information from line scores, the authors believe that it did a credible job of identifying the most exciting World Series games. Undoubtedly, others will disagree. Arguments are welcome: it's one of the pleasures of being a baseball fan!

**Table 1. WORLD SERIES GAME RANKINGS**

GAME 1	INN	GAME 2	INN	GAME 3	INN	GAME 4	INN	GAME 5	INN	GAME 6	INN	GAME 7	INN
2000	12	1916	14	1914	12	1933	11	1926	10	1958	10	1924	12
1977	12	1950	10	1980	10	1939	10	1952	11	1956	10	1912	10
1907	12	1934	12	1911	11	2001	10	1936	10	1991	11	1991	10
1946	10	1944	11	1991	12	1910	10	1933	10	1992	11	1997	11
1958	10	1913	10	1973	11	1969	10	2001	12	1986	10	2001	9
1924	12	1990	10	1995	11	1978	10	1980	9	1919	10	1971	9
1954	10	1912	11	1992	9	1991	9	1942	9	1971	10	1962	9
1939	9	1922	10	1935	11	1972	9	1964	10	1945	12	1926	9
1949	9	1973	12	1950	9	1927	9	2000	9	1975	12	1975	9
1923	9	1975	9	1961	9	1943	9	1972	9	1935	9	1972	9

## APPENDIX: TECHNICAL SPECIFICATIONS

**CONSTRUCTION AND VALIDATION** With those four assumptions, the following framework was used in constructing the model:

Each of the first three assumptions has a curve representing the relationship of their values.

The calculations use 1.0 as the maximum value for any given increment.

The basic increment used in individual calculations for the first three assumptions is the "half inning" (in a standard game where the home team uses its last at-bat, there are 18 half innings).

With this conceptual framework, a statistical model was constructed, using Microsoft Excel for the computer-based calculations. The model allowed line scores to be entered for any game (including extra innings), and would generate a rating based on the assumptions and framework stated.

To refine and then validate the effectiveness of the model, a multi-phase procedure was used. Initially, discussions were held with selected baseball "experts" regarding scoring sequences that maximize excitement in a game; for example, what's the most exciting 1-0 nine-inning game? (Consensus: the run scores in the bottom of the ninth.) Then line scores for hypothetical games—each of which ended in a 5-4 score—were presented to staff members at the Hall of Fame; they were asked to rank the games in order of excitement. This phase led to some modification of the model, especially the various weighting schemes.

Ultimately, two sets of line scores for actual games were presented to experts. One set represented a wide range of scoring outcomes, and the other set were all close games, including some with extra innings. By the final phase, the ranking of games by the model agreed with the *average* ranking by the experts.

**EQUATIONS AND GRAPHS** The first assumption is represented by Curve 1 on Graph 1.

The "Run Differential" (RD) on the x-axis is the absolute difference between the home team's run total and the visiting team's run total at the end of each half inning. For example, if a game is tied 4-4, the RD is 0 and has a corresponding y-value of 1.0 (the maximum score for that factor). A tie score is the most exciting score possible in the model. The other extreme is a game where one team is annihilating the other. For the purposes of the model, the extremes only go up to a RD of 24. When one team is beating the other by 24

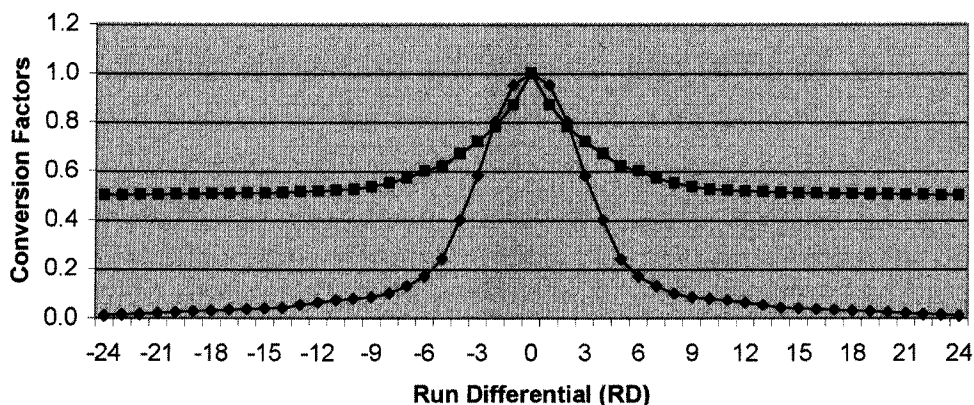
runs, the "RD Conversion" (RDC) is only .01. In other words, at such a lopsided score, the game is not exciting. With the two extremes of the model defined, the points in between were filled in. Going from -24 to 0, the curve rises gradually, with the RDC for a one-run game very close to a tie ball game on the curve. For every half inning of a game, Curve 1 produces a number on the y-axis, which is used in a later calculation.

The Curve 2 represents the second assumption of the model. This curve is similar to Curve 1, but involves one more step in producing an actual number. The second assumption uses the absolute difference in score at the beginning *and* end of each half inning to produce a conversion number, and measures the absolute vertical distance traveled on Curve 2 between the beginning and end of each half inning. Similar to Curve 1, Curve 2 is shaped to recognize the corresponding excitement for a change. Suppose, for example, the score at the beginning of the half inning is 4-2: the resulting y-value is .78. If the offensive team then scores one run to make it 4-3, the second resulting y-value is .87. The "Lead Change Conversion" (LCC) is simply the difference between these two numbers, or .09. If, however, the team behind 4-2 had instead scored five runs and now had a lead of 4-7, the LCC calculation would be the following:  $(1.0 - .78) + (1.0 - .72) = .50$ . Thus, Curve 2 results in a higher score when the path traveled in the half inning goes from one side of the curve over the peak and back down to the other side.

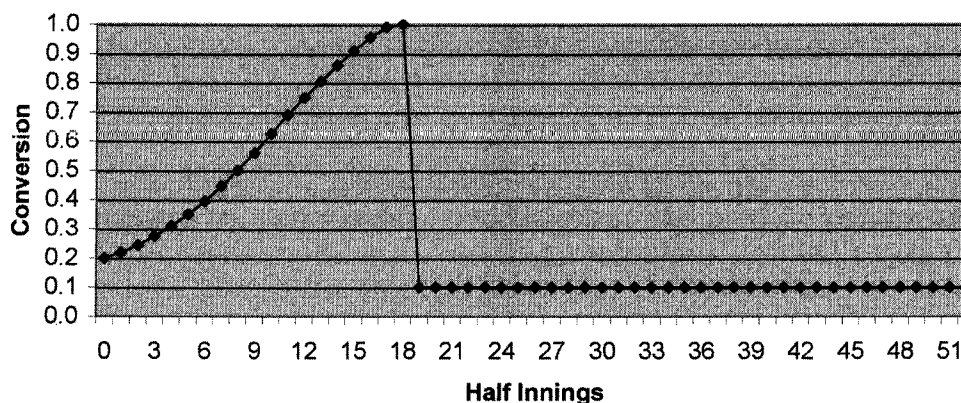
The observant reader may notice that the two assumptions (and thus the two curves) counterbalance each other to a certain degree. In other words, when you maximize one factor, the other factor is minimized. For example, in order to maximize the first assumption, a score would be tied at the beginning and end of a half inning, producing scores of 1.0 for Curve 1, but a score of 0.0 for Curve 2 (since there was no change in the score). But the Curve 2 is maximized when a half inning starts at -24 and ends at +24 for a score of .998, whereas Curve 1 produces scores of .01. Therefore, the intersection points of the two curves are of great importance. These occur approximately at RDs of -2 and +2. The significance of this is that the highest possible sums for the results from Curves 1 and 2 occur within the range -2 to +2.

Calculations based on these two curves are thus used to generate the following expression:

Graph 1. RD AND LEAD CONVERSIONS



Graph 2. INNING FACTOR CONVERSION



(Curve 1 score) + (Curve 2 score)

At this point we turn our attention to the third assumption, whose values are plotted in Graph 2.

Similar to the first two curves, Curve 3 uses an asymptote of 1.0 as its maximum value. The beginning of the game is weighted at approximately 0.2 and increases gradually until it reaches 1.0 at the 18th half inning. In other words, the end of a game is weighted approximately five times as heavily as the beginning of the game. Although the shape and value of this curve might seem arbitrary, it was based on the results of the validation process and other factors.

Note that the graph allows for extra-inning games. Although the weighting for the ninth inning is close to the asymptote, the subsequent half innings are weighted at 0.1. Although an extra-inning game will almost always score very well by virtue of its inherent

closeness, the low weighting of 0.1 for the extra half innings makes it possible for very exciting nine-inning games to compete against extra-inning games. (Some readers may disagree with the low weighting assigned to the extra innings, note that if the weighting for the extra innings had been 0.0 instead of 0.1 [i.e., the model only considered the first nine innings], 67 of the 70 games ranked in the final section of this article would have nonetheless still been ranked in the top 10 of their game category.)

With the third curve, we can complete the equation:

$$[(\text{Curve 1 score}) + (\text{Curve 2 score})] \times (\text{inning factor}) \\ = \text{half inning score}$$

Every half inning of the game receives a half-inning score, and when the game is completed, the half-inning scores are aggregated for the final game score.

## The Best Last-Place Team Ever?

### The 1966 Yankees Didn't Know How to Finish Last

**T**he 1967 *Sporting News Baseball Guide* reported "Many observers felt [the 1966 Yankees] to be the best tenth-place team in major league annals." If they couldn't capture yet another pennant, at least they could be the best at finishing last.

The 1966 Yankees boasted two Hall of Fame players in Mickey Mantle and Whitey Ford, as well as two other former Most Valuable Players in Elston Howard and Roger Maris. There was one former Rookie of the Year recipients on the team: Tom Tresh. Clearly there was plenty of talent.

What sets the team apart, though, is its near miss. No, not a near miss in the pennant race; the team finished 26.5 games out of first place, which wasn't terribly far back for a last-place team. No, the team nearly missed outscoring its opponents over the season. The Yankees scored 611 runs while allowing 612. Normally a team with such a close disparity would be expected to finish near .500. But the Yankees finished 70-89. In the pre-divisional era (1903-68), the Yankees' achievement is impressive. No other last-place team came within 46 runs of outscoring their opponents during the season (see Table 1). Only eight teams came within 75 runs of doing so. On average, last-place teams tended to be outscored by 210 runs in the American League and 195 runs in the National League before divisional play. Surprisingly, during the first expansion period (1961-68 in the American League and 1962-68 in the National League), last-place teams were outscored by only 147 runs per season in the American League and by 212 runs in the National League. During the divisional era, six more teams with the worst won-loss records came within 75 runs of outscoring their opponents.

The 1966 Yankees' win-loss mark was the fifth-best

percentage (.440) compiled by a last-place team in the pre-divisional era (see Table 2). Clearly, the Yankees were superior cellar dwellers. The 1915 New York Giants finished with a 69-83 record (.454), which is the highest mark ever for a last-place team. The Giants were two seasons removed from a pennant-winning season. Only four other last-place teams compiled a .431 or better record. During the divisional era, the team with the worst won-loss record always had worse than a .430 mark.

**Table 1. LAST-PLACE TEAMS OUTSCORED  
BY FEWER THAN 75 RUNS, 1903-1968**

YEAR	TEAM	LEAGUE	W-L	RUNS	OPPRUNS	GAP
1966	New York	AL	70-89	611	612	-1
1915	New York	NL	69-83	582	628	-46
1925	Chicago	NL	68-86	723	773	-50
1924	Chicago	AL	66-87	793	858	-65
1944	Washington	AL	64-90	592	664	-72
1918	St. Louis	NL	51-78	454	527	-73
1946	New York	NL	61-93	612	685	-73
1947	Pittsburgh	NL	62-92	744	817	-73

#### 1969-PRESENT (TEAM WITH THE WORST OVERALL RECORD)

YEAR	TEAM	LEAGUE	W-L	RUNS	OPPRUNS	GAP
1986	Pittsburgh	NL	64-98	663	700	-37
1974	California	AL	68-94	618	657	-39
1975	Houston	NL	64-97	664	711	-47
1994	San Diego	NL	47-70	479	531	-52
1993	New York	NL	59-103	672	744	-72
1997	Chicago	NL	68-94	687	759	-72

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The Yankees' team ERA that season was slightly lower than the league average (3.42 versus 3.44), but the Bronx Bombers produced fewer than the average number of runs. The team's fielding record was slightly worse than the league average (.977 versus .978), and

the team completed slightly fewer double plays than average. Indeed, the team was consistently slightly below average. The team's 15-38 win-loss record in games decided by one run was telling.

**Table 2. LAST-PLACE TEAMS WITH WIN-LOSS PERCENTAGES ABOVE .430, 1903-68**

YEAR	TEAM	LEAGUE	W-L	PCT.	GB
1915	New York	NL	69-83	.454	21
1958	Philadelphia	NL	69-85	.448	23
1968	Houston	NL	72-90	.444	25
1925	Chicago	NL	68-86	.442	27½
1966	New York	AL	70-89	.440	26½
1924	Chicago	AL	66-87	.431	25½

Note: no team with the worst record had a record of .430 or better during the divisional era.

How did the team flounder so badly in 1966? Going into the season, general manager Ralph Houk exuded confidence in a February 5, 1966, *The Sporting News* article. Houk claimed that the defending American League champion Minnesota Twins had a clear-cut edge at only one position: shortstop. The Twins boasted MVP Zoilo Versalles at shortstop, while the Yankees had acquired Ruben Amaro from the Phillies to replace the retired Tony Kubek. Clete Boyer, Horace Clarke, Bobby Murcer, and Dick Schofield would all get tryouts at shortstop during the season. Otherwise, Houk felt the Yankees had as strong a pitching staff and superiority at five of the eight fielding positions (with the remaining two positions being standoffs).

Unfortunately, the four biggest stars on the team continued their deterioration that started in 1965. Mantle (.288, 23 home runs) and Maris (.233, 13 home runs) each had fewer than 400 at-bats. Elston Howard, MVP in 1963, hit .253 with only six home runs. Whitey Ford was on the injured list for most of the season and had his first losing record (2-5) despite a 2.47 ERA. Mel Stottlemyre went from being a 20-game winner to a 20-game loser. Former twenty-game winner Jim Bouton continued his ineffectiveness with a 3-8 record, although his 2.70 ERA suggests that his teammates were more responsible. Reliever Pedro Ramos lost his effectiveness.

The Yankees' descent from the five consecutive pen-

nants between 1960 and 1964 wasn't a one-year odyssey: by 1965 the New York Yankees dynasty was in disarray. The team had its first sub-.500 record since 1925. The team finished sixth, its worst finish since 1925. Of course, the team's pennant in 1964 was not awe-inspiring. The Yankees won a tough three-team pennant race by a single game.

In retrospect, the warning signs were apparent in 1964. Stars Mickey Mantle, Elston Howard, and Whitey Ford were over 30; Mantle was an old 32 during 1964. In the few years before the 1964 season, the team had introduced new blood in Tom Tresh, Joe Pepitone, Al Downing, Jim Bouton, and Mel Stottlemyre; Stottlemyre won nine of twelve decisions to help the Yankees clinch the pennant. The late-season acquisition of Pedro Ramos steadied the bullpen. Unfortunately, standouts Roger Maris, Ralph Terry, and Tony Kubek were slipping badly.

The team fired Yogi Berra after the World Series loss, and Johnny Keane, manager of the champion St. Louis Cardinals, took over. Unfortunately for Keane, Mickey Mantle got injured in 1965 and would never be a great player again. Whitey Ford pitched 244 innings, but his ERA was half a run above his lifetime average. Roger Maris suffered through injuries and hit only eight home runs. Elston Howard, too, was injured. Tony Kubek continued his slump and would soon retire. Mel Stottlemyre won 20 games, but Jim Bouton won only four games. No effective reinforcements were on the way. Mike Hegan and Jake Gibbs would have lengthy mediocre careers. The injuries contributed to the Yankees' 77-85 record, a drop of 22 wins.

The Yankees did not trade for an established star between 1965 and 1966. There were a few good players available, including Frank Robinson, but Baltimore acquired Robinson for Milt Pappas. All Robinson did was win the Most Valuable Player Award in 1966. Ted Abernathy and Ferguson Jenkins were traded during the 1966 season. Abernathy led the National League in saves in 1965 and 1967, although he slumped badly in 1966. Jenkins was just beginning and would not become a prolific winner for another season. Former National League Most Valuable Player Bill White was also available after the 1965 season. The Yankees acquired Ruben Amaro and Bob Friend, and later purchased Lu Clinton, Al Closter, and Dick Schofield. Friend was near the end of his fine career, and Schofield shared shortstop duties with the mediocre Amaro. The team promoted

Horace Clarke, Fritz Peterson, Roy White, and Bobby Murcer. Peterson led the team in wins with 12, and Clarke hit .266 as one of Kubek's replacements.

Although Bobby Murcer would become a solid outfielder, Horace Clarke was a mediocre player throughout his career. The Yankees would later introduce Rookies of the Year Stan Bahnsen and Thurman Munson, but the farm system was not as prolific as during the 1950s. Indeed, observers attributed the minor league talent dearth to George Weiss's refusal to pay bonuses during the 1950s, and to the death of key scouts, including Paul Krichell. Although the Yankees introduced several solid players during the 1960s, there would be a long drought after Mickey Mantle. Indeed, one could argue that the franchise has failed to introduce a superstar of the Gehrig, DiMaggio, and Mantle caliber in the intervening 50

years since Mantle's debut.

The 1966 Yankees' last-place finish was hotly disputed. The expansion Senators finished 25½ games back of the pennant-winning Minnesota Twins, while the Boston Red Sox finished 26 games back. Thus, there was a dogfight for last place. The Red Sox completed the "Impossible Dream" in 1967 by winning the pennant, while the Senators continued to wallow in the second division with the Yankees.

Still, the 1966 Yankees make a strong case for being the best last-place team in history. Their win-loss mark and run differential were stellar for cellar dwellers.

#### SOURCES

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**The 600 Club** There are now four players with 600 career home runs as Barry Bonds joined the club in August. When Babe Ruth established the club in 1931, Rogers Hornsby was second on the all-time career home run list with 293 dingers. Ruth was the only member of the 300, 400, 500 and 600 home run clubs at the time. The Babe had three hits in that game but was ejected in the seventh inning for arguing a home run call on a ball hit over his head that bounced off the top of the left field wall and returned to the field. Ruth paid a young fan \$10 for his home run ball.

Willie Mays pinch hit his 600th homer in 1969 before a small crowd in San Diego that gave the slugger a 5-minute standing ovation. Mays was joined 19 months later by Hank Aaron, thus forming the only active 600-homer duo ever until Mays retired at the end of the 1973 season. Ironically, Mays won that 1971 game with his fourth hit of the contest in the 10th inning.

Ruth was the youngest of the four sluggers to reach the mark and took many fewer at bats to hit his 600 home runs. He is also the only American Leaguer on the list. All three of the NL blasts on this list involve the San Francisco Giants. Two of the players were members of the Giants when they struck their historic blows and a Giants' hurler surrendered Aaron's clout.

#### HOME RUN Nº 600 (AB - CAREER AT BAT FOR Nº 600)

PLAYER	TM	LG	DATE	PITCHER	TM	SITE	AGE	ON	AB	AB/HR
Babe Ruth	NYA	AL	8/21/1931	Geo. Blaeholder	SLA	SLA	36	1	6921	11.54
Willie Mays	SFN	NL	9/22/1969	Mike Corkins	SDN	SDN	38	1	9514	15.86
Hank Aaron	ATL	NL	4/27/1971	Gaylord Perry	SFN	ATL	37	1	10014	16.69
Barry Bonds	SFN	NL	8/9/2002	Kip Wells	PIT	SFN	38	0	8211	13.69

- DAVID VINCENT

## Kamenshek, the All-American

### Was This Baseball's Greatest Fielding First Baseman?

**T**he old Yankee first baseman, Wally Pipp, watched the diminutive first baseman, Kamenshek, dance around the bag in the 1940s and said he'd never seen a finer fielding first-sacker in his life. And Pipp had seen Lou Gehrig, George Sisler, and Hal Chase.

A left-handed leadoff hitter, Kamenshek once stole 109 bases in 107 games and led the league in batting twice, 1946 and '47. But when a contract arrived from the minor league Fort Lauderdale club in 1947, "I turned it down," Kamenshek says. "One, I thought it was a publicity stunt, and, two, I was only 5'6" and weighed 135. I thought, 'How am I going to compete with those big guys?'"

So Dottie passed up the chance to make history. Instead, she stayed with the Rockford Peaches of the All-American Girls Professional Baseball League, the "league of their own" later made famous by the hit movie starring Geena Davis and Madonna.

"Our skills were as good as the men's," Kamenshek says. "We just weren't strong enough to compete with them. It's like golf: Women play in tournaments with men, but they tee off from the shorter tee."

Many authorities consider her the greatest woman baseball player ever. "Kammie had no weakness," says Lavone "Pepper" Paire Davis, a colorful catcher of the league. "She hit left-handed line drives and was a complete ballplayer, the Pete Rose of our league."

Dottie spent two days on the film set helping the starlets learn how to start a first-to-short-to-first double play. On a hit to their left, instead of throwing across their bodies, she advised whirling completely around to make the left-handed throw.

The AAGPBL was the brainstorm of Chicago Cubs owner Phil Wrigley, who founded it in 1943, ready to put it into the major league stadiums if World War II forced men's baseball to close down.

It didn't, but the All-American League flourished anyway in cities such as Rockford, Peoria, Racine, Fort Wayne, Grand Rapids, and later even Chicago and Minneapolis. At the peak of its popularity, the late 1940s, the league boasted ten teams, its games were broadcast from Chicago, and they drew over one million fans.

Kamenshek, the league's all-time batting leader, won two batting titles, with averages of .316 and .306. She was also a danger on the bases.

"I had speed," she says. "The manager made me leadoff man. Your hitting tactics are a lot different; I was kind of a Rod Carew type." She practiced by the hour bunting for hits.

In 1946 when Dottie stole 109 bases, she finished second—her rival, Sophie Kurys, stole 201. "I could have stolen more, but our manager wouldn't let us steal unless it meant something in the game."

And they did it wearing short skirts. (How many could Rickey Henderson steal in short pants?)

"We got used to it," Kamenshek shrugs. "In the spring we're always hoping we'd develop calluses. If you got your skin toughened up, you were pretty lucky most of year."

The uniforms were also cold. "In May up in the Midwest, it gets pretty cold at night," Dottie says. "We were on the Lakes a lot of times, with nothing to protect your legs." While fans bundled in blankets with thermos jugs of coffee, the girls shivered. "Maybe that's why we ran so fast."

At first they played a modified softball, with a short pitching distance and base paths, underhand delivery, and a ball somewhere between a baseball and a softball in size.

Later, the diamond was enlarged almost to major league dimensions, the ball was reduced, overhand pitching was allowed, and batting averages climbed. "In 1951 I hit .345 and finished second." Her lifetime average, .292, is the best in the league. But "I'm not one for statistics, really. I never paid any attention to that. I didn't consider myself an individual player, team victories were more important to me."

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She didn't even know her batting average until a few years ago, when league historian Sharon Roepke published them on a set of baseball cards. "I looked at my card," Dottie says. "I was probably on base 40 percent of the time, counting walks."

Kurys and Kamenshek fought it out year after year for the honor of being the greatest girl in the league. Which was better? "That could be thrown up for grabs," Kammie smiles.

(Kurys starred in her own TV commercial for Master Card in the 2001 World Series; she's the lady who opens the door when a little boy rings to give her a picture of herself. See also *SABR Baseball Research Journal*, 1991).

The only time Dottie and Sophie played together was on a Latin American goodwill tour after the '46 season. They visited Panama, Costa Rica, Venezuela, and other countries.

"You sure could feel the unrest in Nicaragua," Dottie says, "you could tell it was a dictatorship." They were invited to President Somoza's palace and danced until everyone missed bed check. "You didn't leave when Somoza didn't want you to leave."

Thanks to their star first baseman, Rockford reached the playoffs every year but the first two. In all, the Peaches won four championships in ten years, 1943-52.

One of Dottie's greatest games was the seventh game of the 1946 playoffs against Kurys's Racine Belles. "Our pitcher, Carolyn Morris, pitched a no-hitter for ten innings. Racine's Joanne Winter was in trouble constantly but didn't get scored on." Finally the Rockford manager lifted Morris for a pinch-hitter.

"The game was filled with sensational plays," Kurys remembers. In the 15th inning Sophie got on, stole second, and started to steal third, when Betty Trezza hit a ball over the infield. "I kept going and hook-slid into home. It was close, but I just made it, and we won the championship."

The old-time base-stealing champ, Max Carey, who was in the stands, called it the best-played baseball game he'd ever seen.

Kamenshek was born just before Christmas 1925, outside Cincinnati, and at the age of nine started playing baseball with the boys with a "wrapped-up, worn out ball."

At age 14 or 15 Dottie competed in a track meet against Stella Walsh, the 1936 Olympic sprinter for the U.S. "I came in last, but that's all right—I was good enough to run against her."



At 17 she was playing industrial league softball when the All-American League was formed and she joined 30 other Cincinnati girls for a tryout. She was one of only two selected.

She practiced footwork in front of a long mirror in her bedroom, throwing a ball in the air and shifting her feet.

After their workouts, the girls had to go to "charm school," walking up and down stairs with books on their heads. Most of them griped, but she didn't. "We realized that Mr. Wrigley was trying to make it a very high ladies' league. Back in those days no one wore a lot of makeup; if you did, you were called a floozy."

Every team had a chaperone, who doubled as a counselor, getting the younger girls over bouts of homesickness, etc. The chaperones were also trainers, bandaging up the wounded after each game.

Some of the players clowned on and off the field. Outfielder Faye Dancer of Fort Wayne was famous for climbing fire escapes to sneak in after curfew.

But Kammie says she "didn't get into a lot of escapades. I practiced a tremendous amount of time."

At first the teams traveled by bus or train, each girl carrying her own bats and gloves.

Could they sleep on the buses? "We tried. We'd get some sleep and hope that we'd get into town early enough to take a nap." If the rooms weren't ready, they sprawled on lobby sofas until time to go to the park.

During home stands the girls lived with local families, from one to four girls to a house.

At first the Peaches didn't draw too well, but attendance grew as the team started winning. They played in the high school football stadium which didn't have a fence. On an average night they drew 3-4,000 fans, with up to 10,000 for a big game. The local newspapers gave them excellent coverage.

Dottie played for \$50 a week the first year. In later seasons she drew \$125 a week, which was supposed to be tops. "A couple of years I held out for bonuses, which I wasn't supposed to do. We called it 'under the table' money. I was trying to go to college and used it for tuition."

She enrolled at Marquette University in 1949 to become a physical therapist and reported to the team after the semester was over, arriving without any spring training.

In 1951 Dottie left the game at the age of 25 to go to school full-time. The next year TV and the lack of good young players finally killed the All-American.

Kamenshek spent 18 years working with crippled

children as Los Angeles County's chief of therapy services. Now retired in the California desert, she drove her van to Cooperstown in 1989 to see the Hall of Fame's new exhibit on women's baseball. "Yes," she says, "my picture's there."

In 2000 *Sports Illustrated* named her one of the top 100 woman athletes of the century.

A stroke in 2001 put a sudden stop to her visits to Kurys. After an 11-month recovery, she regained her speech and was able to walk supported by a walker.

Until then Kamenshek liked to drive her van around the country sightseeing. Whenever she got to Phoenix, she stopped to play a round of golf with her old friends, Kurys and pitcher Helen Nicol "Nicky" Fox, and talk about the old days.

Kammie remembers the final playoff game against the South Bend Blue Sox in 1949. With Rockford leading 1-0, the Sox put a runner on third, the batter bunted, and "I came charging in and was able to tag the runner out at home and throw the batter out at first. I had sense enough not to throw it to the catcher but continued on in for the tag, which won us the pennant."

Another year the Peaches played Sophy's Racine Belles for the title. Rockford went into game six trailing three games to two but won it to tie the series.

"That kind of broke their spirit, and we won the seventh game, like the Angels did against the Giants."

## The Most Dominant Triple Crown Winner

**B**aseball's Triple Crown is a heroic achievement reserved only for the sport's elite. It has been accomplished only thirteen times since 1900, by eleven different stars. Only Rogers Hornsby and Ted Williams were able to repeat the feat of winning the league's batting title, home run crown and RBI title in the same season. The achievement is virtually synonymous with baseball immortality, as every twentieth century Triple Crown winner is a Hall of Famer. In today's era of specialization, where players tend to earn the classifications of "home run hitters", or "RBI guys" or "high average hitters", fewer batters seem to possess the total package of the complete hitter necessary to win a Triple Crown. The feat occurred at least once a decade in each of the first seven decades of the 20th century. That counts Heinie Zimmerman, who for years was listed as a Triple Crown winner in 1912—the lone winner that decade. But research in the 1990s gave the RBI title to Honus Wagner. There has been no Triple Crown winner since 1967, when Carl Yastrzemski narrowly won. The following is the list of the post-1900 Triple Crowns:

YEAR	PLAYER	TEAM	BA	HR	RBI
1901	Lajoie	PHI-A	.426	14	125
1909	Cobb	DET	.377	9	107
1922	Hornsby	STL-N	.401	42	152
1925	Hornsby	STL-N	.403	39	143
1933	Klein	PHI-N	.368	28	120
1933	Foxx	PHI-A	.356	48	163
1934	Gehrig	NY-A	.363	49	165
1937	Medwick	STL-N	.374	31	154
1942	Williams	BOS-A	.356	36	137
1947	Williams	BOS-A	.343	32	114
1956	Mantle	NY-A	.353	52	130
1966	Robinson	BAL	.316	49	122
1967	Yastrzemski	BOS-A	.326	44	121

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There are several noteworthy aspects of the thirteen Triple Crowns. Four of the thirteen occurred within a five-year span, from 1933 to 1937, with "matching" achievements in *the same city in the same year* . . . the Phillies' Chuck Klein and the A's Jimmie Foxx. The Cardinals and Red Sox lay claim to the most Triple Crowns with three each, aided by double winners Hornsby and Williams. Nine of the accomplishments were in the American League, with no National League winners in the last sixty-five years. The stats reveal the lowest batting average of a winner was .316, while single digit home runs made the list once.

Is there a meaningful way to differentiate among Triple Crown winners? Does any one Triple Crown season stand out as a more dramatic accomplishment? From a statistical perspective, how would the Triple Crowns rank against one another? One plausible methodology to compare Triple Crown performances is to evaluate the winners' statistics relative to the remainder of the league, for the same season. The effect of this analysis would be to "normalize" the performance statistics, eliminating the variability of batting statistics over different eras of modern baseball. This method creates indices of the individual winner's performance versus the average performance of all hitters in the same league, for each of the three relevant stats, batting average, home runs and runs-batted-in. One can then create a simple average of the three indices to create an overall Triple Crown Index (TCI).

### THE TRIPLE CROWN INDEX (TCI) FORMULA

$$TCI = (BA \text{ Index} + HR \text{ Index} + RBI \text{ Index}) \div 3$$

where:

BA Index = (Player's batting average ( League batting average))  $\times$  100

HR Index = (Player's home runs per at bat (League home runs per at bat))  $\times$  100

RBI Index = (Player's RBI per at bat  $\div$  (League RBI per at bat))  $\times$  100

The TCIs could then be compared for each Triple Crown performance, effectively ranking the player's performance versus his peers. The results are:

RANK	YEAR	PLAYER	BA INDEX	HR INDEX	RB INDEX	TCI
1	1909	Cobb	155	581	244	327
2	1933	Foxx	130	590	233	318
3	1942	Williams	139	543	246	309
4	1925	Hornsby	138	523	233	298
5	1922	Hornsby	137	548	207	297
6	1934	Gehrig	130	529	221	293
7	1901	Lajoie	154	428	218	267
8	1933	Klein	138	428	204	257
9	1956	Mantle	136	381	199	239
10	1947	Williams	134	374	196	235
11	1967	Yastrzemski	138	344	216	233
12	1937	Medwick	138	336	215	230
13	1966	Robinson	132	338	207	226
		AVERAGE	138	457	218	271

By this methodology, Ty Cobb's 1909 season emerges as the most dominant Triple Crown win. His most impressive statistic was his .377 batting average, winning the title by 31 percentage points over the A's Eddie Collins, in a year when the AL batted only .244, and only seven players batted over .300. Cobb's batting average index relative to the league was 155, a high for all Triple Crown winners. Also, Cobb's nine homers represented over 8% of the total home runs hit in the entire AL in 1909. He also led the league in total bases, hits, runs scored, slugging average and stolen bases.

Ironically, Cobb hit for a higher average in seven of the next 10 seasons. In possibly his best season, 1911, Cobb batted .420 with 8 home runs and 144 RBI. In that glorious season, Cobb won the batting and RBI titles, but trailed Philadelphia's Frank Baker by three home runs, and was denied a second Triple Crown. Ranking second to Cobb's 1909 win is the 1933 season of Jimmie Foxx. While Foxx was not as dominant in the batting average category, winning the title by 20 percentage points and a 130 index to the AL batting average, he dominated in the home run category. His 48 HR's topped Babe Ruth's 34 and indexed at 590 to the AL (on a per at bat basis), as only four American Leaguers hit over 20 home runs. Further testimony to Foxx' homer prowess in '33 occurred cross-town as Chuck Klein was duplicating the feat with his own

Triple Crown season in the NL for the Phillies.

Klein won the National League HR crown with a modest 28 four-baggers. Third place in the Triple Crown derby was Ted Williams' first win in 1942, aided by his RBI dominance. Williams' 137 RBI topped DiMaggio's second best 114 in a year when only 5 players drove in 100 or more runs. It is also noteworthy that both of Hornsby's Triple Crowns were statistically comparable to one another, ranking 4th and 5th all-time. Five Triple Crown winners also won the major league Triple Crown, meaning their batting average, HR and RBI totals were tops in both leagues . . . Cobb, Hornsby (1925), Gehrig, Williams (1942) and Mantle.

While there may not be a "weak" Triple Crown, statistically speaking, the least impressive Triple Crown accomplishment was Frank Robinson's 1966 season with the Orioles, his first in the American League. In fact, Robinson's .316 batting average was lower than that of five National Leaguers. Also of note is the five lowest ranked Triple Crown victories include the most recent four, Williams' 1947, Mantle's 1956, Robinson's 1966 and Yaz's 1967. At the top of the list in the "near miss" category is Babe Ruth's legendary 1921 season. Ruth's .378 batting average trailed two Tigers—Heilmann (.394) and Cobb (.389)—preventing him from winning the Triple Crown. However, his home-run dominance (59 vs. the "runner up" at 24) and RBI dominance (171 vs. the "runner up" at 139), makes it one of the most dominant non-Triple Crown seasons.

Anyone who achieves a Triple Crown in the 21st century will certainly be heralded, regardless of his margin of victory in any one statistical category. Nonetheless, as we strive to gain perspective on historical accomplishments over more than a century's time, it is interesting and useful to attempt to measure "degrees of greatness."

## Preventing Base Hits

### Evidence that Fielders Are More Important Than Pitchers

**A** most surprising discovery about baseball was reported several years ago by Voros McCracken on various Web sites. Despite their individual efforts, major league pitchers seem to have almost identical abilities to prevent base hits. Of course, they differ greatly in how often they yield strikeouts, walks, and home runs. There are also large and consistent variations in the “ground-ball-yielding” tendencies of pitchers. But *once a batted ball is put into play*, no matter whether in the air or on the ground, the frequency of base hits resulting is essentially the same for a Jimmy Anderson as for a Randy Johnson.

This well-confirmed fact is all the more surprising when it is remembered that a pitcher is supported by eight other fielders, whose only jobs are to convert as many batted balls as possible into outs while minimizing advancement of any baserunners. Surely there are differences in fielding skill, even though it has proven very difficult to measure these differences and to assess their values to their teams. For example, from its very first recording date during 1981 spring training, STATS has emphasized trying to directly and systematically gather observational data that would allow them to “rate fielders.” But the Zone Ratings that have resulted are little more convincing than Range Factors.

Could it be that the small differences that do exist in “batting average per batted ball in play” (BABIP from now on, as suggested to me by Rob Neyer), among pitchers and among teams, are more strongly affected by the fielders’ skills than by the pitchers’ skill? This research report describes four studies to address this question. In summary, three of the four results obtained agree in strongly suggesting, “Yes. Fielders

collectively seem to have a much greater effect on BABIP than do the pitchers”, while the fourth result is not inconsistent with this statement.

Many of the following studies share a methodological point of view. *Effects are real if they tend to correctly predict future effects. Effects that are not persistent are the results of random chance, or luck* – in this case, the at'em screamers or wind-blown bloopers, which actually seldom even out in 162 games. To decide whether or not an effect is predictive, we may ask whether an effect that shows up in a particular year, say, 1997, is observed again in the next year, 1998. And we look at all the examples we can find, for the small effects that haven't been established in 162 games may become significant over a decade of major league play. In baseball analysis, this general “persistency” approach seems to have first been applied to “clutch hitting” in the early 1970s, when only two seasons of relevant data existed.

Of course, this point of view is also that of most scientists and statisticians in addressing many practical questions, such as “Is this new drug better than that old one?” A widely used yardstick when statisticians compare two sets of numbers (such as 1997 vs. 1998) is  $r$ , the Pearson correlation coefficient, which varies from 0.0 (no relationship between these sets) to 1.0 (there is an exact relationship) and has a sign that will be either positive (the numbers tend to vary in the same way) or negative (the relationship is consistent but backward—for example, the relation between ERA and WHIP among pitchers). It is also useful to square  $r$  ( $r \times r$  or  $r^2$ ), because the resulting  $r^2$  expresses the proportion of the differences among one set of numbers that can be predicted by knowing the other set.

A second underlying point of view here, conceptually the same as par runs in *Total Baseball*, is a focus on team or player performance above or below the league average. As Pete Palmer was the first to stress, teams win or lose games not, say, because their team batting average is .270, but because their team batting average is better or worse than the other teams’ batting averages. Here we will be considering only the num-

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ber of hits yielded, above or below the "expected" or league average value. Expressed as a formula, for a pitcher- or team-season, this value is calculated as:

$$\text{Hits Prevented} = \text{Lg.BABIP} \times (3 \times \text{IP} - \text{K} + \text{H} - \text{HR}) + \text{HR} - \text{H}$$

$$\text{where Lg.BABIP} = (\text{Lg.H} - \text{Lg.HR}) / (3 \times \text{Lg.IP} - \text{Lg.K} + \text{Lg.H} - \text{Lg.HR})$$

Hits Prevented will be positive whenever the defense is more effective than average (whether because of superiority in fielding, in pitching, in home park effect, or in luck) and will be negative for weaker than average performance. The sum of Hits Prevented over all the pitchers or teams in a league will be zero. (This formula differs a bit from McCracken's, but not in any way that affects the conclusions.)

Finally, the scope of these studies was the 11 seasons from 1991 to 2001, including the strike season of 1994. These seasons provided 10 consecutive-season comparisons.

To begin with, the question of whether the pitchers themselves have any effect on BABIP was reexamined. There were 945 instances in which an individual pitcher worked a total of 200 innings in consecutive seasons, all for the same club (the 945 were identified by hand, almost certainly yielding an undercount, but an unbiased one). The  $r$  of Hits Prevented over these 945 paired pitcher-seasons is .162, so pitchers do have a statistically significant effect on BABIP. However as a practical matter that effect is very small. Squaring  $r$  yields the predictability of Hits Prevented in year 2, given the result in year 1, as a value of .026 or 2.6%.

**RESULT 1** Hits Prevented can be compared for consecutive team-seasons as well as for consecutive individual pitcher seasons. There are exactly 308 such comparisons for these seven consecutive seasons. The  $r$  over these 308 paired team-seasons is .369, considerably higher than pitcher-seasons, especially when  $r$  is squared to yield a 13.6% predictability. So the persistence of Hits Prevented from one season to the next is about five times greater for teams than for individual pitchers. I have shown directly that this increased team persistence is not caused by the individual pitchers. And turnover in pitching staffs is rather high anyway. *It seems reasonable to attribute the much higher persistence of team Hits Prevented to a less variable influence on BABIP, the skill of the fielders.*

Park effects also play an important role. For example, removing the most extreme park effect, the Rockies' eight comparisons, yields  $r = .323$ , or a 10.5% predictability, for the remaining 299 cases. Also the consecutive team-season correlation for park effects has a relatively large  $r$  of .535 (307 cases, excluding the Astros move).

Then could the park effect account for all of the season-to-season persistence of team BABIP? The *STATS Major League Handbook* has presented complete home/away team statistics for the last decade. So these calculations were repeated for 1992-2001 away data only, excluding 1995, which for various reasons was not available. The  $r$  for the resulting 199 away-team BABIP persistence was .300, a 9.0% predictability.

Summarizing, from the  $r^2$  values for all these various correlations, there is an overall team BABIP season-to-season persistence of 13.6%. If the smaller set of away-game BABIP data, with the park-neutral persistence of 9.0%, is considered sufficiently representative, then the average home park effect on BABIP persistency becomes 4.6% (the difference). The individual pitcher season-to-season persistence of BABIP is 2.6%, an overestimation of the "pure pitching" effect since the much larger park and fielder effects that must affect individual pitcher BABIP persistence were ignored. The only other persistent entity appears to be the fielders, so they are left responsible for the remaining 6.4% (9.0% minus 2.6%) of persistence in BABIP, the largest single factor.

Perhaps the most important point to note about BABIP is that 86.4% is not persistent at all. For the most part, differences among teams in their hits yielded, per ball in play, appear to be random variations, in "lucky bounces" and "at'em balls." Pete Palmer reports that this conclusion is also expected on the basis of statistical theory. League BABIP rates are currently about 0.290 (in other words, the league-average batter currently hits about .290 when he puts the ball in play, excluding home runs). However, the BABIP off an individual pitcher in a season will randomly vary, just as the number of heads in 100 actual coin flips will usually not be exactly 50. Pete Palmer has recently calculated that the actual historical variations in BABIP for individual pitchers behave indistinguishably from variations in coin flips (for the same distributions of sample sizes). (However, just to avoid any possible confusion, year-to-year persistence is relatively much greater in individual batting statistics, or

in walks, strikeouts, and home runs off pitchers, or in traditional fielding statistics—and again in accord with statistical theory, because for all these other statistics the variations among individual players' totals are much larger than the theoretically expected random variations.)

If most of the variations in BABIP among teams and especially pitchers are actually random fluctuations, who if anyone should be held accountable? From the simple accounting balance viewpoint of the classical box score, the traditional practice of charging the hits to the pitchers and only the errors to the fielders will not be easily improved. However, from the point of view of the baseball analyst, who is mainly trying to better understand how individual players help teams win and lose games, to say nothing of the point of view of all the spectators, it is difficult to believe that fielders differ only in their frequencies of errors, double plays, and passed balls. And fielders are indeed found to have a greater effect than pitchers or parks on team Hits Prevented, here on the basis of year-to-year persistence arguments. The following is the same question, examined from a different perspective.

**RESULT 2** There already exist direct if incomplete statistical measurements of fielding skill, errors, double plays per opportunity, and passed balls. We now have a candidate indicator for another aspect of fielding skill, Hits Prevented. If in fact Hits Prevented also indirectly reflects fielding skill, then team superiority in Hits Prevented should correlate with team superiority in errors, double plays, and passed balls. And indeed there is such a positive correlation. For the 338 team comparisons in this study, the  $r$  value between conventional and unconventional fielding skill is .273 (see the Appendix for how conventional fielding skill was summarized).

There are of course two more important team skills, batting and pitching. Note that for this purpose team pitching skill is being calculated with all pitchers assigned the same league average BABIP (see the Appendix for this too). Here is a "correlation matrix" of  $r$  values showing how all these four skills are related to each other, for these 338 team comparisons.

	CF	HP	B
Conventional fielding (CF)			
Hits Prevented (HP)	.273		
Offensive (batting) (B)	.061	.193	
Pitching skill (P)	.112	-.008	-.038

Although the .273 between conventional fielding and Hits Prevented is modest, it is the largest association in the table. Furthermore, note the insignificant (and negative!) correlation between Hits Prevented and pitching skill. If Hits Prevented instead reflects mostly pitching skill, as all of us believed until very recently, this is a very surprising result. *Hits Prevented correlates with conventional fielding skills more strongly than any other pairing of the four skills.* The second largest correlation is between offensive skill and hits prevented, which can easily be interpreted as a tendency for good hitters also to be good fielders, but is very hard to understand if hits prevented are the pitchers' responsibility.

Park effects must also affect these measures of team skills—i.e., as an important cause of the weak negative relation shown between batting and pitching skills.

**RESULT 3** The approaches used to obtain Result 1 and Result 2 can be combined by forming the correlation matrix for 308 consecutive team-season comparisons among the four team skills. (Results 2 and 3 are actually independent, despite any contrary impression, as there is very little tendency for consecutive team-season differences to correlate with the values forming those differences. The actual  $r$ 's range from .0006 to .070 for the four team skills.)

Here is the outcome:

	CF	HP	B
Conventional fielding (CF)			
Hits Prevented (HP)	.326		
Offensive (batting) (B)	.087	.145	
Pitching skill (P)	.149	-.013	-.209

The same tendencies exist as in individual season skills, and to a somewhat greater extent. *Consecutive season changes in team Hits Prevented strongly follow changes in conventional fielding skill but are unrelated to changes in (BABIP constant) pitching skill.*

**RESULT 4** If differences in BABIP are determined more by the fielders than by the pitchers, then pitchers who change teams should have a relatively small season-to-season persistence in their Hits Prevented (difference between actual hits allowed and those with constant BABIP). There were 348 pitchers in this 1990-2001 sample who over consecutive seasons appeared with more than one team. The  $r$  value for season-to-season correlation in this group's Hits Prevented was

.154. Although this value is less than the  $r$  value of .162 for the 945 pitchers who worked for only one team, and thus the change is in the expected direction, the decrease is too small to have statistical significance.

**TEAM PERFORMANCES** A less objective but much more interesting way to continue looking at this question is to consider individually some of the largest, less likely to be chance, season-to-season changes in team Hits Prevented. Are changes in the fielders a reasonable cause? In the following discussion, the numbers shown are not Hits Prevented, but the extra (fewer) runs that these extra (fewer) hits are expected to create.

By far the best Hits Prevented team during the entire 1990-2001 era was the 2001 Mariners, at +128 runs while the worst was the 2001 Indians, at -79 (fielding skill prevailing when they met in the post-season!). The second and third best teams were the surprising second-place 1998 Reds (+91) and 1991 White Sox (+84), the fourth and fifth the 1990 and 1997 Athletics (+77 and +70), and the sixth another record setter, the 1998 Yankees (+60). The second and third worst teams, the 1993 and 1999 Rockies (-75 and -72), were strongly influenced by an unfavorable park effect. The fourth worst was the 2001 Rangers (-71) the fifth worst was the 1990 Braves (-62), and the sixth the 1997 Rockies (-60).

The second largest change in Hits Prevented runs was a +87 run improvement by the 1991 Braves over the 1990 team. My recollection of a concerted effort to improve the defense and "support the young pitching" is supported by changes at every field position except catcher: Lemke over Treadway (2b); Belliard over Blauser (ss); Pendleton over Presley (3b); Otis Nixon over Dale Murphy (cf); Justice over Lonnie Smith; Bream for Justice (1b). The pitching staff was mostly unchanged.

An even bigger improvement is the last two years in Seattle, where a +67 runs from 1999 to 2000 (fifth largest) was followed by the greatest year-to-year improvement in the 1990-2001 era, of +90 runs from 2000 to 2001. The major 1999-2000 changes were Cameron for Griffey (cf), David Bell for Russ Davis (3b), and Olerud for Segui (1b). The 116 wins resulted after McLemore was replaced by Boone (2b), Buhner by Suzuki (rf), and A-Rod by Guillen (ss). Again, the pitchers were mostly the same, although some of this improvement is the park change.

Large negative changes seem as much the result of injuries as conscious decision making. For example,

the second worst change of -91 runs in Tampa Bay's second year (1998 to 1999) saw many fewer games played by defensive stalwarts Cairo, Stocker, Boggs, and McCracken but only one intentional change, in left field. A slightly larger decline (-92) occurred in the turmoil of the Brewers' last two AL seasons (1996 to 1997), notable being departures by Jaha and Vaughn and arrivals by Gerald Williams and Burnitz.

In summary, several independent analyses of the available data converge in suggesting that the fielders have much more influence on opponents' hits per batted ball in play (BABIP) than do the pitchers, in current major league play. BABIP season-to-season persistency is much greater for teams than for individual pitchers. And even more important, team hits allowed per batted ball correlate positively with other measures of fielding skill but negatively with other measures of pitching skill. Home park effects are also significant. While any other major influences on hits per batted ball remain either unknown or, much more likely, random and nonexistent, there seems quite enough justification to assign the total of team BABIP variation to team fielding rather than individual pitching.

Of course, team fielding is the summation of the individual fielding performances that we all most want to understand. So these findings about BABIP offer hope for significantly better evaluations of individual fielders. Analysts of individual fielding performances have always been confounded by the arithmetic of the defense. There will be three putouts per inning, regardless of how many baserunners and runs occur in between those putouts. So the better one's teammates field, the fewer one's own chances to record those individual putouts and assists that we can objectively count and compare. However, with BABIP obviously a measure of those baserunners between the putouts, if BABIP differences may be attributed mostly to fielders, then the arithmetic of baseball rules need no longer dominate our numerical comparisons of individual fielders. Although the next details will no doubt be debated thoroughly, they seem clear in principle, and creative analyses like those by Bill James in *Win Shares* and by groups like the Baseball Prospectus have already made substantial progress in this direction.

## APPENDIX

Here is an example of the spreadsheet formula used in this work to calculate conventional fielding par runs, here for the 2000 Angels:

$$0.7 \times (112 - AM5) + 1 \times (AN5 - 162.9 \times ((AA5 + AD5 + AE5) \div 2192.4)) + 0.25 \times (10.7 - AO5)$$

It is the sum of three terms, which from left to right account for errors, double plays, and passed balls. The spreadsheet cell references are to specific Angel team totals. The constants are either the league average for a team or the run value attributed to an error, DP, or PB.

Thus the average AL 2000 team made 112 errors, while the Angels made 134 (referenced by AM5). Those  $134 - 112 = 22$  extra errors are assumed to have cost the Angels about 15 runs on defense ( $0.7 \times 22$ ). Passed balls are handled in exactly the same way. Expected double plays are weighted by the number of opportunities, approximated by the number of Angel opponents reaching base by hit (AA5), walk (AD5), or HBP (AE5). The league average for opponents reaching base in the 2000 AL is 2192.4, as shown.

Here is an example of the much more intricate pair of formulae used to convert Hits Prevented into par runs allowed, applicable either to Pedro Martinez or the Boston Red Sox.

$$\begin{aligned} \text{Expected runs allowed} = \\ \frac{11950 - 1.068601 \times (29710 - (AA77 + 3 \times AB77)) \times (30881.75 - (AA77 + AD77 + AE77 + (AG77 + AH77) \div 4))}{(82045 - (Z77 \times 3 + AA77))} \end{aligned}$$

$$\text{Par pitching runs} = (11950 \div 20141) \times Z77 \times 1.0072 - \text{"Expected runs allowed"}$$

The first formula expresses two basic ideas:

In the spirit of the "component ERA" that Bill James has promulgated, expected runs allowed are calculated using a runs-created-type formula for pitchers.

Primarily to make the total of individual pitchers runs allowed very nearly equal to the team runs allowed (i.e., so that the "whole equals the sum of the parts"), every runs created (RC) formula I use is *for the league after omitting the contributions* of the player or the team. The RC by the player or team then becomes the difference between the actual RC by the league and the RC calculated as just described (after the pitcher or team is omitted).

So the first formula expresses the difference between 11,950, the runs actually scored off AL pitchers in 2000, and three multiplied terms divided by a fourth. As a detailed example, the second term is an approximation of total bases yielded (hits yielded +  $3 \times$  HR yielded), where hits yielded can be either actual or calculated by the league average of BABIP. Its 29,710 value is the "total bases yielded" for the league (calculated using actual hits) and the  $-(AA77 + 3 \times AB77)$  then removes the pitcher or team "total bases yielded" from this league "total bases yielded".

The third term is an "on-base allowed," expressing hits, walks, HBP, and (WPs and balks) in a similar way. The fourth divisor term is an "at-bat," approximated as ( $3 \times$  IP + hits).

The first constant term (1.068601) is the ratio of the actual league runs allowed to those that are calculated for the league, omitting team or player subtraction—in this instance  $29710 \times 30881.75 \div 82045$ .

The par pitching runs formula is much simpler, again the difference of two terms, with the first being the number of runs an average pitcher would yield in the same number of innings (Z77) in a neutral park (1.0072 being the 2000 Fenway correction) and the second the output of the first formula.

The par runs resulting from Hits Prevented (used to obtain Results 2 and 3) is the difference in runs allowed (or par runs allowed, same thing) calculated as above either (1) with actual hits allowed vs (2) with hits calculated at the league average BABIP rate.



ROGER GODIN

## Not Quite Marching Through Georgia Don Larsen and the Atlanta Crackers

**T**he cover of Tim Darnell's book *Southern Yankees* describes the now virtually forgotten Atlanta Crackers as "one of minor league baseball's most successful and storied franchises." Over a 65-year period from 1895 through 1960, playing largely in the Southern Association, the Crackers won 17 pennants and six playoff titles.

The 1954 Crackers were particularly notable, finishing first at 94-60 and then eliminating Memphis and Birmingham in the playoffs. This allowed them to advance to the Dixie Series against Houston, where they came back to win the last two games and the series four games to three. Most of those who made the season possible were gone the following year, including future major leaguers Frank Torre and Chuck Tanner. Among those still around in 1955 were outfielder Bob Montag, who had hit .323 with 105 RBI, catcher Jim Solt, and second baseman Frank DiPrima. The latter two had hit .321 and .316 respectively.

It was common in those halcyon days for major league teams to break from spring training and head north, playing exhibition games against minor and major league clubs. The New York Yankees, unlike the Crackers, were not defending champions when they broke from their Florida camp at St. Petersburg on March 31. Their first stop on a Southern Association tour was the next night in Atlanta. Former Yankee George McQuinn had succeeded Whit Wyatt as Atlanta manager, and he sent ex-Brooklyn Dodger Clyde King to the mound. Yankee manager Casey Stengel countered with Whitey Ford and his basic lineup of Rizzuto, Mantle, Berra, et. al.

The game was expected to be the first of a number of easy tune-ups, but it would prove to be something quite different. In the top of the second Hank Bauer

walked, advanced on a wild pitch, and scored on Gil McDougald's single. The Crackers countered with a 400-foot home run to the left-field scoreboard by Solt in their half of the inning. McQuinn brought in Dick Roberson in the fifth, and he gave up the go-ahead run on a walk to Andy Carey and Mickey Mantle's double. The Yankees added a single run in the eighth on two walks and an error, and then got another in the ninth off Stu Alton when Hank Bauer walked with the bases loaded.

While the 4-1 lead was close by the standards of such games, there appeared to be little concern that Whitey Ford would not be the first Yankee pitcher to go nine innings that spring. Going into the bottom of the ninth he had scattered five hits and struck out nine. With one out, DiPalma got an infield single, Earl Hersh walked, and Solt got another infield single to load the bases. Jack Caro then followed with a hard smash off Andy Carey's glove into left field, scoring DiPalma and Hersh. With Solt on third and Caro at second, Ford struck out pinch-hitter Bill Casey for the second out, but Johnny Turco walked to reload the bases. Stengel then waved in right hander Don Larsen for his first appearance as a Yankee. He had been acquired the previous November from Baltimore along with Bob Turley and others.

Despite a 3-21 record in 1954, the Yankee manager was high on the Indiana native. He told the *New York Times'* Louis Effrat: "Larsen knows how to pitch. I've been watching him throw to hitters in practice. There's no reason why he shouldn't be a big winner with this club. He's big and strong and can fire the ball. . . . Larsen reported with a sore arm, but it seems to be all right now. Twice I had him listed to work, but he was rained out of his turn each time."

Larsen would be throwing to right-hand hitting outfielder Bob Thorpe, who had a brief 110-game major league career with the Boston-Milwaukee Braves over a three-year period, where he hit .251 with six home runs. He took an instant liking to Larsen's first pitch and drove it to right center for a two-run double as Solt and Caro scored for the 5-4 win.

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The 7,209 fans at Ponce de Leon Park were delighted, as was the *Atlanta Constitution*, which put the game story on the first page with the headline: "Crackers Topple Yanks 5-4, on Thorpe's Blow." The Yankees took out their frustrations on Birmingham and Memphis 11-1 and 13-1 respectively in their next two games.

Whitey Ford was charged with the loss, but he would go on to win 18 games and Larsen would chip in with nine as the Yankees won their 20th pennant, but lost the World Series to Brooklyn. Larsen's memorable moment would, of course, come on October 8, 1956, with his 2-0 World Series perfect game triumph against the Dodgers.

Surprisingly enough, prior to the Crackers' memorable win, the Atlanta team had dropped two consecutive games to Fort McPherson, Georgia. This was at a time when Army teams were composed of major and

minor league players serving their military obligation. Frank Bolling and Norm Siebern were both in the soldiers' lineup. The Crackers were slated to play the Detroit Tigers on Saturday night, but the game was rained out, and a doubleheader rescheduled for Sunday. Atlanta continued their major league domination by winning the nightcap, 8-0. Despite these high points it would not be a good season for the Crackers. They finished seventh at 70-84, as Clyde King took over from George McQuinn before the season was out.

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### Twin Bills Fill the Bill

Doubleheaders are an increasingly rare part of baseball. Major league baseball no longer has them as part of the regular season schedule, so it is left to rainouts to produce games that need to be rescheduled as part of a twin-bill. But domed stadiums, better field drainage systems, and more teams located in southern climates have reduced the number of rainouts.

Perhaps the last place to find doubleheaders on a regular basis is the minor leagues—even if they are only seven inning games. Perhaps no league has ever had as many doubleheaders as the 1947 Eastern League.

Because of rotten weather in the spring that made a mess of the Eastern League schedule, all teams were forced to play an unusually high number of twinbills. For example, the Utica Blue Sox played 35 two-game sets. Yes, thirty-five. On June 9, Utica met Elmira in the first of five straight doubleheaders. Playing ten games in seven days against three different opponents didn't adversely affect the Blue Sox as they won nine of the ten. In fact, playing 35 doubleheaders for the season actually helped Utica win the Eastern League championship.

The Blue Sox were incredibly successful in these twinbills. They split 17 of them, and they swept both games 17 times. Only once did they lose both games. This extraordinary 51-19 record (.729 winning percentage) was a major part of the club's overall 90-48 record. It is unlikely that many teams have played as many doubleheaders in a season—and even more improbable that they could beat the winning percentage of the 1947 Utica Blue Sox.

— SCOTT FIESTHUMEL

## Forbes Field, Hitter's Nightmare?

**F**orbes Field was one of the very first classic era ballparks (only Philadelphia's Shibe Park preceded it) to be built in America. It was the home of the Pittsburgh Pirates for 62 seasons after it opened June 30, 1909. Forbes Field has been regarded as a spacious park and a poor park for hitters. Only in the 1947-53 seasons when the "Greenberg Gardens" reduced the left-field foul line distance by 30 feet, was the park considered friendly to hitters.

The conventional wisdom about Forbes Field is illustrated by the following quotations taken from various ballpark books:

"No no-hitter was ever pitched here. Given the fact that the Pirates, Grays, and Crows played here for 62 years, that is an incredible statistic," wrote Philip Lowry in *Green Cathedrals*.<sup>1</sup>

"It was one of the most spacious parks in baseball, so much so that when slugger Hank Greenberg's contract was sold to Pittsburgh in 1947, he refused to report unless the team moved the fences in," and "... the park remained a nightmare for many hitters including the great Roberto Clemente," Eric Enders in *Ballparks: Then And Now*.<sup>2</sup>

"Strangely a no-hitter was never pitched in the entire history of Forbes Field," Larry Ritter wrote in his *Lost Ballparks*.<sup>3</sup>

Much of this conventional wisdom reflects two facts: (1) Forbes Field was spacious, more so than the average NL park in the time period 1909-46, and (2) during this period the park was not conducive to the hitting of home runs. How spacious was Forbes Field relative to the other NL parks? When it opened in June 1909, only Redland Field in Cincinnati was larger. In the ensuing years, parks in other NL cities varied in size, but Forbes Field's overall size changed very little and was never less than 457 to center field. A comparison of the average outfield distances for

Forbes Field and the entire National League is shown in the following table.

**Table 1. PARK SIZE 1910-46  
AVERAGE OUTFIELD DISTANCES (ft)**

YEAR	FORBES FIELD	NL AVERAGE
1910	395	380
1920	395	382
1925	388	383
1930	390	374
1935	390	373
1940	390	375
1946	390	373

The second item which leads to Forbes Field's reputation as a poor park for hitters was the undisputed evidence of relatively few home runs being hit at Forbes Field. The concept of a park Home Run Factor has been developed to measure the number of home runs at a given park relative to the league average for that season. The determination of the park Home Run Factor adjusts for the home team's hitters' and pitchers' proclivities for hitting and giving up home runs. By definition, the league average Home Run Factor is equal to 100. The following table shows the Home Run Factors for Forbes Field:

**Table 2. HOME RUN FACTORS-FORBES FIELD<sup>4</sup>**

TIME PERIOD	FORBES FIELD
1910-1961	
1920-29	57
1930-39	62
1940-46	68
1909-46 (average)	62

Compared to the average NL park, Forbes Field was about 40% below average in home runs. By contrast, Forbes Field was always regarded as a good park for triples. How much above the average NL park has not been known. Indirect evidence supporting the view of

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*Forbes Field. Babe Ruth hit his final three home runs here on May 25, 1935. The last one, #714, cleared the right field wall, which had never been done before.*

Forbes Field as a good triples park includes: (1) Owen Wilson of the 1912 Pirates set the major league single-season record for triples (36) while playing half his games in Forbes Field, and (2) in 18 seasons (1921-37) the Pirates led the NL in triples 14 times.

Except for the Home Run Factors, all of the above evidence consists of data that is either indirect or merely suggestive. Recent research into NL Home/Road batting by park has made available some direct evidence that bears on the question: Was Forbes Field a poor park for hitters?

**DEADBALL ERA** For the last three years of the deadball era (1917-19) Park Factors were computed for six batting categories based on the batting data for the Pirates and their opponents in games at Forbes Field vs. data for Pirates games in all other NL parks.<sup>5</sup> The resulting Park Factors are as follows:

**Table 3. FORBES FIELD PARK FACTORS 1917-19**

CATEGORY	PARK FACTOR	NL RANK
Batting Average	102	3
On-Base Pct.	100	4
Slugging Pct.	104	2
2B	95	4
3B	157	1
HR	56	8

\*All categories are rate data; (e.g., 2B are 2B per AB)

Note that despite being dead last in home runs, Forbes Field was the second (behind Philadelphia's Baker Bowl) best park for slugging. This result is due to the marked superiority of Forbes Field for triples—50% better than the average NL park. In general, in the deadball era triples had a greater impact on offense than home runs. For the three deadball seasons studied, the NL seasonal average was 67 triples per team, nearly three times the average per team for home runs (23).

**LIVELY BALL ERA** For the nine-year time period 1928-1936 Park Factors were computed for six batting categories based on the batting data for the Pirates and their opponents in games at Forbes Field vs. batting data for the Pirates games in all other NL parks.<sup>5</sup> The resulting Park Factors are as follows:

**Table 4. FORBES FIELD PARK FACTORS 1928-36**

CATEGORY	PARK FACTOR	NL RANK
Batting Average	104	2
On-Base Pct.	102	2
Slugging Pct.	101	3
2B	94	5
3B	161	1
HR	62	7

\*All categories are rate data; (e.g., 2B are 2B per AB)

In this era of the lively ball Forbes Field ranked second in batting average, on-base percentage, and again first in triples. Ranking first in triples was no surprise. What was more interesting is how a spacious park like Forbes Field ranked second in batting average, and on-base percentage. Had other NL parks been modified to make them larger, and thus Forbes Field became relatively smaller? The answer is *no*. The trend in the other NL parks in the 1920s and 1930s involved closer fences and smaller dimensions. In particular, Braves Field in 1928 was greatly reduced in size, and Redland Field in Cincinnati was downsized in 1927 by moving home plate 20 feet toward center field. In fact, despite Forbes Field being slightly smaller after 1925 (when right field was reduced by the extension of the grandstand), the relative size of Forbes Field actually increased from the deadball era to the 1930s. Based on the data shown above in Table 1, Forbes Field was 3.4% larger than the NL average park in 1920; by 1930-35 it was 4.4% larger than the NL average.

#### FORBES FIELD: LEFT-HANDED VS. RIGHT-HANDED BATTERS

Between 1925 and 1947 Forbes Field was a clearly asymmetrical park as the left field distance was 365 while right field was 300 ft. However, overall the average right field distance was only 3% less than the average left field distance. Did this 3% difference provide an advantage to left-handed batters? Pittsburgh team batting data for left-handed (LH) and right-handed (RH) batters are now available for 1927-37 and 1940-42.<sup>6</sup> A comparison was made between the home and road batting data for both LH and RH batters.<sup>6</sup> A sample (the 1929 season) of the data is shown:

##### LEFT-HANDED BATTERS

	BA	OBP	SLG
Home	.334	.417	.511
Road	.329	.399	.486
H/R Ratio	1.017	1.044	1.051

##### RIGHT-HANDED BATTERS

	BA	OBP	SLG
Home	.311	.360	.430
Road	.265	.323	.359
H/R Ratio	1.175	1.116	1.199

One inherent problem in comparing LH and RH batters' performances is that LH batters are generally better hitters—LH batters hit better than RH batters

at home *and* on the road. The H/R ratio for LH and for RH was used to measure how LH and RH batters performed relative to their performance at other NL parks. The comparison for the years 1927-37 and 1940-42 was based on the three categories of batting average, on-base percentage and slugging percentage and is shown below:

**Table 5. FORBES FIELD LH/RH BATTING 1927-42  
HOME/ROAD (H/R) RATIOS**

CATEGORY	LH H/R RATIO	RH H/R RATIO
Batting Average	1.074	1.102
On-Base Pct.	1.060	1.088
Slugging Pct.	1.078	1.108

The above data clearly show that LH batters had no advantage at Forbes Field—*relative* to other NL parks in any of the three offensive categories. The average H/R ratio differential (RH-LH) was 2.9 points. However, there is a catch. The average NL ballpark in this time period favored LH batters. Available data show the average NL park (1928-36) had a RF average distance some 7% less than the average LF distance. Thus RH Pittsburgh batters could be expected to have a larger disadvantage in road games than at home. As a result, the RH batters should hit *relatively better* (measured by the H/R ratio) at home when compared to LH. The data conforms to this expectation—the differential between RH and LH batters (2.9 points of H/R ratio) is about the same as the relative LF/RF average distance relationship between the average NL ballpark and Forbes Field (107% to 103%). The conclusion is that Forbes Field slightly favored LH batters, but to a lesser degree than the average NL park in this time period.

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## RBI, Opportunities, and Power Hitting

### Opportunities Significantly Affect RBI Totals

**R**BI have long been one of the staples of measuring a hitter's contribution to his team's success. Sometimes a player is said to be "a good RBI guy." Newspapers and record books list the annual RBI leaders, scoreboards and broadcasters tell us how many RBI a hitter has, almost as if getting them is a special skill, separate from power hitting or hitting for average. But RBI are also often criticized as being misleading since all hitters don't get the same number of opportunities to drive in runs. One hitter might get more RBI than another because he had more opportunities and not because he is somehow better at driving in runs. So the important question is: Exactly how much difference do RBI opportunities make?

They make a big difference and exactly how big can be learned from statistical analysis. The following equation, derived using the linear regression technique, explains a hitter's RBI per at-bat and the value of opportunities:

#### EQUATION 1

$$\text{RBI/AB} = .125 \times \text{OPP} + .194 \times \text{AVG} + .514 \times \text{ISO} - .20$$

where

OPP = number of RBI opportunities per at-bat

AVG = batting average

ISO = isolated power

How does this work? Equation 1 predicts that Juan Gonzalez would get .206 RBI per at-bat because:

$$.125 \times (1.67) + .194 \times (.297) + .514 \times (.271) - .20 = .206$$

Gonzalez actually had .205 RBI per at-bat. The equation is also generally very accurate (I explain the statistical results and the data below).

But first, what does the equation mean from a baseball perspective? With the coefficient on OPP being

.125, two players who differ by, say, .15 OPP (90 RBI opportunities for a 600 at bat season), will end up with an 11.28 difference in RBI over a 600 at-bat season ( $11.28 = .15 \times .125 \times 600$ ). This is significant in baseball terms as well as statistically. Why look at a .15 difference in OPP? This study includes all players (61) who had 6,000 or more plate appearances during the 1987-2001 seasons and whose situational statistics were listed on the CNN/SI Web site.<sup>1</sup> Tino Martinez had the highest OPP/AB at 1.69 for his career. More than half of the other players were at least .15 less than this, including other power hitters like Jose Canseco, Ken Griffey Jr., and Gary Sheffield. Barry Bonds was even lower at 1.48. Martinez would get 15.79 (or  $.21 \times .125 \times 600$ ) more RBI than Bonds solely as a result of having more opportunities.

For a single season, the differences in OPP can be even greater. In 1995 for example, Paul O'Neill was the leader at 1.85 while Barry Bonds had 1.61. Everything else being equal, O'Neill would get about 18 more RBI over a 600 at-bat season. So opportunities play a big role in RBI totals.

Hitters vary quite a bit in RBI opportunities. For example, the two lowest in OPP/AB were Rickey Henderson and Craig Biggio, at 1.36 and 1.39, respectively. The two highest were Juan Gonzalez and Tino Martinez at 1.67 and 1.69, respectively. Of course, Henderson and Biggio are both primarily leadoff men while Gonzalez (usually fourth) and Martinez (usually fifth or sixth) have been largely used in the middle of the lineup. But the difference between Rickey and Tino (.33 OPP) would be 198 more RBI opportunities over the course of a 600 at-bat season. Just about half of that, say .15, would mean about 90 more.

An actual example supports the importance of opportunities. Juan Gonzalez has a career average of .297 and an ISO of .271. Ken Griffey Jr. had .296 and .270, almost identical numbers. Yet Gonzalez had .205 RBI/AB or 123 RBI over a 600 at-bat season. Griffey had .187 RBI/AB or 112 over a 600 at-bat season. The difference results from Gonzalez having 1.67 opportunities per at-bat while Griffey had 1.54.

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As for the data, opportunities include one for every time at bat and one for each runner on base during an at-bat. This means that OPP does not include opportunities from plate appearances when the batter walked. (A regression was run that included these opportunities, and the results were similar).<sup>2</sup> Isolated power is a hitter's slugging percentage minus his batting average and is a better measure of power hitting since it only includes bases on hits beyond singles.

As for the statistical results, the  $r^2$  is .943, which means that 94.3% of the difference in RBI per at-bat across players is explained by Equation 1. The standard error, which measures dispersion in the equation's predicted RBI/AB for each player, is .00839 or just 5.03 RBI for a 600 at-bat season ( $600 \times .00839 = 5.03$ ). The numbers in front of the variable abbreviations are referred to as coefficient estimates. So, for example, a .010 increase in batting average means a .00194 increase in RBI/AB ( $.194 \times .010 = .00194$ ). That is 1.16 RBI for a 600 at-bat season. A .010 increase in ISO would add 3.08 RBI for a 600 at-bat season. The  $T$  values, which indicate statistical significance, are:

$$\text{OPP} = 7.25$$

$$\text{AVG} = 3.35$$

$$\text{ISO} = 22.25$$

This says that the three variables are all significant at the 1% level (or lower), meaning that there is less than a 1 in 100 chance of getting the coefficient estimates in Equation 1 if their true value were zero.

Equation 1 also shows the bigger role played by power hitting in driving in runs. Consider Players A and B, who have the following statistics:

PLAYER	AB	HITS	2B	3B	HR	AVG	SLG	ISO
A	600	192	40	8	16	.320	.493	.173
B	600	162	20	4	32	.270	.477	.207

Who will drive in more runs? Using Equation 1 and assuming they each get 1.5 OPP, Player A will drive in 83.2 runs while Player B will drive in 87.66 runs. Player B's edge in home run power gives him the edge in RBI despite a much lower batting average and a deficit in doubles and triples. For Player A to get up to 87.66 RBI, his average would have to jump to .358 (assuming all additional hits are singles). If Player A had just 20 doubles and 4 triples, along with a .320 average, he would drive in just 68.8 runs. To get up to 87.66 RBI, he would then have to raise his average to

.482! (Again, assuming additional hits are singles.)

But are all RBI opportunities of the same quality? No, a runner on third is better than a runner on first. So a runner on third counted as a four-point opportunity, a runner on second as a three-point opportunity, a runner on first a two-point opportunity, and the batter as a one-point opportunity. So I ran another linear regression with points per at-bat replacing opportunities per at-bat.

The following equation shows the results:

## EQUATION 2

$$\text{RBI/AB} = .069 \times \text{PTS} + .212 \times \text{AVG} + .479 \times \text{ISO} - .18$$

The  $r^2$  is .969. The standard error is .00614 or just 3.68 RBI for a 600 at-bat season. This result is even better than the one summarized in Equation 1. Notice that the value of ISO is still much greater than the value of average, so power hitting is still the dominant force. The three variables were all statistically significant at the 1% level. Equation 2 is very accurate, predicting to within six RBIs per 600 at-bats for 56 of the 61 hitters. Also, a regression was run that included opportunities from walks, as converted into points, with similar results.

What do these results mean in baseball terms? With the value of PTS being .069, two players who differ by, say, .30 PTS, will end up with a 12.36 difference in RBI for a 600 at-bat season ( $12.36 = .3 \times .069 \times 600$ ). This is significant in baseball terms as well as statistically. Why look at a .3 difference in PTS? Juan Gonzalez had the highest, at 2.85. About half the players in the study were below 2.55. Barry Bonds, for example, had 2.4. So with equal hitting performances, Juan Gonzalez would get 18.5 (or  $.45 \times .069 \times 600$ ) more RBI than Bonds solely as a result of having more opportunities and better quality opportunities.<sup>3</sup>

A hitter's RBI are determined by his ability to hit for average, hit for power and the quality and quantity of his opportunities. There probably is no special "RBI ability." The vast majority of hitters will get about the number of RBI predicted by their general hitting ability and opportunities. Any deviations are probably just random chance. That would be consistent with the well-known research on clutch hitting.

## NOTES

<sup>1</sup>Some outstanding hitters of recent times, Manny Ramirez and Mike Piazza, for example, were not in

the study since they had not achieved 6,000 plate appearances through the 2001 season. Both were high in opportunities per at-bat at 1.71 and 1.68, respectively. Ramirez had about .5 more RBI per 600 at-bats than expected and Piazza had about .26 less.

<sup>2</sup>RBI from sacrifice flies are also not included. Neither are opportunities that were available when the player hit a sacrifice fly. For the average player in this study, sacrifice flies make up less than 1% of his plate appearances and no more than 1.5% for any one player. So excluding sacrifice flies matters very little. RBI from bases-loaded walks were not included in the Equation 1 or Equation 2 results. They were included in the unreported regressions that included opportunities from walks. In those regressions, all variables were divided by plate appearances rather than at-bats. HBPs were also included in those cases. But again, the results were similar with basically the same meanings as the two regressions reported here.

<sup>3</sup>If I used walks, plate appearances, and the point system, the regression results show that opportunities alone would give Juan Gonzalez 15 more RBI than Barry Bonds over a 660 plate appearance season. That is less than 18.5, but still very high.

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## APPENDIX: PREDICTED RBI VS. ACTUAL RBI

PLAYER	AVG	ISO	RBI OPP PER AB	RBI PER 600 AB*	PREDICTED	DIFFERENCE
Harold Baines	.291	.172	1.51	94.28	81.03	13.25
Wally Joyner	.289	.149	1.50	84.48	72.81	11.67
Ruben Sierra	.270	.184	1.50	89.29	81.38	7.90
Andres Galarraga	.291	.219	1.52	102.89	96.01	6.88
Jose Canseco	.268	.252	1.54	111.68	104.83	6.85
B.J. Surhoff	.281	.135	1.52	75.98	69.14	6.84
Paul O'Neill	.288	.182	1.59	94.80	89.51	5.29
Will Clark	.304	.196	1.49	93.75	88.49	5.26
Tony Fernandez	.286	.112	1.42	60.07	55.07	5.00
Mark Grace	.307	.140	1.49	76.18	71.44	4.74
Cal Ripken	.271	.163	1.50	79.41	74.85	4.56
Robin Ventura	.271	.176	1.60	90.57	86.17	4.39
Tony Gwynn	.342	.127	1.44	71.58	67.27	4.31
Tim Lincecum	.288	.134	1.41	65.42	61.17	4.25
Mark McGwire	.263	.327	1.48	127.26	123.40	3.85
Ken Caminiti	.272	.175	1.55	85.88	82.43	3.44
Dante Bichette	.299	.200	1.59	99.95	96.53	3.42
Bobby Bonilla	.280	.200	1.50	90.35	87.20	3.14
Gregg Jefferies	.289	.132	1.45	66.30	64.04	2.27



THE BASEBALL RESEARCH JOURNAL

PLAYER	AVG	ISO	RBI OPP PER AB	RBI PER 600 AB*	PREDICTED	DIFFERENCE
Jay Buhner	.254	.240	1.60	106.52	104.47	2.06
Matt Williams	.269	.222	1.56	99.05	97.21	1.85
David Justice	.280	.227	1.58	103.19	101.57	1.62
Fred McGriff	.287	.228	1.53	100.76	99.26	1.51
Tino Martinez	.274	.207	1.69	103.93	102.84	1.10
Frank Thomas	.319	.258	1.59	117.90	116.83	1.07
Todd Zeile	.267	.162	1.57	80.47	79.76	.71
Roberto Alomar	.306	.149	1.45	71.11	70.87	.24
Benito Santiago	.260	.151	1.52	71.44	71.42	.02
Greg Vaughn	.245	.232	1.60	100.19	100.40	-.21
Rafael Palmeiro	.295	.225	1.51	96.95	97.35	-.40
Ron Gant	.256	.212	1.48	86.37	86.79	-.42
Mark McLemore	.260	.080	1.55	51.36	51.94	-.58
Delino DeShields	.270	.109	1.44	52.73	53.52	-.80
Juan Gonzalez	.297	.271	1.67	123.21	124.13	-.91
Gary Sheffield	.295	.226	1.53	98.15	99.10	-.95
Edgar Martinez	.319	.211	1.55	97.80	98.83	-1.04
Jeff Bagwell	.303	.251	1.61	113.06	114.13	-1.07
John Olerud	.300	.176	1.59	87.83	88.99	-1.16
Travis Fryman	.278	.171	1.63	86.69	87.87	-1.18
Ken Griffey	.296	.270	1.54	112.30	113.53	-1.23
Dave Martinez	.279	.114	1.46	55.81	57.67	-1.85
Devon White	.264	.156	1.43	64.56	66.73	-2.17
Omar Vizquel	.274	.077	1.51	47.01	49.21	-2.20
Jay Bell	.267	.153	1.44	64.50	66.79	-2.30
Rickey Henderson	.274	.140	1.36	55.40	57.94	-2.54
Wade Boggs	.317	.117	1.41	56.42	59.33	-2.91
Barry Larkin	.300	.155	1.45	68.58	72.12	-3.54
Ellis Burks	.292	.220	1.53	93.29	97.07	-3.78
Craig Biggio	.291	.145	1.39	59.81	63.83	-4.02
Marquis Grissom	.270	.134	1.49	60.58	64.91	-4.33
Sammy Sosa	.277	.265	1.58	108.32	113.28	-4.96
Larry Walker	.315	.257	1.55	107.72	113.14	-5.42
Eric Karros	.268	.194	1.66	89.70	96.17	-6.46
Luis Gonzalez	.286	.198	1.59	87.50	93.99	-6.49
Barry Bonds	.295	.299	1.48	111.72	118.24	-6.52
Bernie Williams	.305	.194	1.65	93.49	100.04	-6.55
Ray Lankford	.274	.209	1.54	86.15	92.86	-6.72
Brady Anderson	.257	.170	1.44	63.65	70.85	-7.20
Chuck Knoblauch	.293	.118	1.45	51.53	59.95	-8.42
Kenny Lofton	.302	.123	1.47	55.16	64.06	-8.90
Steve Finley	.275	.164	1.51	66.49	76.77	-11.27

\* RBI from sacrifice flies and bases-loaded walks not included. Predicted number is based on equation (1).

## Babe Ruth Dethroned? Whither the Sultan of Swat?

**D**uring the first two decades of the 20th century, "inside baseball" dominated the way the national pastime was played. Superstars like Detroit's Ty Cobb and Pittsburgh's Honus Wagner, along with manager John McGraw of the New York Giants, were proponents of this style of baseball.

After Wagner and Cobb retired, many baseball experts believed that one or the other ranked as the greatest baseball player ever. This "consensus" lasted through the 1930s and beyond, even though the towering figure of Babe Ruth had played the game in an unparalleled way.

George Herman Ruth . . . known as the Babe . . . the Bam . . . the King of Swing . . . the Sultan of Swat.

But was he *really* the Sultan of Swat? Was he *the* best or merely *one* of the best?

Babe Ruth died in 1948. Opinions vary as to where he ranked with respect to the great players of all time. But there was no real methodology to measure these until the field of sabermetrics was introduced. Bill James (See Tables 1 and 2) using such concepts as Runs Created and Win Shares, and John Thorn and Pete Palmer (See Table 3) with their Linear Weights method, concluded that Babe Ruth *was* the greatest player ever.

These arguments, and many others, were overwhelmingly in favor of Ruth. So much so that it was noted if a study ever found that Babe Ruth did *not* rank as the greatest player ever, there was something wrong with the analysis.

The Babe eclipsed Cobb and Wagner; McGraw's "inside baseball" was forever eradicated. Since 1918 Babe Ruth was doing the unthinkable: he was posting seasonal home run totals that were greater than totals amassed by other *teams*. Year after year, Ruth slugged

so many home runs that in his career he "outhomered" rival clubs 90 times.

And that was not all. Besides the homers, there were other unbelievable records: marks involving walks, runs scored, total bases, slugging percentage, and home run percentage. No one was close. There were many kings, if you will, but only one Sultan.

In addition to Ruth's slugging, he was a great pitcher for the Boston Red Sox. In 1916 he led the American League with an earned run average of 1.75, had the lowest batting average allowed to opposing batters with .201, and established the league record for shutouts by a left hander with nine (since tied). He won 20-plus games twice, and never suffered a losing season, boasting winning percentages that never dipped below .640. His lifetime ERA was 2.28. Including a 5-0 record with the Yankees, Ruth ended up with career totals of 94 wins and 46 losses.

The Bambino pitched 29 $\frac{2}{3}$  consecutive scoreless innings in World Series play, a record that would stand for over four decades. Ruth was prouder of this pitching achievement than any of his slugging marks. His lifetime won-loss record was 3-0 in Series play with an earned run average of 0.87.

His World Series batting performances speak for themselves.

In 1919 when he set the major league record for home runs with 29, he led all American League outfielders with a fielding percentage of .996. He also spent enough time on the mound to hurl his team to nine victories.

Ruth stole more than 100 bases in his career, including 10 swipes of home.

No one was close to him, as a hitter or as an all-around performer. It seemed that he should play in a higher league.

Babe Ruth's career lasted for 22 years. When he retired in 1935, he owned scores of records and was responsible for many "mosts" and "firsts." Some of these were:

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- Most home runs in a season (60)
- Most lifetime home runs (714)
- Most lifetime runs batted in (2,211)
- Most lifetime walks (2,062)
- Most walks in a season (170)
- Highest slugging percentage in a season (.847)
- Highest lifetime home run percentage (8.5%)
- Most 50-plus home run seasons (4)
- First player to hit 30, 40, 50 home runs in a season (1920)
- First player to hit 60 home runs in a season (1927)
- First player to hit a home run in Yankee Stadium (1923)
- First player to hit an All-Star Game home run (1933)

He left behind quite a legacy of seemingly unbreakable records.

Then 1961 came along. Thirteen years after the Babe's death, Yankee right fielder Roger Maris hit 61 home runs in an unbelievable whirlwind season. Ruth's magic 60 had been toppled! His most famous seasonal record was now erased. The baseball world was stunned.

In the same year, Yankee ace Whitey Ford broke Ruth's most cherished record. The southpaw pitched the last parts of 32 consecutive scoreless innings in World Series play. Ford added one more inning to his streak in 1962.

But the mammoth record of 714 lifetime home runs remained. It was doubtful that this monumental mark would ever be approached.

Ever so slowly, however, the figure of 714 *was* being approached. Outfielder Henry Aaron of the Braves, a model of consistency, was nearing the ultimate record. In 1974 Bad Henry smashed number 715, and added another forty homers before he retired. Another assault on the Sultan of Swat.

Then came the 1990s when home run totals seemed to grow at an exponential rate. Detroit outfielder Cecil Fielder hit 51 home runs at the beginning of the decade. He became the first player to break the 50-plus barrier since 1977 when Cincinnati Red's outfielder George Foster blasted 52 homers.

Five years later in 1995, slugger Albert Belle hit 50 home runs. This signaled the beginning of an onslaught of 50-plus home run seasons that has not stopped: from 1996 through 2002, no fewer than 17 times has the half-century mark been surpassed. The 60-plus barrier has been reached six times, three

times by Chicago Cub outfielder Sammy Sosa.

In 1998 Mark McGwire of the Cardinals hit 70 home runs, marking the first time that total had been reached. Big Mac, recently retired, now holds the lifetime record for home run percentage.

In 2001, Giants outfielder Barry Bonds posted one of the greatest seasons ever, setting major league seasonal records for home runs (73), walks (177), slugging percentage (.863), and home run percentage (15.3%). A year later, Bonds posted the highest on-base-plus-slugging mark ever (1.381).

Also in 2001, much traveled outfielder Rickey Henderson broke Babe Ruth's career record for walks.

One by one, Ruth's records were falling. Was he still the Sultan of Swat?

The recent home run explosion has provided an impetus to reevaluate the once (still?) exalted position of the Bambino.

As mentioned above, Ruth outhomered teams 90 times, 14 in 1920 and 12 in 1927. It is unthinkable to envision any recent slugger rivaling this kind of dominance. McGwire, Sosa, or Bonds would have to hit in the neighborhood of 200 homers to surpass another team's home run total.

Regarding the 50-plus home run barrier, it used to be just that: a barrier, something rarely scaled before the 1990s. But by the end of the 2002 season, the mark was equaled or surpassed 34 times, by more than 20 different players.

The increased frequency of such seasons, coupled with the preponderance of home runs, however, seems to suggest that a certain *degree of difficulty* with regard to hitting home runs has varied over the 82 years in question.

For example, in 1920 there were 630 home runs hit in 84,176 at-bats (there were 16 major league teams in that year). This gives an average home run ratio of 0.0074 home runs per at-bat. In 2001, by way of comparison, the 30 major league teams hit 5,461 home runs in 166,255 at-bats, giving a home run ratio of 0.03285. What does this mean?

Roughly speaking, this last statistic can be interpreted as meaning that the "average 2001 player" hit about 3.285 home runs per 100 at-bats, which is about 4.39 times greater than the 1920 figure. (See Table 1, which gives the major league home run ratio for each 50-plus home run season).

When we consider the individual home run ratio for each 50-plus homer hitter (Table 2) and compare these to the appropriate year, we get a relative home

Table 1. MAJOR LEAGUE HOME RUN RATIO

YEAR	Nº TEAMS	Nº 50+ HR BATTERS	Nº ML HR	Nº ML AB	HR RATIO
1920	16	1	630	84176	0.00748
1921	16	1	937	85205	0.01142
1927	16	1	922	84461	0.01092
1928	16	1	1093	84453	0.01294
1930	16	1	1565	86575	0.01808
1932	16	1	1385	87193	0.01558
1938	16	2	1475	85013	0.01735
1947	16	2	1565	84436	0.01854
1949	16	1	1704	84380	0.02019
1955	16	1	2224	83590	0.02661
1956	16	1	2294	83856	0.02736
1961	18	2	2730	97032	0.02814
1965	20	1	2688	109739	0.02450
1977	26	1	3644	143974	0.02531
1990	26	1	3317	142768	0.02323
1995	28	1	4081	138571	0.02945
1996	28	2	4962	156801	0.03165
1997	28	2	4640	155437	0.02985
1998	30	4	5061	167034	0.03030
1999	30	2	5528	167137	0.03307
2000	30	1	5693	167290	0.03403
2001	30	4	5461	166255	0.03285
2002	30	2	5059	165582	0.03055

run ratio (Table 3). We see that Babe Ruth has the four highest amounts, and that his ratios in 1920, 1921, and 1927 dwarf the entire field. It is plausible to assert that not only were home runs "harder to hit" in Ruth's time, but that no other slugger in history was close to Ruth in this relative sense.

One of the more recent measures is *isolated power*, which is defined as slugging percentage minus batting average. Babe Ruth is the career leader with .348. In comparison, Mark McGwire has an ISO of .325 while Barry Bonds' ISO is .300.

Another statistic is called the *total power quotient*. It is defined as the sum of home runs plus runs batted in plus total bases, all divided by at-bats. That is,

$$TPQ = \frac{HR + RBI + TB}{AB}$$

Ruth is number one in career TPQ with 1.0382, placing him well ahead of both McGwire's 0.9109 and Bonds' 0.8670.

The most commonly used "new" statistic is, perhaps, that of *on-base plus slugging* (sometimes called *production*). This is defined as the sum of on-base average and slugging percentage:

$$OPS = PRO = OBA + SLG$$

Babe Ruth, at 1.167, ranks first in lifetime OPS, well ahead of Barry Bonds' 1.023 and Mark McGwire's 0.982. Ruth's 1920 standard of 1.379 was edged by Bonds' 2002 mark of 1.381, but Ruth has six of the ten best seasons ever with respect to OPS, compared to two held by Bonds. Boston Red Sox great Ted Williams considered this *the* superior measure.

Table 2. INDIVIDUAL HOME RUN RATIO

NAME	YEAR	HR	AB	HR/AB
Babe Ruth	1920	54	458	.11790
Babe Ruth	1921	59	540	.10926
Babe Ruth	1927	60	540	.11111
Babe Ruth	1928	54	536	.10075
Hack Wilson	1930	56	585	.09573
Jimmie Foxx	1932	58	585	.09915
Hank Greenberg	1938	58	556	.10432
Jimmie Foxx	1938	50	565	.08850
Ralph Kiner	1947	51	565	.09027
Johnny Mize	1947	51	586	.08703
Ralph Kiner	1949	54	549	.09836
Willie Mays	1955	51	580	.08793
Mickey Mantle	1956	52	533	.09756
Mickey Mantle	1961	54	514	.10506
Roger Maris	1961	61	590	.10339
Willie Mays	1965	52	558	.09319
George Foster	1977	52	615	.08455
Cecil Fielder	1990	51	573	.08901
Albert Belle	1995	50	546	.09158
Mark McGwire	1996	52	423	.12293
Brady Anderson	1996	50	579	.08636
Mark McGwire	1997	58	540	.10741
Ken Griffey, Jr.	1997	56	608	.09211
Mark McGwire	1998	70	509	.13752
Sammy Sosa	1998	66	643	.10264
Ken Griffey, Jr.	1998	56	633	.08847
Greg Vaughn	1998	50	573	.08726
Mark McGwire	1999	65	521	.12476
Sammy Sosa	1999	63	625	.10080
Sammy Sosa	2000	50	604	.08278
Barry Bonds	2001	73	476	.15336
Sammy Sosa	2001	64	577	.11092
Luis Gonzalez	2001	57	609	.09360
Alex Rodriguez	2001	52	632	.08228
Alex Rodriguez	2002	57	642	.09135
Jim Thome	2002	52	480	.10833

Table 3. RELATIVE HOME RUN RATIO

NAME	YEAR	
Babe Ruth	1920	.00748
Babe Ruth	1921	.01142
Babe Ruth	1927	.01092
Babe Ruth	1928	.01294
Hack Wilson	1930	.01808
Jimmie Foxx	1932	.01558
Hank Greenberg	1938	.01735
Jimmie Foxx	1938	.01735
Ralph Kiner	1947	.01854
Johnny Mize	1947	.01854
Ralph Kiner	1949	.02019
Willie Mays	1955	.02661
Mickey Mantle	1956	.02736
Mickey Mantle	1961	.02814
Roger Maris	1961	.02814
Willie Mays	1965	.02450
George Foster	1977	.02531
Cecil Fielder	1990	.02323
Albert Belle	1995	.02945
Mark McGwire	1996	.03165
Brady Anderson	1996	.03165
Mark McGwire	1997	.02985
Ken Griffey, Jr.	1997	.02985
Mark McGwire	1998	.03030
Sammy Sosa	1998	.03030
Ken Griffey, Jr.	1998	.03030
Greg Vaughn	1998	.03030
Mark McGwire	1999	.03307
Sammy Sosa	1999	.03307
Sammy Sosa	2000	.03403
Barry Bonds	2001	.03285
Sammy Sosa	2001	.03285
Luis Gonzalez	2001	.03285
Alex Rodriguez	2001	.03285
Alex Rodriguez	2002	.03055
Jim Thome	2002	.03055

Williams called it "... the bottom line in hitting..."<sup>4</sup>

When dominance is considered, Ruth is so far ahead of his contemporaries that comparisons are virtually impossible to make. For example, with regard to slugging percentage, he won 13 titles in 14 years, an unparalleled feat, and he is the only player ever with two .800+ seasons.

Ruth more than holds his own when compared to the new breed of super sluggers. For example, Babe's seasonal records for runs scored (177), total bases (457) and extra-base hits (119) are astounding, especially when realizing that these marks were accomplished during 154-game seasons.

Despite the home run barrage of the past several years, consider the following:

- Babe Ruth has more American League home run crowns than any player in history with 12 (including two ties).
- Babe Ruth has more major league home run crowns than any player in history with 11 (including three ties).
- No one has more 50-plus homer seasons than the four that Ruth accomplished.
- No other player in any decade hit as many home runs, 467, as Ruth hit in the 1920s.
- No other player has as many multiple home run games as the 72 posted by the Babe.
- No other player has as many slugging percentage (SLG) titles as the 13 posted by Babe Ruth.
- No other player has as many on-base plus slugging (OPS) titles as the 13 recorded by the Bambino.
- No other player has as many runs scored titles as the eight that Ruth accomplished.
- No other player has as many runs batted in crowns as the eight posted by the Babe.
- Ruth led the league in bases on balls 11 times, more than any player in history.
- No player in history has more extra base hits titles than the seven recorded by Ruth.
- Ruth is the only player in the Hall of Fame to have pitched in at least ten different years with more wins than losses in each season.

Though some of his records have fallen, when considered as a conglomerate, his overall rating must remain number one.

In the final analysis, some may feel that his throne is a bit tarnished. Others may wonder if some of the glitter has faded from his crown. But no one—neither

Ted Williams nor Lou Gehrig from the past—not Mark McGwire, Sammy Sosa, or Barry Bonds from the present—can usurp Ruth's merited title. Like fine wine, the Sultan of Swat improves with age.

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ROBERT H. SCHAEFER

## Wanted: One First Class Shortstop

**T**he fall of 1878 found Harry Wright in a tight spot. The tale of how Harry's troubles came about is a long one, finding its roots way back in 1868. Wright had been managing and captaining the leading nines of professional baseball since that year. The next season the precedent-breaking all-professional Cincinnati Red Stockings established a new record for winning ball games. A major reason for Captain Harry's success was his younger brother, George, arguably the leading player of the 1860s and early 1870s. George Wright resigned from a strong club in Washington, D.C., to join Harry in Cincinnati in 1868 and was financially very well rewarded for it. When the Cincinnati nine disbanded at the end of the 1870 season, Harry was given carte blanche to organize a professional club in Boston. The first player Harry enrolled for this new nine was brother George. In recognition of his ball-playing genius, George was again the highest-paid member of the nine.

In a major coup, Harry signed the best three players of the famous Rockford Forest City club: outfielder Fred Cone, infielder Ross Barnes, and pitcher Al Spalding. Barnes was definitely the leading shortstop of the West. But when Barnes agreed to join the Wrights in Boston, he also agreed to move to second base in deference to George. For the next five years (1871-1875) Wright and Barnes formed the national pastime's most famous double play combination. While with Boston, Barnes led the association's second basemen in fielding three times, won two batting championships, and posted three .400+ batting averages. By 1875 his brilliance had eclipsed that of George Wright.

The Boston Red Stockings proved to be as mighty a juggernaut as was the original Red Stockings of Cincinnati. They dominated the National Association, the first organization of professional baseball teams,

and captured four consecutive pennants. However, Harry's Boston empire crumbled when, in blatant violation of all existing rules, Chicago team president William Hulbert lured the Boston's so-called "Big Four" to the Windy City for the 1876 season.

Hulbert, through the personal intervention and influence of Al Spalding, persuaded Ross Barnes, Cal McVey, and Jim White to sign contracts with Chicago for the 1876 season. Spalding also defected to Chicago. In those days of unrestrained free agency, the National Association rules strictly prohibited one club from engaging players from a second club while they were still under contract to that club. The contracts of the Red Sox players didn't expire until November 1, and the Chicago signing took place on July 4, an unconscionable rule violation by Hulbert. The theft of the "Big Four" emasculated the Bostons and ended their National Association Championship Whip Pennant monopoly.

In fact, this breach was so egregious, Hulbert concluded that he'd be expelled from the National Association. In a preemptive strike, he established his own organization, the National League, leaving the old Association a hollow shell. The Association never was officially declared defunct—it simply ceased to exist. Hard-hitting Adrian "Babe" Anson joined the Chicago nine from the Philadelphia A's, making Chicago the odds-on favorite to capture the initial league pennant.

As evidenced by voluminous correspondence between Wright and Hulbert in the years following 1875, Wright harbored no detectable animosity toward Hulbert. Captain Harry must have been a practical man and reckoned there was no point in holding a grudge. Besides, there simply was no way he could even the score against Hulbert. Although Wright was a brainy baseball man, he didn't wield the raw power that Hulbert had at his disposal. In an age of unabashed "boosterism" Hulbert declared, "I'd rather be a lamp post in Chicago than a millionaire in any other city." He had the best of all possible worlds, for he became a millionaire in Chicago.

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Chicago did win the League pennant in 1876, and Ross Barnes won its very first batting title with his fourth .400+ season. However, the Chicago nine didn't fare well in 1877, and tumbled to fifth place in a six-team league. There were two reasons for their collapse. First of all, the best hitter in all of professional baseball, the one and only Barnes, was rendered totally ineffective by a crippling illness. In addition to missing 66% of the games played, he plummeted from being the terror of the league to the ranks of very ordinary hitters.

Barnes contracted the ague, a Victorian-era name for malaria, over the winter of 1876-1877. He was still suffering from its lingering effects when the season opened the first week of May. Barnes was unable to perform adequately on the diamond, and in mid May the Chicago Club furloughed him without pay. Barnes went home to Rockford, Illinois, about 90 miles northwest of Chicago, to rest and recuperate. On Thursday, May 31, the *Rockford Weekly Gazette* reported: "Ross C. Barnes, the famous base ballist, is to visit his relatives in this city."

He rejoined the Chicago nine in late August and appeared in a total of only 22 games the entire season. Barnes's batting average fell to a mere .272—a stupendous drop from his lusty .429 the season before.

At the end of the 1877 season Barnes sued the Chicago club for the wages they withheld while he was recovering at home. The court found in favor of the Chicago club, as Barnes admittedly failed to deliver the services specified in his contract. This legal action rendered Barnes persona non grata in Chicago. The club did not engage him for the 1878 season, and Barnes had to scramble to find a new job coming off a horrible season.

Coincident to Barnes's fall from his place of preeminence, 1877 was the first year that the modern rule governing foul balls was placed in effect. Harry Wright personally authored this rule with the deliberate intent of legislating the vexing fair-foul hit out of existence. As Barnes was the acknowledged master of the fair-foul, now banned by the new rule, several modern historians have concluded that there was a cause-and-effect relationship between the elimination of the fair-foul hit and Barnes's poor performance that year. This conclusion conveniently ignores the fact that Barnes suffered a debilitating illness from which he never fully recovered. He was permanently handicapped by the lingering effects of the disease, and his star never again sparked with its former luster.

Barnes signed with the Ontario Tecumseh of the International League for the 1878 season. His contract required him to play second base and captain the nine. Some observers of that day considered the International League to be the equal of the National League. However, the National League refused to grant parity to any other organization of professional baseball teams. They adamantly and blindly pursued this policy until brought to their knees by Ban Johnson in 1901-1903. Barnes hit an anemic .235 that year, but reached his career high in fielding, .922.

The second reason for Chicago's fall in 1877 is that Al Spalding, who had compiled a glittering pitching record of 251-65 (a winning percentage of .794) over the years 1871-1876 made a surprising adjustment to the Chicago nine. During the winter of 1876-1877, Spalding, in his dual role of team captain and manager, persuaded St. Louis's leading pitcher, George Washington Bradley, (45-19, 1.23 ERA in 1876) to abandon the Mound City in favor of the Windy City. This move allowed Spalding to retire from the pitcher's box and play first base. On the face of it, coming off a season where he posted 47 victories, Spalding's decision is unfathomable. Apparently, Spalding sensed that his days as a pitcher were over. In 1877, he appeared in just four games as a pitcher, with only one start, and hurled a total of 11 innings. His record was one win and no losses. It was also his last year as an active player, as he turned his considerable talents to developing his expanding sporting goods business.

As Chicago's fortune declined, Harry Wright's Boston nine regained the supremacy they had previously enjoyed and won the league pennant in 1877 and 1878. Then fate once more dealt Captain Harry an unkind blow, and put him in the tight spot mentioned earlier. The city of Providence had organized a league entry for the 1878 season and finished in third place. The nine was captained by center fielder Tom York. The team Directors convinced George Wright that he was just the man to captain the nine in 1879. George was always an outstanding player. He is credited with revolutionizing the position of shortstop, and was a heavy hitter as well. But George, rightly or wrongly, was always in Harry's shadow in terms of being a leader. A measure of the esteem accorded Harry is that in his own time he was given the accolade of "The Father of Base Ball," a title he modestly spurned. Perhaps the opportunity in Providence was one George had always sought but, as long as he was associated with Harry, could never attain. George agreed



to the terms offered by Providence, and suddenly Harry's championship nine needed a first-class shortstop. George departed both Boston and Harry, ending 11 consecutive years of playing under his brother's management. This left Harry in a bind, because then as now, first-class shortstops that can hit are not found hanging around on every street corner desperately seeking employment. Harry's thoughts turned to his old second baseman, Ross Barnes.

Barnes was staying at the Tecumseh Hotel on September 26, in London, Ontario, when Wright's letter arrived inviting him to rejoin the Boston nine. He thought over the letter, and carefully crafted a response to his old friend. The first thing he advised Wright was that he had made arrangements to follow a "legitimate" business over the winter. Whether or not Barnes would return to the diamond depended upon his success in his new field. He made it clear that baseball was a second priority to him. Barnes next asked Wright how much money he was willing to pay for a good shortstop, emphasizing that money was Barnes's sole objective. Barnes requested that Wright name his highest figure in his next letter. But acceptance of any offer was contingent upon the outcome of Barnes's venture into the business world, and he specified that he would accept Wright's offer only in the event of his failure in business. How much of this position was to increase his bargaining power and extract more money from Wright is moot. Finally, Barnes asked Wright to delay filling the shortstop position until the outcome of his business enterprise became clear.

In the meantime, shortstop par excellence Davey Force heard that Harry Wright needed to fill George's shoes at shortstop for 1879 and volunteered for the job. Force had never been a member of one of Wright's nines, although they had been adversaries on the diamond for many years. Force's letter to Wright is dated October 6, 1878, and was written on the letterhead of the Haynes Hotel in Springfield, Massachusetts. Force played for the International League Buffalo club, and told Wright, confidentially, that he no longer wanted to play alongside McCasey. He offered his services to Wright despite the fact, as he candidly stated, he had already signed with Buffalo. Force's jumping a contract was not without precedent. In 1875, he reneged on his contract with Chicago in favor of a more lucrative one with Philadelphia. When the National Association board of directors failed to enforce Hulbert's contract with Force, Hulbert vowed

vengeance. Some baseball historians believe that this incident motivated Hulbert to form the National League and sabotage the Association.

Force was considered one of the leading infielders of his time, equally at home at shortstop, third base, and second base. In the days of bare-handed fielders, Force was famous for his glove. Prior to 1877 he used the fair-foul hit on a regular basis. Although Force didn't gain fame and notoriety equal to Ross Barnes as a fair-foul hitter, his batting average was severely affected after that type of hit was banned. The horizontal curve came to the fore in the same years that Force's average declined, and that apparently also contributed to the reduction in Force's hitting. More to the point, Force never was the outstanding, dominating hitter that Barnes was in his prime. Now, completely on his own initiative, Force wrote to Wright asking to be considered for Boston's shortstop job in 1879. Sadly, there is no record of Harry Wright's response. It is easy to speculate that Wright refused to be party to an illegal contract and the ugly scandal that would ensue if he accepted Force's offer. The fact is that Force remained with the Buffalo nine for 1879.

To fill the void George's departure had created, Harry juggled his players around. For 1879 he moved his 29-year-old third baseman, Ezra Sutton, to the vacant shortstop position, moved first baseman John Morrill to third, and used four different players to cover first. Sutton hit .248 (the overall league batting average for 1878 was .259) and fielded for an average of .864, playing 51 games at short and 33 at third base. Harry's Boston nine finished second in 1879.

Ross Barnes evidently got the kind of salary offer he was looking for from his old teammate Cal McVey. McVey was the Cincinnati captain in 1879, and he organized his nine with the 29-year-old Barnes at shortstop. Barnes hit .266 as the Cincinnati club finished sixth. Barnes's fielding average was a shabby .849, with 61 games at short and 16 at second base. McVey did not complete the 1879 season as the Cincinnati captain.

The 30-year-old Davey Force remained with Buffalo for the 1879 season. Against Force's strong advice, the club transferred from the International League to the National League. They finished a dismal seventh in the eight-team league. Force hit .209 and fielded .929, living up to his reputation of good glove, no stick. He played all but one of his 79 games at shortstop.

At the age of 32, George Wright played all of his 85 games as the Providence shortstop. He hit for a .276

average and posted a fielding average of .924. Oh, by the way, George led the Providence nine to the National League championship that year. It would be the final full-season championship either of the Wright brothers ever won.

Despite the myriad changes that have encompassed the world of baseball since 1879, one thing has remained constant: a first-class shortstop is very hard to find.

## NOTES

<sup>1</sup>Rhodes, Greg, & John Erardi. *The First Boys of Summer*. p. 133.

<sup>2</sup>Ryczek, William. *Blackguards and Red Stockings*. p. 26.

<sup>3</sup>Nemec, David. *The Great Encyclopedia of 19th Century Major League Baseball*. pages 17, 30, 32, 45, 46 & 59.

<sup>4</sup>Spalding, Albert. *America's National Game*. p. 203

<sup>5</sup>Harry Wright Correspondence, Volumes 1, 3 & 4 (1870-1878).

<sup>6</sup>Pietrusza, David. *Major Leagues*. p. 23.

<sup>7</sup>The *Chicago Tribune*, September 9, 1877, quoted the *Syracuse Courier* following an exhibition game played between Chicago and Syracuse: "Barnes whose incapacity to play with his nine until within the past week has had more to do with the decline and fall of the Chicago champions this year than is generally supposed, appeared at second, but he presented a pitiful spectacle there. It was an exhibition of fallen greatness. A long and tedious siege against disease has reduced the man, whose every swing of the bat was once worth at least a base, to almost a skeleton. He plays without vim and seems to do what little he does out of sheer compulsion. Ball-tossing and willow wielding are lost arts to Ross Barnes."

<sup>8</sup>The *Chicago Tribune*, April 8, 1877: "Barnes has been for some days ailing and under command of a physician, who has ordered him not to practice at present."

<sup>9</sup>The *Chicago Tribune*, May 19, 1877: "The wisest thing the Chicago Club of 1877 has done since its assembling was yesterday, when they laid off and furloughed their ablest player—the one who has won more victories than any other man in the Champion team, and whose record for batting and run getting for the past four years has been better than any other in the business. It has been evident ever since the team assembled that 'Ross,' as he is everywhere known, was not in condition, and his painful efforts

to play when he could not play have tended not a little to the defeats which the team has sustained . . . . Yesterday it became evident to the management that to play Barnes was to throw away chances, and he accordingly was allowed to go home to Rockford until he is once more himself, and when himself he is the best man who ever stepped in the ball field."

<sup>10</sup>*New York Mercury*, November 16, 1878: "The suit of Ross Barnes against the Chicago Club for salary claimed to be due him on his contract for the season of 1877 was argued before Judge Loomis of the County Court, Chicago, on November 9. The judge reserved his decision until the 18th. It will be remembered that Barnes was engaged by the club for 1877 at a salary of \$2,500, but in May when the season began, he was compelled by illness to quit playing for three months. When he returned he claimed \$1,000 salary due him for the time he was absent, which claim the directors refused to allow. He then brought suit for the amount and the evidence in the case was submitted to judge Loomis, as stated above. The case is a new one in the experience of ball clubs and the outcome will be looked forward to with interest by professionals generally."

<sup>11</sup>*New York Mercury*, April 12, 1879: "In the Chicago Appellate Court, Apr. 2, Judge Bailey announced the decision of the court affirming the judgment in the case of Barnes against the Chicago Baseball Club."

<sup>12</sup>The *New York Clipper* October 30, 1876: "Harry Wright's latest effort to improve the game was an experiment which was tried in the match between the Bostons and Hartfords, at Boston, on Oct. 28, on which occasion was put into practical effect a rule the object of which is to do away with the class of hit known as fair-fouls."

<sup>13</sup>Harry Wright Correspondence, Volumes 1, 3 & 4 (1870-1878).

<sup>14</sup>*Ibid.*

<sup>15</sup>The *New York Clipper*, December 12, 1874.

## Does Experience Help in the Post-Season?

**D**o baseball players fare better in the post-season when they have post-season experience behind them? My research says the answer is a clear *no*. Managers' efforts to build teams with players who "have been there before" appear to be fruitless ventures, sacrificing money and possibly quality for no apparent gain.

**MEASURING POST-SEASON EXPERIENCE** Common baseball wisdom says that one factor in achieving post-season success is having post-season experience. The thinking is that because the World Series is such a unique event, those players who have not been there before are more likely to fall victim to nervousness, lack of confidence, or other conditions that would adversely affect their play. This sounds like a reasonable theory. The success of the Yankees in recent post-season play would be one piece of positive evidence, but then this last World Series had young Lackeys and Rodriguezes all over it.

The big question is: How do we tell if the theory is true? We could analyze by team or individual success. From a team standpoint, we could compare the winning percentage of teams who have played in the playoffs more recently than their opponents. A difficulty with this method would be controlling for the quality of the team, particularly the different mix of players from year to year. So I chose to focus on individual performance. The obvious decision here is looking at hitters or pitchers. Here I determined that using pitchers would be a better choice, for many reasons:

1. Ease of choosing a measuring stick. For batters, we can use some standard measure such as OPS, but in a short series, clutch hitting can be more

important than overall performance. So one could easily argue that runs and RBI, broken down into game situations, are the best measure. For pitchers, ERA seems to be the obvious best measure, and it is easy to obtain.

2. Sample size. In a playoff series, starting pitchers often face 70 batters or more. Hitters rarely get more than 30 plate appearances in series of seven or fewer games.
3. Pressure. I decided to use pitchers who started games. A pitcher named by his manager to take the mound is obviously the focal point on the field for his team that day (exception: 2002 version of Barry Bonds).

**SELECTING THE DATA** The post-season has changed over the years: from a single World Series to two, and now three, sets of playoffs. Because of the difficulty in defining "post-season pressure" or "experience" with mixed sets, I decided to use only pitchers who started World Series games, and whose first World Series start was prior to 1969, the year that divisions were created. This yielded 65+ years of World Series play.

I created two sets of data for each pitcher. The data from "experienced" hurlers were those innings thrown by pitchers who made at least one start in their first World Series appearance. In other words, if a pitcher first appeared in a World Series as a reliever only, he was ineligible; this was done so I did not have to decide whether a relief appearance counted as "experience." Then I used his combined total of all other World Series innings as "experienced" data, as long as he made at least one more start in a succeeding World Series. Pitchers who did not start any games in any successive World Series were again not used.

I was surprised when collecting the data that there are many discrepancies among sources for pitchers' ERAs in the early part of the century. I eventually chose the baseball1.com database as my standard reference.

**TOM HANRAHAN** age 42, lives in Lexington Park, Maryland. He is employed by the Department of Defense, working to save airplanes from crashing and pilots from getting killed, wasting everyone's hard-earned tax dollars. Tom has a wife and three teenage children. With all due respect to Lou Gehrig, Tom considers himself the luckiest man on the face of the earth.



*How do these numbers sound?: 267 inning pitched, 22 wins, 13 losses, a 3.00 ERA. Not a bad year? Between 1903 and 1914, Christy Mathewson tossed at least 267 innings per year. He never won fewer than 22 games. He never lost more than 13. His worst earned run average was an even 3.00. So for a 12-year stretch, if you combine his very worst performance in every category—he was still very good.*

**THE RESULTS** This method yielded 97 pitchers who combined for 3,710 innings pitched in World Series play. Fifty-four pitchers (56%) had a lower ERA in their initial Series appearance than in future games. Forty-two pitched better when they were experienced in Series play. One had identical ERAs: Dutch Leonard threw 9 innings of one-run ball in both cases. Raw data totals:

FIRST WS		FUTURE WS		ERA DIFFERENCE
IP	ERA	IP	ERA	
1213	2.69	2497	2.97	+0.28

Possibly a more accurate way of determining the “experience effect” would be to create matched sets of data rather than combining all of the data into one pool. As an example, suppose the entire data set consisted of only two pitchers. Their mythical totals are listed below:

PITCHER	FIRST WS		FUTURE WS		ERA DIFFERENCE
	IP	ERA	IP	ERA	
A	5	2.00	25	3.60	+1.60
B	25	4.00	5	4.00	0.00
A+B	30	3.67	30	3.67	0.00(!)

Pitcher A was much worse in future games, B was the same, yet overall, there is no difference! This is because of the disparity in innings and in perform-

ance. Pitcher A was better overall, or possibly pitched in an era when it more difficult to score runs. Clearly, it is possible that in the instance above, one could interpret the combined results to say that the pitchers were better in their initial World Series appearances.

To combat this situation, I created matched sets of data for each pitcher, weighting the difference in ERA by how many innings each pitcher threw. I used the harmonic mean of each pitcher’s first and future innings as the weight for each pair. The data for the first three pitchers is alphabetically listed in Table 1.

Grover (Pete) Alexander’s weighted IP are found by  $2 \div (1/18 + 1/25) = 20.9$ . The ERA difference and weighted IP are multiplied for each pitcher to get the right-most column. Then, 83.7 divided by 39.8 yields a composite ERA difference of 2.11 for the first three pitchers.

Alexander is one of the more memorable World Series performers. At age 28 he threw two fine games for the 1915 NL champ Phillies against the Red Sox. He won game 1, but lost game 3 by a 2-1 score. Much later, in 1926, hurling for the Cardinals, he faced the Yankees. Pete won games 2 and 6 with fine efforts, and then came in relief the next day, striking out Lazzeri with the bases full and recording a save. However, his post-season career finished in 1928, against the Yanks again, and this time the New Yorkers lit up Alex in game 2, chasing him in the third, and then hit him hard again in relief in game 4.

**Table 1. ERA DIFFERENCES BETWEEN EXPERIENCED AND INEXPERIENCED PITCHERS IN WORLD SERIES PLAY**

PITCHER	FIRST WS		FUTURE WS		ERA DIFFERENCE	WEIGHTED IP	ERA DIFF TIMES IP
	IP	ERA	IP	ERA			
V Aldridge	18	4.42	8	7.15	+2.73	11.1	30
G Alexander	18	1.53	25	5.02	+3.49	20.9	73
E Auker	11	5.56	6	3.04	-2.52	7.8	-20
Above 3 Pitchers	47	3.58	39	5.15	+2.11	39.8	83.7
All 97 Pitchers					+0.64	1374	875

Overall, his first World Series effort was far superior to his combined later appearances.

The pitcher with the most weighted innings in World Series play is Christy Mathewson, who famously tossed 27 shutout innings in his initial 1905 appearance, and then threw 75 more innings with an ERA of 1.44 later in his career.

When combined using this method, there is a total of 1,374 weighted innings. Pitchers as a whole had an ERA that is a full 0.64 runs per game *higher* in their "experienced" Series play than in their first outings. That is almost a full year's worth of innings pitched for an entire team, and the experienced pitchers were .64 runs per game worse.

While not being beyond the bounds of statistical significance, these results clearly show no apparent advantage of post-season experience in the first two-thirds of the 20th century.

Further investigation could be performed to attempt to account for age differences, park effects, or other factors, but I reason that the chance of these other influences is very unlikely to be large enough to sway the results of this study. Experienced pitchers have done no better in the pressure cooker of the Series than first-timers. Tell that to your favorite announcer.

#### ACKNOWLEDGMENTS

Rob Wood was kind enough to review my data, correct lots of missing or bad information, and pointed out the data differences in various sources.

## The Riot at the First World Series

**I**t is one of the most widely reproduced photographs in baseball history and probably the best known of all baseball pictures from the opening of the twentieth century. The picture is especially relevant in 2003 because it was taken one hundred years ago on October 3, 1903. The site is the Huntington Avenue Base Ball Grounds in Boston and the occasion is the third game of the World Series. This was the inaugural World Series, agreed upon only late in the summer of the 1903 season. The agreement signaled peace in baseball after two years of bitter fighting between the National League and upstart American League. From the start, the fall contest captured the imagination of the fans, and thousands turned out to watch as the Pittsburgh Pirates and Boston Americans faced off in a best-of-nine series.

The picture was taken by a photographer for the *Boston Globe* and it appeared two days later, on October 5, in the newspaper. The caption read in part that the picture "was taken a few minutes before the game began." It was commonplace for overflow crowds to stand behind outfield ropes during the games and, indeed, fans had done so in Game 1 (won by Pittsburgh) and Game 2 (won by Boston) of the series. Balls hit into the ropes would go for ground-rule triples. But on October 3, the fans burst through the restraints and swarmed the field. The story of what took place, captured in the famous photograph, suggests nothing less than what might be called "The Riot at the First World Series."

Excited by the two games played so far, and stimulated by the balmy weather, not to mention the extra money in their pockets from a Friday payday, fans turned out by the thousands for the Saturday afternoon contest. By 11 o'clock, hundreds of people stood outside waiting for the gates to open. Hour after hour,

packed streetcars unloaded fans at the park. The single, long lane that led to the ticket office was clogged with fans inching forward, eager to buy tickets for the third game in Boston before the series shifted to Pittsburgh for four games. The ticket sellers had no time to place the dollars and coins in the box, so they simply threw the money to the floor. Later, once the game started, there would be time to gather it.

At noon, the gates opened, and a "surging, struggling mass" rushed into the park. By 1:15, all the seats had been sold and the area behind the outfield ropes continued to swell with people who jostled for position. At 2:00, fans covered the outfield, occupied the terrace, climbed the fences, even found their way to the roof. Ticket speculators made a fortune, offering general admission bleacher tickets for one to two dollars and reserved grandstand seats for as high as ten dollars. Even the peanut vendors and scorecard boys made out by selling buckets and boxes for people to stand on for \$1 a piece. The ticket office closed, and the speculators ran out of seats. Yet people were still arriving. Some 3,000 fans clustered outside the Huntington Avenue grounds and clamored for admission. Once the game started, those in the bleachers called out to those in the street, reporting what was happening on the field.

The official attendance was put at 18,801, but that figure was low. Probably between twenty and twenty-five thousand people jammed themselves into the park. The situation seemed unstable. Anticipating a larger Saturday crowd, Boston's business manager had arranged for fifty policemen, up from the thirty-five at the previous game. But as many as 150 officers would have had trouble containing this gathering. As the crowd swelled, it vibrated back and forth in waves. Fans stood ten deep in the outfield. Suddenly, at a little after 2:00, a few men slid past the ropes in center field. Others started to press toward the field from the third base bleachers. Within seconds, a stampede began. Thousands broke through the ropes and covered the entire field. They "tore across the diamond . . . drove the two teams from their benches, swept rest-

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lessly around and around the entire lot, and they determined to get as close to the play as possible." "A surging, struggling, frantic crowd," reported the *Boston Post*, "a sea of faces, a perspiring mass of humanity that fringed the fences, packed and jammed the stands, encircled the diamond and fought both police and players."

The scene was unfathomable. In their desire to get closer to the action, the exuberant fans, described as "good natured," threatened the game, the players, and their own physical welfare. The police, aided by several players, struggled to prevent the mob from invading the reserved grandstand section. Two women, caught in the crush, were rescued by a Boston player and several policemen. The fans packed the field and the police began trying to move them from the infield. Time and again the police would charge, with their clubs drawn, only to discover that the crowd would rush back to fill each area shortly after it was cleared. Boston's business manager raced into the dressing room and returned with an armful of bats for the police, who used them against the shins and skulls of unruly fans. The victims grabbed themselves as if poked with a "white, hot brand." Some fans saw "stars which no astronomer has yet mapped."

The police could not restore order and clear the diamond. The game would have to be postponed, or worse, forfeited to the Pirates. At 2:45, one hundred additional officers rushed to the grounds, although the mounted unit the police had requested never arrived. One policeman, who weighed nearly three hundred pounds, had a "unique method of pushing back the crowd." He would "throw his arms in the air and then run like a mad bull into the midst of the encroachers. His efforts had great effect." A patrolman brought out a long length of rubber hose and, with four men on each side, the police used it as a battering ram to force the crowd back. With a concerted push, they cleared the diamond. Then they moved to the outfield where "inch by inch the swaying mass fell back . . . Forty feet was gained in 20 minutes." At the same time, "the members of both nines, anxious to get together in the decisive battle of the local series, were using their bats in much the same manner as the police did the hose."

The best the police could do was to move the crowd about 50 yards behind the diamond. Along the base lines on first and third, the crowd was packed to within fifteen feet of the playing field. Behind the catcher, a space of about thirty feet was cleared, and men lined

up ten deep in front of the backstop. The players were closed off from their benches and sat on the grass to the side of the catcher. The fans who crowded in front of the stands would be dangerously close to the action, but the patrolmen decided to leave them there "knowing that a few foul balls would clear this part of the field better than the most strenuous suasion."

The Pirates came out to warm-up. Second base was missing. Manager Fred Clarke threw his cap down as a substitute, much to the amusement of the crowd. Finally, a "230 pound policeman gained fame by rescuing [the bag which] had been stolen by a 57-pound newsboy." After a few hit balls, the fans again drifted onto the field. The bell rang for Boston's turn, and the Pirates came off the field having handled fewer than twenty chances. Screaming and waving his arms, Boston manager Jimmy Collins urged the crowd to give the home team more room. A little after 3:00, Collins, Clarke, and Umpire Connolly met to discuss ground rules. Connolly once remarked that "the constant woes of an umpire's life are the height of a pitch, rain, and darkness." He neglected to mention the fans. The group decided that balls hit into the outfield crowd, which stood only about 150 feet beyond the base paths, would count for doubles.

Remarkably, the game began only fifteen minutes late, but the presence of the fans, so close to the action, would have an effect. The Pirates scored a run in the second when, with two out, second baseman Claude Ritchey came to bat and lifted a ball into the crowd in center field, a ground rule double. The ball fell only a few yards from the outfielders. The fans groaned, perhaps in self-remorse, because outfielders Patsy Dougherty or Chick Stahl would have caught the ball easily had the crowd not shrunk the dimensions of the field. Jimmy Sebring walked and Eddie Phelps hit the ball into the left field crowd for another double, scoring Ritchey. Pitcher Deacon Phillippe grounded out, but his team now held a one-run lead.

In the top of the third, the Pirates struck again. Boston pitcher Tom Hughes started to come undone. Boston's number three hurler walked Ginger Beaumont on four consecutive pitches to begin the inning. Clarke then doubled into the crowd in left. Tommy Leach quickly singled, scoring Beaumont. The formidable Honus Wagner was due up, with runners on first and third, and nobody out. The score stood 2-0, and Collins had seen enough. He started arguing with the umpire in a ploy to buy some time for a relief pitcher to warm up. As the argument con-



cluded, the crowd that was jammed against the grandstand "trembled, then parted with a loud sound." Out walked a large man with tawny hair. The fans recognized him at once. "In a second every one of that gang of 25,000 was swinging hats wildly and yelling 'Cy! Cy!' and it was he, Young was rushing to the rescue."

Collins needed the extra time because, while Hughes was getting into trouble, Young was still in street clothes, sitting in the club's office, helping to count the day's take.

When play resumed, Wagner stepped in. Young's first effort was a wild pitch that put Leach on second, but did not roll far enough away to allow Clarke to score from third. Wagner fell behind in the count with two strikes. Young then came with a hard curve ball that failed to break early enough and drilled the superstar in his left shoulder. Wagner's face

"crinkle[d] like an old ash-dump boot," and he stormed around for a few moments.

"Hully gee," yelled a young man, "but Wagner must be hard as nails to take such a swat as that." Another cupped his hands together and screamed "Kill 'em Cy, that's the only way they can be done up today." The shortstop said his arm went to sleep. If so, remarked one writer, "it was the only part of Hans that did any sleeping during the remainder of the game." Young stood motionless. He retrieved the ball, rubbed it in his glove, glared at first, and "began swaying like a Sioux squaw in a death dance, for another delivery."

Bases loaded, no one out. Young induced the struggling Bransfield to foul out to first. Ritchey hit a hard shot to third, which Collins handled and threw to Lou Criger to force Clarke at home. The bases were still loaded, but now two were out. It looked as if Young would escape from the jam. Sebring had two strikes



on him when he hit a swift, skipping shot to Fred Parent. The shortstop partially stopped the ball. Leach scored, but Wagner got caught rounding third and was tagged out by the catcher in a run down. The Pirates had jumped ahead 3-0.

After Pittsburgh went down in the top of the fourth, the police managed to move the outfield crowd back another 30 feet. The Boston partisans couldn't help but think that had the police done so in Pittsburgh's second or third time up, "a different tale would possibly be told." Boston scratched out a run, to make the score 3-1, but Young and Phillippe settled into a pitchers' duel. Each team added a run in the eighth, but the game by then had taken on an air of inevitability. In the ninth, after Pittsburgh went down in order, few thought a rally against Phillippe, who had kept the ball down in the strike zone all afternoon, was possible. And it wasn't. Parent popped up to second. Candy La Chance grounded to Wagner. Hobe Ferris struck out, but won a momentary reprieve when Phelps dropped the ball. An instant later, with the throw to first, his at-bat, as well as the game, came to an end.

No one had left the grounds before the final out. Whereas prior to the game, some fans on the field had tried to climb into the stands, now those in the stands emptied onto the field. For ten minutes, "it was impossible to see one bare inch of turf." As the fans shuffled away from the grounds, "gloom and silence" marked their demeanor. They admitted that the "Pittsburg aggregation is almost in a class by itself," and conceded that "Boston's chances for the championship look very dim indeed."

If the commotion prior to the game had turned the contest into a battle of nerves, then Phillippe demonstrated that he could not be shaken. Twice, a hit would have led to runs for Boston, and twice the Deacon "showed his ability, once by a strike-out and the second time by compelling the batsman to hit a grounder to the infield." He was pitching from inside "a great ring of humanity, 40 deep, sitting, standing or lying around the entire field within 200 feet of the bases, yet in nine full innings he allowed only two balls to be hit into the crowd." Hughes, by contrast, became rattled when he saw "those dumpy, illegal hits" fall not further than ten feet from his outfielders. The Pirates also "backed up their pitcher at every point, and time and again cut off seeming base hits by apparently impossible plays." Wagner alone "was everywhere and anywhere [and] three of his stops were labeled sure base hits." Pittsburgh spent the afternoon "outbatting,

outfielding, and, yes, 'outnerving'" their opponents.

Some would say "outlucking" them as well. "Luck is Quite a Factor," claimed a headline in the *Boston Globe*. "Luck, that inscrutable dogma of the fatalists, was romping" with the Pirates all day long. The problem was the ground rule established prior to the game. "Right here," reporters noted, "was where Boston lost the game before ever it was started." Of four Pirate base hits in the first three innings, doubles into the crowd by Ritchey, Phelps, and Clarke would have been easy outs. The two runs resulting from these hits was the margin of the loss. A third run as well, scored in the eighth, came off of yet another "fungoe," a lazy fly ball hit by Wagner just beyond the outfielder. And LaChance's shot in the bottom of the second "would have been a clean home run" rather than a ground-rule double. "With a clear field," wrote one writer, "the final score would have been three to one in favor of Boston." Difficult as it was to admit, the fans' behavior prior to the game had to be viewed as "the main cause of the local team's defeat."

There were "plenty of excuses and ifs to offer" for the results of the game. If only Young had started, many thought Boston would have won. If only the Boston bats had broken through in the fourth and the eighth innings, they might have emerged victorious. If Young and Collins had not made those errors in the eighth, the Pirates would have had one less run. If only the crowd had been a few feet further back. It was a game of feet. "Baseball is full of uncertainties," reasoned one writer. The famous photograph of that day captures the uncertainty, but also the glory that was baseball at the first World Series.

## Why Isn't Gil Hodges in the Hall of Fame?

**G**il Hodges has received more votes for the Hall of Fame than any other person not selected. He came as close as 44 votes shy of election, but unfortunately, that came in his last year of eligibility under the BBWAA vote.

Gil Hodges' Hall of Fame fate resides in the hands of the newly constituted Veterans Committee. Much time and energy has been devoted to the Hall, and many fans have opinions about unqualified players who have been inducted and vice versa. Noted Sabermetrician Bill James wrote a book, *The Politics of Glory*, detailing the history of the HOF, and presenting some arguments about which players might or might not merit selection. I will use his 15-point list of arguments as a guideline for Gil Hodges' case. No one argument makes an entire case, but it is interesting to see how many can be used in Hodges' favor. The numbering is based on James' list:

**3. Was he the best player in baseball at his position? Was he the best player in the league at his position?** This is probably the best argument for Hodges' induction. He was the best first baseman in the NL in the fifties (if we consider Stan Musial an outfielder), and possibly the best in the majors. Hodges led all first basemen of the 1950s in the following categories: HR (310), G (1,477), AB (5,313), R (890), H (1,491), RBI (1,001), TB (2,733) and XBH (585). He made the All-Star team eight times, every year from 1949 to 1955 and again in 1957, the most of any first baseman of the time (again, discounting Musial). Hodges won the first three Gold Gloves at his position and was considered the finest defensive first baseman of the era as well. In addition, he was second among all players in the 1950s in HR and RBI, third in TB and eighth in R (fourth in NL).

Hodges was voted by respected baseball statistics

organization STATS Inc. as the best defensive first baseman of the 1950s. The organization also retroactively selected All-Star teams for all years, both leagues. Hodges was named the retroactive All-Star first baseman four times, tying him for 13th place in number of times selected as a first baseman. Ahead of Hodges and in the Hall are Brouthers, Gehrig, Mize, Anson, Cepeda, Chance, Foxx, Sisler, and McCovey. The only players in the top twelve not in the Hall are Keith Hernandez and Ed Konetchy, while Hall of Fame first basemen such as Tony Perez, Jim Bottomley, and George "Highpockets" Kelly merited fewer STATS, Inc. selections.

In the first edition of the *Historical Baseball Abstract*, James wrote, "The fifties were packed with first basemen who were outstanding for a few years—but none was consistently strong throughout the decade." He also states that Kluszewski, Hodges, and Vic Wertz were the contenders for the best first baseman of the decade. Hodges outpaces them in Boswell's Total Average (a base-out percentage) and in Palmer/Thorn's basic Linear Weights. Table 1 gives the player's career totals, and then his numbers on a per/154 game basis.

**4. Did he have an impact on a number of pennant races?** In Hodges' first ten years as a starting player, the Dodgers finished as low as third only twice, finishing in first place or tied for first six times. Hodges created a significant percentage of his team's runs in the years 1948-1959. By Bill James's Basic Runs Created formula, he created 12.3% of the Dodgers' runs over that time. Over a similar period in his Reds career, Hall of Famer Tony Perez created just under 12% of his team's runs.

Although this category seems to be more about contributions of players, Hodges also played a major role in the 1969 pennant race as the manager of the Miracle Mets. The seven-year-old expansion team, which had finished in 9th place at 73-89 the previous year, won 100 games despite having only two players (Cleon Jones and Tommie Agee) who had more than 400 at-bats.

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**5. Was he a good enough player that he could continue to play regularly after his prime?** Hodges drove in 100 runs in the seven consecutive seasons from 1949 to 1955. He continued to play as a regular for four years after that, averaging more than 26 home runs and 82 runs batted in for each of those years. It is clear that he was somewhat past his prime, but he continued to play regularly; he won his Gold Gloves in the last three of those years, the first ever awarded.

**6. Is he the very best player in baseball history who is not in the Hall of Fame?** At the time of his retirement, Hodges was the leading right-handed home run hitter in National League history and also the league's all-time leader in grand slams. Forgetting ineligible players such as Shoeless Joe Jackson, and sure-thing first ballot players, or arguably deserving players whose fate still resides with the BBWAA, the fact that he received the greatest number of HOF votes of any player may qualify him as the very best player not in the Hall who is under the purview of the Veterans' Committee. His candidacy seems almost snake bit; according to several reports, Hodges missed selection by that committee by a single vote in 1992. Although we have no way of knowing how he would have voted, or whom he might have influenced, it should be noted that the late Roy Campanella, a former Hodges teammate, was too ill to attend that particular meeting.

**7. Are most players who have comparable statistics in the Hall of Fame?** In *The Politics of Glory*, James makes compelling arguments based on similarity scores, i.e., determining players' similarities based on career offensive totals and deducting points from 1000 for various differences. According to James, the nine "most similar" players to Hodges, none of whom are in the Hall of Fame, are as follows: Joe Adcock, Norm Cash, Rocky Colavito, George Foster, Willie Horton, Frank Howard, Lee May, Boog Powell, Roy Sievers. However, by James's own system for determining if a player meets the standards of the Hall, Hodges scores the highest. From this group, only Joe Adcock was both a contemporary of Hodges and a pure first baseman. Hodges outpaces Adcock in both the bat and the field, and he compares favorably with May and Powell, also first basemen. The player whose batting record is strikingly similar to that of Hodges is Norm Cash, but he certainly was not Hodges' match in the field, and observers at the time saw fit to name Cash to only four All-Star teams. Also, Cash's best season was 1961, the year of baseball's first expansion and thus a year in which batting statistics were affected. Thus, Hodges can be seen as a first among equals.

To many, the player most similar to Hodges, and the one whose election to the Hall of Fame would most definitely seem to bode well for Hodges, is Tony Perez. Despite more than 2,700 more at-bats for Perez, their career numbers are similar (Hodges: 370 HR, 1,274

**Table 1. BEST PLAYERS IN BASEBALL/LEAGUE AT HODGES' POSITION**

	G	AB	R	H	2B	3B	HR	RBI	BB	TB	SB	AVG	OPS	TA	LWTS
Hodges	2071	7030	1105	1921	295	48	370	1274	943	3422	63	0.273	0.846	0.867	411
Hodges	13.4	525	82.5	143	22	3.58	27.6	95.1	70.4	255	4.7	0.273	0.846	0.867	30.7
Kluszewski	1718	5929	848	1766	290	29	279	1028	492	2951	20	0.298	0.849	0.832	317
Kluszewski	11.2	529	75.7	158	25.9	2.59	24.9	91.8	43.9	263	1.79	0.298	0.849	0.832	23.7
Vernon	2409	8731	1196	2495	490	120	172	1311	935	3741	137	0.286	0.783	0.772	334
Vernon	15.6	560	76.7	160	31.4	7.69	11	84	59.9	240	8.78	0.286	0.783	0.772	24.9
Wertz	1862	6099	867	1692	289	42	266	1178	828	2863	9	0.277	0.833	0.84	324
Wertz	12.1	504	71.7	140	23.9	3.47	22	97.4	68.4	237	0.74	0.277	0.833	0.84	26.8

RBI,.273 BA, .361 OB, .487 SLG, 8 All-Star selections; Perez: 379, 1652, .279, .344, .463,7). Also, they played the role of first baseman/RBI man deluxe on one of the best teams of their times. Each had two seasons over .300 batting average, and seven 100+ RBI years, although Gil Hodges had six seasons of 30+ HR to Perez's two. These facts would seem to indicate that while the careers were somewhat equal, Hodges maintained a higher peak.

During his peak years as measured by those with an offensive HEQ (see point #8 below) greater than 300, Hodges' teams had a winning percentage of .591, while Perez's was .576.

However, in his most recent version of the *Historical Baseball Abstract*, James ranks Tony Perez as the 13th best first baseman of all time, and Hodges as the 30th. Is Perez really better than Hodges, and if so, is he that much better?

As mentioned above, the raw numbers for these two players are fairly similar. The only argument against Hodges might be that his career (1947-1962, with a cup of coffee in 1943) occurred during a time of relatively more offense than that of Perez (1964-1986). When viewed in context, Hodges slugged 23% better than his league over the course of his career, while Perez slugged 24% better than his. If we adjust for this, Hodges' Slugging Percentage becomes only 1 point lower than that of Perez, .457. In addition,

Hodges seems to have been a much more highly regarded defensive player, as Perez never won a Gold Glove. Thus, it would seem that Hodges and Perez are fairly close, and in fact, Hodges is in fact the better player when defense is taken into account.

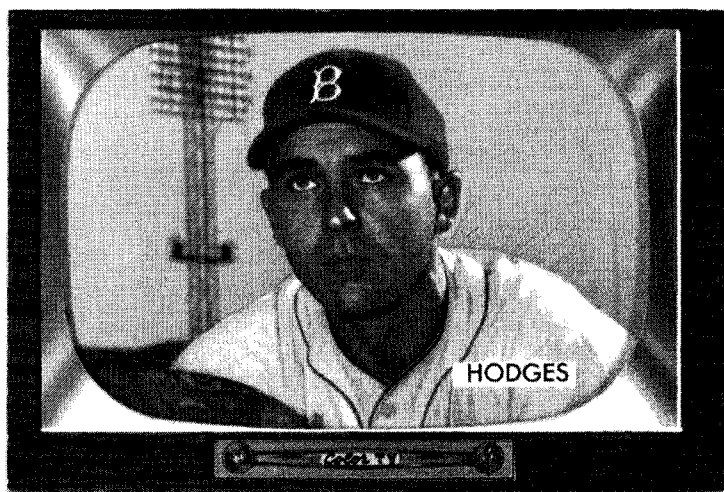
**8. Do the player's numbers meet the HOF standards?** James developed several systems for enumerating the de facto HOF standards, and Hodges performs better in some than in others. Comparing him to his contemporaries, considering statistics of other first basemen in the Hall, and if his work as the manager of the Miracle Mets is also in the mix, Hodges meets or exceeds the Hall of Fame standards.

In his 1981 book, *Baseball's 100*, Maury Allen gives Hodges one of 10 honorable mentions, thus placing him in his top 110 of all time. Interestingly, 17 of the 110 (including Hodges and Shoeless Joe Jackson) are not enshrined in the Hall.

Michael Hoban, in his book *Baseball's Complete Players*, develops a statistical system to rank players based on on-field performance over the ten best seasons of his career. Hodges scores very well here also; Hoban asserts that a combined 830 PCT (Player Career Total) seems to be the "dividing line" for Hall of Fame induction, and Hodges' score is 902. Hall of Fame first basemen Frank Chance (572) and Highpockets Kelly (805) miss the cut, while Cepeda

**Table 2. BEST PLAYERS IN BASEBALL/LEAGUE AT HODGES' POSITION**

	R	HR	RBI	SLOB	SECAV	TA	RANKING
Greenberg	1051	331	1276	0.248223694	0.466782207	1.136605891	HOF
Killebrew	1283	573	1584	0.190974096	0.446176507	0.943903646	HOF
Mccovey	1229	521	1555	0.191812511	0.412223984	0.93384564	HOF
Mize	1118	359	1337	0.220752039	0.387086761	1.016471119	HOF
Hodges	1105	370	1274	0.174854144	0.356614509	0.866705813	J30
Chance	795	20	597	0.149191226	0.321178121	0.880865225	HOF
Cepeda	1131	379	1365	0.172381866	0.29494134	0.840925395	HOF
Bottomley	1177	219	1422	0.183048274	0.28724401	0.864482358	HOF
Kluszewski	848	279	1028	0.175028603	0.286220273	0.83185203	J34
Perez	1272	379	1652	0.158365036	0.283698098	0.781436276	HOF
Vernon	1196	172	1311	0.152044617	0.26549078	0.771808852	J23
Terry	1120	154	1078	0.198297023	0.257000622	0.907910272	HOF
Kelly	819	148	1020	0.153458127	0.230936092	0.750177936	HOF
Sisler	1284	102	1175	0.17596109	0.23055522	0.864894592	HOF



(890), Bottomley (857), and McCovey (839) make the cut but score lower than Hodges.

**9. Is there evidence to suggest that the player was significantly better or worse than suggested by his statistics?** The election of Tony Perez to the Hall shows that the role of the first baseman as a primary run producer, de-emphasizing batting average, is gaining increased recognition. There is a definite bias in the Hall toward players of high batting average, but is anyone prepared to defend the merits of 1920s HOF first baseman George Kelly's six seasons batting over .300 vs. Hodges' and Perez's HR and RBI tallies? Hodges' career Total Average (Tom Boswell's base-out percentage), a statistic that displays no bias toward a particular style of player, is more than 100 points higher than Kelly's (.866 to .749).

In his 2001 version of the *Historical Baseball Abstract*, Bill James discusses the importance of "Secondary Average" as a statistic. "The things a hitter can do to help his team can be summarized in two more or less equal groups: Hitting for average, and everything else." Secondary average is a statistic that attempts to measure the number of bases beyond a single that a player is responsible for. It is computed by taking Total Bases minus hits plus walks and steals, and dividing that total by the number of at bats. In a

sampling of 15 first basemen throughout history, whether in the Hall of Fame, ranked ahead of Hodges in the *Historical Abstract*, or a contemporary of his, Hodges ranks fifth in secondary average, ahead of 7 of the Hall of Famers (see Table 2), seventh in Boswell's Total Average (ahead of Sisler and Bottomley), ninth in Slugging Average times On Base Average (SLOB) (ahead of Cepeda, Perez, Kelly and Chance), and ninth in RBI.

Note that Lou Gehrig and Jimmy Foxx are not included, as they are far better than the players listed here and present an unfairly high Hall of Fame standard.

**10. Is he the best player at his position eligible for the Hall of Fame who is not in?** All the previous arguments suggest that Hodges is the best player and best first baseman not honored with a HOF plaque whose fate is in the hands of the Veterans Committee.

**11-13. How many All-Star teams? How many All-Star Games? Did most players in this many make the HOF?** As previously stated, Hodges made eight All-Star teams. Counting two All Star teams in the same year when the players were boosting their pension fund (1959-1962) as a single nomination, the following Hall of Famers made a comparable number: Duke Snider, 8; Willie Stargell,

Tony Perez, Juan Marichal, Bill Mazeroski, 7; Billy Williams, Ralph Kiner, 6; Phil Rizzuto, Richie Ashburn, 5.

Here are the members of his "similarity cluster" and their number of All-Star selections:

Joe Adcock (1), Norm Cash (4), Rocky Colavito (6), George Foster (5), Willie Horton (4), Frank Howard (4), Lee May (3), Boog Powell (4), Roy Sievers (4). Colavito and Hodges are the only ones to distinguish themselves from the pack in this category.

**14. What impact did the player have on baseball history?** Gil Hodges was a key contributor to the second-best team of the 1950s and a beloved figure in his adopted home of Brooklyn. He was the manager of the Miracle Mets, one of the most unlikely World Series Champions in baseball history.

**15. Did the player uphold the standards of sportsmanship and character that the HOF, in its written guidelines, instructs us to consider?** This is another very strong point in Hodges' favor. The strong, silent type, he was described in Pete Golenbock's *Bums* as "the Dodgers' Lou Gehrig . . . strong but sphinx like, more of a presence than a personality . . . Everything Hodges did was professional . . . Off the field he was a gentleman and a gentle man." The same book quotes the Dodgers' public relations man Irving Rudd as saying, "If I needed a player to visit a blind kid in the stands, a kid in a wheelchair," Hodges would be there. This man was beloved by fans; in his epic *Boys of Summer*, Roger Kahn entitled the chapter about Hodges "the one who stayed behind." Unlike most players, Hodges actually won the hearts of fans when he went into a slump that began in the 1952 World Series and continued into the next season.

That Hodges has positives in 11 of the 15 arguments that James feels to be valid is a strong indication that he merits induction in the Baseball Hall of Fame. In his time, he was the best at his position, offensively and defensively. Peripheral considerations that bolster his case include his character, his role in the Brooklyn Dodgers' only World Championship (drove in both runs in the 2-0 clincher, fielded the throw from Pee Wee Reese for the final out), and his role as architect of the Miracle Mets.

The other categories offered by James include number of times leading the league in a major category (which Hodges never did), MVP awards (for which he received puzzlingly low support) and rules or equip-

ment changes brought about as a result of the player.

Hall of Fame voters are asked to consider six criteria when evaluating a candidate's worthiness for enshrinement. In no particular order, they are record, ability, character, sportsmanship, integrity, and contribution to the game. We have addressed Hodges' record, ability, and contribution to the game. His character, sportsmanship, and integrity are more difficult to quantify. However, Hodges was never ejected from a game, and by all accounts, he was highly regarded. In the *Historical Abstract*, James quotes Arnold Hano about Hodges, "He was a patient, devoted man with a fine heart."

## From a Researcher's Notebook

**DAN SWEENEY WAS A SMALL MAJOR LEAGUE PLAYER** Trying to determine who was the smallest player in major league history is a difficult task. In the old days statistics on the height of major league players were usually inaccurate. Of course, Eddie Gaedel, the 3 foot, 7 inch midget who was used in one game in one of Bill Veeck's weirdest promotions on August 19, 1951, must be excluded.

The smallest player in major league history may have been Dan Sweeney, who played 27 games with Louisville, National League, in 1895. At that time the Louisville papers listed him as being 4 feet 10 inches tall. When Sweeney played for San Francisco in the California league in 1890, the San Francisco *Alta* stated that Sweeney was only 4 feet, 8 inches tall. Sweeney is listed as 5 feet, 5 inches tall in the *Total Baseball Encyclopedia*.

**PITCHER HAL CARLSON DIED IN CHICAGO HOTEL IN 1930** The shocking death of Cardinal pitcher Darryl Kile in a Chicago hotel on June 22 brought to mind another pitcher who died in a Chicago hotel on May 28, 1930. Hal Carlson, veteran Cub hurler, died suddenly in a Northside hotel where he had an apartment. He arose at 2:00 A.M. after a sleepless night. Dr. John Davis, the club physician, was called when Carlson complained of stomach pains. He had been suffering from stomach ulcers for two years. He died 35 minutes later as plans were being made to move him to a hospital.

Teammates Kiki Cuyler, Riggs Stephenson, and Cliff Heathcote were at Carlson's bedside. Mrs. Carlson was at home in Rockford, Illinois, where Carlson was born. Besides the widow, a three-year-old child sur-

vived. The scheduled game with Cincinnati on May 29 was postponed. Carlson had been in the majors since 1917. As a rookie pitcher with Pittsburgh in 1917, Carlson pitched in 34 games and did not give up a home run. In 1918 he gave up a homer, although he pitched in only three games before being drafted into the U.S. Army.

**BOSTON BEES HIT JACKPOT ON TWO LONGTIME MINOR LEAGUE PITCHERS IN 1937** When major league clubs bring up longtime minor league players, the hope is that some of them will be successful. But it is doubtful that any club could match the record of the Boston Bees in 1937. The Bees brought up two pitchers from the American Association—Jim Turner and Lou Fette. Both had toiled many years in the minors and both were listed as being 30 years old, but years later it was discovered that Turner was three years older.

Fette, at St. Paul, was the leading pitcher in the American Association in 1936, with a record of 25 victories and only eight defeats. Turner won 18 games and lost 13 for Indianapolis. Turner and Fette surprised the baseball world by winning 20 games each for a fifth-place Boston club that finished with a record of 79 wins and 73 losses. Only Carl Hubbell, great southpaw of the pennant-winning New York Giants, won more with 22. In addition, Turner had the best ERA in the National League, 2.38, and tied with Fette for most shutouts, each having five.

After his pitching days were over, Turner became a successful pitching coach for the Yankees, from 1949 through 1959, when the Yanks, under Casey Stengel, won nine pennants and seven World Series.

### TWO PLAYERS NAMED HOUSEHOLDER IN THE 1880s CAUSE CONFUSION

There are two players with the name Charles Householder in the baseball encyclopedias. Charles F. is listed as having been born in Harrisburg, Pennsylvania, in 1856. He played with Chicago and Pittsburgh, Union Association, in 1884.

Charles W. is also shown as having been born in Harrisburg in 1856, and died there on October 26,

*Since the inception of the Baseball Research Journal, Al Kermisch's From a Researcher's Notebook has been its most well-respected and longest running feature. Kermisch, a SABR member since 1971, was an ardent baseball researcher for over 60 years. Sadly, he passed on in November 2002. This, Al's last article, was submitted by him shortly before he died. He will be missed by all of us in SABR.*

1908. However, my research shows it was Charles F. who was born Harrisburg and died there on December 26, 1908. He played with Baltimore, American Association in 1882, and with Brooklyn in the same league in 1884. He was one of Harrisburg's early professional players. On October 11, 1884, Charles F. was seriously injured when he fell off a roof in Harrisburg. He eventually recovered and played several more years in the minors. He died at his home, 415 Pear Street on December 26, 1908. He was survived by his wife, five children, three brothers, and his father.

There was not much information on Charles W. except that he was from Philadelphia and not Harrisburg.

**CAP ANSON WAIVED LAST TWO INNINGS OF GAME** According to baseball lore, there was a game in the 1890s in which the home team gave up its last two innings and let the visiting club take its last two innings instead. No details were given about the game. Of course, baseball rules do not allow it, so it could have happened in an exhibition game. I found such an exhibition game that was played in Chicago on Friday, April 13, 1894, with Chicago playing Minneapolis of the Western League at Chicago. The *Chicago Tribune* noted, "Anson's hard-working Colts played and won their fourth exhibition game yesterday, defeating Minneapolis in a fairly well-played contest and established a queer precedent by playing seven innings to the visiting team's nine." The *Tribune* finished its story thus: "Anson waived the formality of playing the last two innings and gave the visitors their halves instead. They failed to score and the game terminated with Chicago three runs to the good."

The weather left much to be desired and besides, Minneapolis had a train to catch. The line score:

MINNEAPOLIS	200 000 100 - 3 3 4
CHICAGO	000 202 2XX - 6 8 4
Fraser and Wilson; Donnelly, W. Camp and	
Kittridge. Time—1.55 Umpire—Jevne	
Attendance—577	

**RED DOOIN, PHILLIES MANAGER, PUT AD IN PAPER FOR A CATCHER** On April 2, 1912, manager Red Dooïn of the Philadelphia Phillies, who were in the midst of their annual pre-season series with the crosstown Athletics, put the following ad in the *Philadelphia Press*:

*"WANTED—A CATCHER. manager Dooïn would like one or two husky backstops report at the Phillies' clubhouse to assist in warming up the large squad of pitchers. Dooïn says it is a good chance for some youth to 'show the goods.'"*

Dooïn was impressed with Ed Irvin and wanted to sign him and farm him out. But Irvin was not interested in going to the minors.

Irvin turns up again on May 18. On that day the Tigers had gone on strike when league president Ban Johnson refused to reinstate Ty Cobb after he had been suspended for going into the stands and hitting heckler Claude Lucker in a game at New York on May 15. Lucker had heckled the Detroit star unmercifully until Cobb lost his cool. If Detroit failed to field a team at Philadelphia on May 18, they were facing a \$5,000 fine. Manager Hugh Jennings was ordered by owner Frank Navin to corral a team of amateurs and college players. Irvin was one of the players recruited. He did not get into the game until the third inning, when he replaced Bill Maharg at third base. It was Maharg who gave a Philadelphia reporter the clue in September 1920 that linked certain White Sox players with gamblers.

Getting back to Irvin, he was the star of the misfits. He registered two hits in three trips to the plate. Both of his hits were triples, and he became the first player in major league history to hit two triples in his first (and only) big league game. The contest was a farce with the Athletics winning by a score of 24-2.

**MIKE MENOSKY, FORMER MAJOR LEAGUE PLAYER, CALLED UPON TO SETTLE COURT CASE** Mike Menosky played in the majors for nine years with Pittsburgh, Federal League, and Washington and Boston in the American League. Menosky, 57, a probation officer, helped decide a court case against a Detroit man. Because Menosky, an outfielder in his playing days, could not throw a rock 250 feet, 21-year-old Robert Melson, of Detroit was acquitted of a charge of malicious destruction of property. He was charged with throwing a rock through a Detroit terminal caboose window. The judge, O. Z. Ide, who played first base for Kalamazoo College in his youth, doubted whether Melson could throw a rock that far. That's when the judge called on Menosky for help. Mike threw a baseball that far but couldn't throw a rock that distance. The judge said that if Mike couldn't do it, then the average man wouldn't have a chance, and the case was dismissed.



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