## Baseball's Worst Team Fred Worth Department of Mathematics and Computer Science


#### Abstract

In this paper we will look at some of the worst teams in baseball history and try to decide which team was indeed the worst. We will look at some statistics that will compare the teams to the teams of their day to try to account for the differences in eras.


## Introduction

Much discussion is heard regarding who the best player, hitter, pitcher, etc. in baseball history may have been. There is not typically a lot of discussion on who the worst in any of these categories may be. The 2003 season changed that a little bit due to the incredible futility displayed by the Detroit Tigers. In this paper, we will look at some of the worst teams in baseball history and see if, indeed, the Tigers qualify.

## Preliminary Criteria

The first consideration needs to be what criteria we will use to make our determination of the worst team. Certainly the teams win-loss record and winning percentage should be considered. Since the word "worst" implies a comparison, we should also look a how far the teams finished out of first place and, to see how truly bad they were, how far they finished behind the next-to-last-place team.

## Candidates

The following table lists the teams we will consider for the designation as the worst team in baseball history. There have been other teams that were very bad. Obviously the choice of candidates is fairly arbitrary, however, most would agree that these nine teams were rather bad.

|  |  |  |  |  |  | Games out of: <br>  <br> Year |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
|  | Team | League | $\mathbf{W}$ | $\mathbf{L}$ | PCT | First | Next to <br> Last |
| 1890 | Pittsburgh Alleghenys | National | 23 | 113 | .169 | 66.5 | 23 |
| 1899 | Cleveland Spiders | National | 20 | 134 | .130 | 84 | 35 |
| 1904 | Washington Senators | American | 38 | 113 | .252 | 55.5 | 23.5 |
| 1916 | Philadelphia Athletics | American | 36 | 117 | .235 | 54.5 | 40 |
| 1935 | Boston Braves | National | 38 | 115 | .248 | 61.5 | 26 |
| 1941 | Philadelphia Phillies | National | 43 | 111 | .279 | 57 | 19 |
| 1952 | Pittsburgh Pirates | National | 42 | 112 | .273 | 54.5 | 12.5 |
| 1962 | New York Mets | National | 40 | 120 | .250 | 60.5 | 18 |
| 2003 | Detroit Tigers | American | 43 | 119 | .265 | $47(58)$ | $25(20)$ |

The 2003 Detroit Tigers are the only team under consideration that played during the division era. In the "Games out of" columns, the first numbers refer to games behind in their division. The numbers in parentheses refer to games behind the best and next-to-worst records in the league.

At this point, two of these teams deserve special recognition. The 1899 Cleveland Spiders had the fewest wins, most losses and lowest percentage. They also finished farther out of first place than any other team. But the 1916 Philadelphia Athletics should also be recognized for finishing farthest behind the next worst team in the league. The Washington Senators were the only other team in the league that won fewer than half of its games that year but their record was a comparatively outstanding 76-77.

## Mitigating Circumstances

Several of the teams have circumstances that would explain why they were so bad. The 1962 Mets were a first year expansion team so it is no surprise that they were bad. The 1916 Athletics were bad because Connie Mack, their owner/manager, had a regular habit of selling or trading all of his good players after they started making high salaries. One of those purges occurred after the 1914 season.

Probably the most interesting story involves the 1899 Spiders. Prior to the season, their owners, Frank and Matthew Robison, had purchased the St. Louis Browns. They then sent all of the Spiders' good players to the Browns. That included Cy Young who, in 1899, won 26 games, 6 more than the entire Spiders team. They were so bad that their fans wouldn't come to the games. They had a total of only 6,088 fans attend games they played at home. They lost 40 of their last 41 games. For their last game, they recruited Eddie Kolb, a hotel cigar counter clerk, to pitch. He lost 19-3 in his only major league appearance.

## Good Players

It should be noted that these teams were not all completely bereft of quality players. Consider the following list of players from some of the teams. This list is, again, very subjective.

| Year | Team | Good Players (age) |
| :---: | :--- | :---: |
| 1890 | Pittsburgh Alleghenys | none |
| 1899 | Cleveland Spiders | none |
| 1904 | Washington Senators | none |
| 1916 | Philadelphia Athletics | Joe Bush (23) <br> Nap Lajoie (41) |
| 1935 | Boston Braves | Wally Berger (29) <br> Babe Ruth (40) <br> Rabbit Marranville (43) |
| 1941 | Philadelphia Phillies | Chuck Klein (36) |
| 1952 | Pittsburgh Pirates | Dick Groat (21) <br> Ralph Kiner (29) <br> Gus Bell (23) <br>  |
|  |  | Bob Friend (21) <br> Murry Dickson (35) |
| 1962 | New York Mets | Richie Ashburn (35) <br> Gene Woodling (39) |


|  |  | Gil Hodges (38) |
| :--- | :--- | :---: |
|  |  | Gus Bell (33) |
| 2003 | Detroit Tigers | Ed Kranepool (17) |
|  |  | Bobby Higginson (32) |
|  |  | Dmitri Young (29) |
|  | Dean Palmer (34) |  |
|  | Steve Avery (33) |  |

It should be noted that, while these teams had some players who had successful careers, most of these were either not yet in their prime (Groat, Kranepool, Friend, Bush, Bell) or were past their prime (Lajoie, Ruth, Marranville, Klein, Dickson, Ashburn, Woodling, Hodges, Bell, Higgonson, Palmer, Avery). Berger, Kiner and Young are the only ones who could be said to have been in the prime years of their careers when they were on these teams.

Special recognition should go to Gus Bell, patriarch of one of baseball's all-time great families, for managing to be on two of these horrible teams.

Also, special note should be taken of the presence in the 1890 Pittsburgh Alleghenys' lineup of Billy Sunday, better known as one of the 20th century's leading evangelists, and the 1952 Pittsburgh Pirates roster which included the well known broadcaster, Joe Garagiola.

## Individual Performance

It is not a surprise to find that very few of the players from these teams managed to be among the league leaders in any good categories while many can be found among the leaders in bad categories. The following finished in the top three in the league.

| Good Hitting |  |  |  |
| :--- | :--- | :--- | :---: |
| Team | Player | Category | Rank |
| 1899 Spiders | Joe Quinn | at bats | 3 |
| 1904 Senators | Joe Cassidy | triples | 1 |
| 1916 Athletics | Whitey Witt | triples | 3 |
| 1916 Athletics | Wally Schang | home runs | 3 |
| 1935 Braves | Wally Berger | total bases | 1 |
| 1935 Braves | Wally Berger | home runs | 1 |
| 1935 Braves | Wally Berger | runs batted in | 2 |
| 1941 Phillies | Bobby Bragan | games | 3 |
| 1941 Phillies | Danny Litwhiler | Hits | 1 |
| 1941 Phillies | Danny Murtaugh | stolen bases | 2 |
| 1941 Phillies | Stan Benjamin | stolen bases | 2 |
| 1941 Phillies | Joe Marty | sacrifice hits | 1 |
| 1952 Pirates | Ralph Kiner | home runs | 1 |
| 1952 Pirates | Ralph Kiner | walks | 3 |
| 1962 Mets | Richie Ashburn | walks | 2 |
| 2003 Tigers | Alex Sanchez | stolen bases | 1 |
| 2003 Tigers | Ramon Santiago | sacrifice hits |  |


| Good Pitching |  |  |  |
| :--- | :--- | :--- | :---: |
| Team | Player | Category | Rank |
| 1904 Senators | Case Patten | saves | 1 |
| 1916 Athletics | Elmer Myers | strikeouts | 2 |
| 1916 Athletics | Elmer Myers | complete games | 2 |
| 1916 Athletics | Joe Bush | complete games | 3 |
| 1916 Athletics | Joe Bush | shutouts | 2 |
| 1941 Phillies | Ike Pearson | games | 2 |
| 1952 Pirates | Murry Dickson | innings pitched | 3 |
| 1952 Pirates | Murry Dickson | games started | 3 |
| 1952 Pirates | Murry Dickson | complete games | 2 |
| 1962 Mets | Al Jackson | shutouts | 3 |
| 2003 Tigers | Jamie Walker | games | 2 |


| Bad Pitching |  |  |  |
| :--- | :--- | :--- | :---: |
| Team | Player | Category | Rank |
| 1890 Alleghenys | Kirtley Baker | hit batters | 1 |
| 1899 Spiders | Charlie Knepper | home runs allowed | 2 |
| 1899 Spiders | Jim Hughey | losses | 1 |
| 1899 Spiders | Jim Hughey | earned runs allowed | 2 |
| 1904 Senators | Happy Townsend | walks allowed | 2 |
| 1904 Senators | Case Patten | hits allowed | 1 |
| 1904 Senators | Happy Townsend | losses | 1 |
| 1904 Senators | Beany Jacobson | losses | 3 |
| 1904 Senators | Case Patten | losses | 3 |
| 1904 Senators | Case Patten | earned runs allowed | 1 |
| 1904 Senators | Happy Townsend | earned runs allowed | 2 |
| 1904 Senators | Happy Townsend | wild pitches | 1 |
| 1904 Senators | Case Patten | hit batters | 1 |
| 1916 Athletics | Elmer Myers | home runs allowed | 2 |
| 1916 Athletics | Elmer Myers | walks allowed | 1 |
| 1916 Athletics | Joe Bush | walks allowed | 2 |
| 1916 Athletics | Elmer Myers | hits allowed | 2 |
| 1916 Athletics | Joe Bush | losses | 1 |
| 1916 Athletics | Elmer Myers | losses | 2 |
| 1916 Athletics | Jack Nabors | losses | 3 |
| 1916 Athletics | Elmer Myers | earned runs allowed | 1 |
| 1916 Athletics | Joe Bush | wild pitches | 1 |
| 1916 Athletics | Elmer Myers | wild pitches | 2 |
| 1916 Athletics | Elmer Myers | hit batsmen | 2 |
| 1935 Braves | Ben Cantwell | losses | 1 |
| 1935 Braves | Ed Brandt | losses | 2 |
| 1935 Braves | Bob Smith | losses | 3 |
| 1935 Braves | Fred Frankhouse | earned runs allowed | 1 |


| 1941 Phillies | Ike Pearson | hit batters | 1 |
| :--- | :--- | :--- | :---: |
| 1952 Pirates | Murry Dickson | home runs allowed | 1 |
| 1952 Pirates | Murry Dickson | hits allowed | 2 |
| 1952 Pirates | Howie Pollet | home runs allowed | 3 |
| 1952 Pirates | Murry Dickson | losses | 1 |
| 1952 Pirates | Bob Friend | losses | 3 |
| 1952 Pirates | Murry Dickson | earned runs allowed | 1 |
| 1952 Pirates | Bob Friend | wild pitches | 2 |
| 1962 Mets | Roger Craig | home runs allowed | 2 |
| 1962 Mets | Roger Craig | losses | 1 |
| 1962 Mets | Al Jackson | losses | 2 |
| 1962 Mets | Roger Craig | earned runs allowed | 3 |
| 2003 Tigers | Mike Maroth | home runs allowed | 1 |
| 2003 Tigers | Mike Maroth | losses | 1 |
| 2003 Tigers | Jeremy Bonderman | losses | 2 |
| 2003 Tigers | Nate Cornejo | losses | 3 |
| 2003 Tigers | Mike Maroth | earned runs allowed | 1 |
| 2003 Tigers | Jeremy Bonderman | wild pitches | 2 |

It is not at all surprising that we find many of these teams having the league leader in losses. The 1890 Alleghenys and the 1941 Phillies are the only teams that did not have at least one pitcher in the top three in losses. The other seven all had at least the league leader. It should be noted that the 1935 Braves had a pitcher tied for 4th in the league in losses in addition to having the top 3.

What is surprising is the lack of anyone from any of these teams in the top three among negative offensive statistics.

## Sharing the Load

The teams all did a good job of passing the losses around among the pitchers.

|  |  |  |  | Pitchers with at least: |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Team | Most W | Most L | 10 L | $\mathbf{1 3}$ L | $\mathbf{1 7} \mathbf{L}$ | 20 L |
| 1890 | Pittsburgh Alleghenys |  | 19 | 2 | 2 | 1 | 0 |
| 1899 | Cleveland Spiders | 4 | 30 | 5 | 4 | 4 | 2 |
| 1904 | Washington Senators | 14 | 26 | 4 | 4 | 3 | 3 |
| 1916 | Philadelphia Athletics | 15 | 24 | 4 | 4 | 3 | 3 |
| 1935 | Boston Braves | 11 | 25 | 5 | 5 | 4 | 1 |
| 1941 | Philadelphia Phillies | 9 | 14 | 7 | 4 | 0 | 0 |
| 1952 | Pittsburgh Pirates | 14 | 21 | 4 | 3 | 2 | 1 |
| 1962 | New York Mets | 10 | 24 | 5 | 4 | 4 | 2 |
| 2003 | Detroit Tigers | 9 | 21 | 4 | 3 | 3 | 1 |

The 1890 Alleghenys had 20 different pitchers get at least one loss. Eleven of those had at least five. Mike Maroth, the 21 game loser for the 2003 Tigers, was the first 20 game loser since

1980, ending the longest such drought in major league history.

## Compared to the League

To determine which team is the absolute worst, more than just wins and losses should be included. We should look at more than just how far behind other teams they were. Let us now look at the teams batting averages, earned run averages, and fielding percentages. Realizing that baseball has changed dramatically over the years, we will not just look at the raw numbers. We will compare each team's averages with those of the league. To truly compare the team to the rest of the league, we will remove that team's statistics from the league total. These tables are sorted by the percentage of the league average.

| Fielding Average |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
| Year | Team | league | team | team <br> rank | as \% of <br> league |
| 1890 | Pittsburgh Alleghenys | .932 | .896 | 8 of 8 | 96.1 |
| 1916 | Philadelphia Athletics | .967 | .952 | 8 of 8 | 98.4 |
| 1904 | Washington Senators | .960 | .951 | 8 of 8 | 99.1 |
| 1962 | New York Mets | .976 | .967 | 10 of 10 | 99.1 |
| 1952 | Pittsburgh Pirates | .977 | .970 | 8 of 8 | 99.3 |
| 1899 | Cleveland Spiders | .942 | .937 | 9 of 12 | 99.5 |
| 2003 | Detroit Tigers | .983 | .978 | 14 of 14 | 99.5 |
| 1941 | Philadelphia Phillies | .972 | .969 | 7 of 8 | 99.7 |
| 1935 | Boston Braves | .969 | .967 | 6 of 8 | 99.8 |


| Runs per game |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
| Year | Team | league | team | team <br> rank | as \% of <br> league |
| 1899 | Cleveland Spiders | 5.40 | 3.44 | 12 of 12 | 63.6 |
| 1941 | Philadelphia Phillies | 4.38 | 3.23 | 8 of 8 | 73.7 |
| 2003 | Detroit Tigers | 4.95 | 3.65 | 14 of 14 | 73.7 |
| 1890 | Pittsburgh Alleghenys | 5.76 | 4.33 | 8 of 8 | 75.1 |
| 1904 | Washington Senators | 3.65 | 2.78 | 8 of 8 | 76.2 |
| 1916 | Philadelphia Athletics | 3.79 | 2.90 | 8 of 8 | 76.5 |
| 1952 | Pittsburgh Pirates | 4.30 | 3.32 | 8 of 8 | 77.2 |
| 1935 | Boston Braves | 4.84 | 3.76 | 8 of 8 | 77.7 |
| 1962 | New York Mets | 4.55 | 3.83 | 9 of 10 | 84.2 |


| Batting Average |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Year | Team | league | team | team <br> rank | as \% of <br> league |
| 1899 | Cleveland Spiders | 0.285 | 0.253 | 12 of 12 | 88.8 |
| 1890 | Pittsburgh Alleghenys | 0.257 | 0.230 | 8 of 8 | 89.2 |
| 2003 | Detroit Tigers | 0.269 | 0.240 | 14 of 14 | 89.2 |
| 1952 | Pittsburgh Pirates | 0.256 | 0.231 | 8 of 8 | 90.2 |


| 1962 | New York Mets | 0.263 | 0.240 | 10 of 10 | 91.2 |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1904 | Washington Senators | 0.247 | 0.227 | 8 of 8 | 91.9 |
| 1941 | Philadelphia Phillies | 0.260 | 0.244 | 8 of 8 | 93.8 |
| 1935 | Boston Braves | 0.279 | 0.263 | 8 of 8 | 94.3 |
| 1916 | Philadelphia Athletics | 0.249 | 0.242 | 8 of 8 | 97.2 |


| ERA |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Year | Team | league | team | team <br> rank | as \% of <br> league |
| 1890 | Pittsburgh Alleghenys | 3.22 | 5.97 | 8 of 8 | 185.4 |
| 1899 | Cleveland Spiders | 3.63 | 6.37 | 12 of 12 | 175.5 |
| 1904 | Washington Senators | 2.45 | 3.62 | 8 of 8 | 147.8 |
| 1916 | Philadelphia Athletics | 2.68 | 3.92 | 8 of 8 | 146.3 |
| 1941 | Philadelphia Phillies | 3.51 | 5.12 | 8 of 8 | 145.9 |
| 1935 | Boston Braves | 3.89 | 5.57 | 8 of 8 | 143.2 |
| 1962 | New York Mets | 3.82 | 5.04 | 10 of 10 | 131.9 |
| 1952 | Pittsburgh Pirates | 3.60 | 4.65 | 8 of 8 | 129.2 |
| 2003 | Detroit Tigers | 4.47 | 5.30 | 13 of 14 | 118.6 |

Not surprisingly, in nearly every case, our candidates for the all-time worst team, finished last in their league in each statistical category we are considering. The exceptions are in fielding average (1899 Cleveland Spiders, 1935 Boston Braves, 1941 Philadelphia Phillies), runs per game (1962 New York Mets) and ERA (2003 Detroit Tigers).

From these charts we see that offense is the main reason the Tigers did so poorly. Their ERA and fielding average were not as dramatically bad compared to their runs per game and batting average. For flat out pathetic baseball, it seems like the worst team has to be the 1899 Cleveland Spiders. They scored nearly two runs per game less than the league average and had an ERA over 2.5 runs worse than the average.

Suppose, we restrict ourselves to the "modern" era of baseball. We first need to decide what that means. For our purposes, we will consider the 1935 Braves to be the first modern (post deadball) era team in our collection.

| Fielding Average |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Year | Team | league | team | team <br> rank | as \% of <br> league |
| 1962 | New York Mets | .976 | .967 | 10 of 10 | 99.1 |
| 1952 | Pittsburgh Pirates | .977 | .970 | 8 of 8 | 99.3 |
| 2003 | Detroit Tigers | .983 | .978 | 14 of 14 | 99.5 |
| 1941 | Philadelphia Phillies | .972 | .969 | 7 of 8 | 99.7 |
| 1935 | Boston Braves | .969 | .967 | 6 of 8 | 99.8 | | Runs per game |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |


| Year | Team | league | team | team <br> rank | as \% of <br> league |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 2003 | Detroit Tigers | 4.95 | 3.65 | 14 of 14 | 73.737 |
| 1941 | Philadelphia Phillies | 4.38 | 3.23 | 8 of 8 | 73.744 |
| 1952 | Pittsburgh Pirates | 4.30 | 3.32 | 8 of 8 | 77.2 |
| 1935 | Boston Braves | 4.84 | 3.76 | 8 of 8 | 77.7 |
| 1962 | New York Mets | 4.55 | 3.83 | 9 of 10 | 84.2 |


| Batting Average |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
| Year | Team | league | team | team <br> rank | as \% of <br> league |
| 2003 | Detroit Tigers | 0.269 | 0.240 | 14 of 14 | 89.2 |
| 1952 | Pittsburgh Pirates | 0.256 | 0.231 | 8 of 8 | 90.2 |
| 1962 | New York Mets | 0.263 | 0.240 | 10 of 10 | 91.2 |
| 1941 | Philadelphia Phillies | 0.260 | 0.244 | 8 of 8 | 93.8 |
| 1935 | Boston Braves | 0.279 | 0.263 | 8 of 8 | 94.3 |


| ERA |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Year | Team | league | team | team <br> rank | as \% of <br> league |  |
| 1941 | Philadelphia Phillies | 3.51 | 5.12 | 8 of 8 | 145.9 |  |
| 1935 | Boston Braves | 3.89 | 5.57 | 8 of 8 | 143.2 |  |
| 1962 | New York Mets | 3.82 | 5.04 | 10 of 10 | 131.9 |  |
| 1952 | Pittsburgh Pirates | 3.60 | 4.65 | 8 of 8 | 129.2 |  |
| 2003 | Detroit Tigers | 4.47 | 5.30 | 13 of 14 | 118.6 |  |

In this collection, it looks like it comes down to the 2003 Tigers and the 1941 Phillies. Neither one did a very good job of scoring runs, though the Phillies did a good bit better in batting average. However, due to the team earned run averages, it looks like the Phillies "win" the title of worst team of the modern era.

## Conclusion

Obviously much of what we discussed here is very subjective. Good arguments could be made for any of these teams as being the worst of all time. Surely other teams, which were not considered here, also have some claim to the title. For example, practically every Chicago Cubs team since the days of "Tinker to Evers to Chance" could probably be included. But, of course, this and other arguments over statistics are what make baseball the best game in the world.

## Bibliography

Baseball-Reference.Com. [Online] Available http://www.baseball-reference.com, 29 NOV 03.
Nash, Bruce and Zullo, Allen. The Baseball Hall of Shame. New York City : Wallaby Books, 1985.

## BIOGRAPHY

Fred Worth received his B.S. in Mathematics from Evangel College in Springfield, Missouri, in 1982. He received his M.S. in Applied Mathematics in 1987 and his Ph.D. in Mathematics in 1991 from the University of Missouri at Rolla. He has been teaching at Henderson State University since August 1991 and is a member of SABR, the Society for American Baseball Research.

