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:	
Year	Team	League	W	L	PCT	First	Next to 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)			
		Nap Lajoie (41)			
1935	Boston Braves	Wally Berger (29)			
		Babe Ruth (40)			
		Rabbit Marranville (43)			
1941	Philadelphia Phillies	Chuck Klein (36)			
1952	Pittsburgh Pirates	Dick Groat (21)			
		Ralph Kiner (29)			
		Gus Bell (23)			
		Bob Friend (21)			
		Murry Dickson (35)			
1962	New York Mets	Richie Ashburn (35)			
		Gene Woodling (39)			

		Gil Hodges (38)
		Gus Bell (33)
		Ed Kranepool (17)
2003	Detroit Tigers	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	3		
1935 Braves	Wally Berger	home runs	1		
1935 Braves	Wally Berger	runs batted in	1		
1941 Phillies	Bobby Bragan	games	2		
1941 Phillies	Danny Litwhiler	Hits	3		
1941 Phillies	Danny Murtaugh	stolen bases	1		
1941 Phillies	Stan Benjamin	stolen bases	2		
1941 Phillies	Joe Marty	sacrifice hits	2		
1952 Pirates	Ralph Kiner	home runs	1		
1952 Pirates	Ralph Kiner	walks	1		
1962 Mets	Richie Ashburn	walks	3		
2003 Tigers	Alex Sanchez	stolen bases	2		
2003 Tigers	Ramon Santiago	sacrifice hits	1		

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:			ast:
Year	Team	Most W	Most L	10 L	13 L	17 L	20 L
1890	Pittsburgh Alleghenys	4	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					
				team	as % of	
Year	Team	league	team	rank	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 rank	as % of 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 rank	as % of 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

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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 rank	as % of 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					
				team	as % of
Year	Team	league	team	rank	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

				team	as % of
Year	Team	league	team	rank	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						
				team	as % of	
Year	Team	league	team	rank	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 rank	as % of 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

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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.