

What's a Batted Ball Report?

By Dave Studenmund

March 23, 2009

Glad you asked. The Hardball Times has been purchasing batted ball stats from Baseball Info Solutions for several years. We know the number of times each batter hit (or each pitcher gave up) each type of batted ball, and how often he achieved a certain outcome for each type. For instance, we know how many ground balls were outs, singles, doubles, triples or fielded for an error.

We're going to update these data on a daily basis in 2009 and we're going to share the results of this cool stuff with you each week. We'll shake up the stats and look at them from all sorts of different perspectives. Maybe we'll try crossing our eyes, too. Whatever seems interesting.

Our goal is to present the batted ball data to you in a way that helps you understand the strengths and weaknesses of all batters and pitchers. We'll tear apart the trends and we'll turn them into run values, the number of runs the player added to his team for each type of batted ball.

Let me show you what I mean. Here's the batted ball profile of the new Phillies left fielder, Raul Ibanez:

Raul Ibanez

Year	PA	% of PA		% of Batted Balls					Out %		Runs per Event				Total Runs vs. Avg.				
		K%	BB%	GB%	LD%	FB%	IF/F	HR/OF	GB	OF	NIPR	GBR	LDR	OFR	NIP	GB	LD	Fly	Tot
2006	699	16	9	42	19	39	.11	.17	71	89	.05	.07	.45	.23	1	5	8	11	25
2007	636	15	9	42	18	40	.09	.12	67	86	.05	.08	.41	.19	0	8	1	7	16
2008	707	16	9	41	19	40	.14	.11	71	83	.06	.06	.45	.20	2	4	8	6	20
MLB Totals		17	9	44	19	37	.10	.11	74	84	.05	.05	.39	.18	--	--	--	--	--



Looks good in red, doesn't he? (Icon/SMI)

Today, we're talking about Ibanez in order to introduce you to the entire concept of batted balls. Ibanez is one of the most interesting hitters in the majors because he has many consistent strengths and no outstanding weaknesses. He's so good that his bat was 20 runs better than average last year (you can find that number in the far right hand column), in line with his production the previous two years. What's more, he was above average in each of the four categories we track in our batted ball profiles. Looking at the far right-hand columns:

- NIP, or "Not in Play," which consists of strikeouts, walks and being hit by a pitch. Ibanez was two runs above average in that category, and he's usually around average;
- GB, or Ground Balls, in which Ibanez was four runs above average;
- LD, or Line Drives, in which Ibanez was eight runs above average, and;
- Fly, which includes all fly balls (infield and outfield, those in play and those hit for home runs), in which Ibanez was six runs above average.

When we talk about a player's batted ball profile, we'll often use this format

The Hardball Times Batted Ball Report

and start in the right-hand columns, which consist of the player's overall strengths and weaknesses, and then use the rest of the table to break him down further.

Anyway, you don't often see a profile like Ibanez's. Most hitters have a particular strength or two, something they particularly excel at. Ibanez does it all, and has been doing it all for quite a while. Let's pick these apart one-by-one. First up, strikeouts and walks (for reference, here's the same table again):

Raul Ibanez

Year	PA	% of PA		% of Batted Balls					Out %		Runs per Event				Total Runs vs. Avg.				
		K%	BB%	GB%	LD%	FB%	IF/F	HR/OF	GB	OF	NIPR	GBR	LDR	OFR	NIP	GB	LD	Fly	Tot
2006	699	16	9	42	19	39	.11	.17	71	89	.05	.07	.45	.23	1	5	8	11	25
2007	636	15	9	42	18	40	.09	.12	67	86	.05	.08	.41	.19	0	8	1	7	16
2008	707	16	9	41	19	40	.14	.11	71	83	.06	.06	.45	.20	2	4	8	6	20
MLB Totals		17	9	44	19	37	.10	.11	74	84	.05	.05	.39	.18	--	--	--	--	--

In the third and fourth columns from the left, you can see the percentage of times Ibanez struck out and walked (the walk column includes intentional walks and HBPs). He's been the very model of consistency here, striking out and walking almost exactly as often as the major league average. His slightly positive NIP scores come from the fact that he strikes out slightly less often than the major league average.

The next three columns, "% of Batted Balls," tell you how often Ibanez has hit each of the three main types of batted balls. He hits line drives at the major league rates, ground balls a little less often and fly balls a little more often. In other words, he's got a tendency to be a fly ball hitter, but not outrageously so. An example of a more extreme fly ball hitter is the guy he's replacing, Pat Burrell, who hit 45 percent fly balls. The Orioles' Kevin Millar was most extreme, at 51 percent. We'll be looking at Batted Ball Leaderboards throughout the year.

The inherent value of ground balls and, to some extent, line drives don't vary a lot, but the value of fly balls does. The next two columns take a critical look at a batter's fly balls. The first column represents the percentage of fly balls that don't leave the infield. These are important because an infield fly is an automatic out, and some batters do tend to hit infield flies more or less often than average. As you can see, Ibanez hits slightly more of them, but not significantly so.

The next column is concerned with only outfield flies. Outfield flies separate the sluggers from mere hitters, and the key metric is the percent of outfield flies that clear the wall for a home run. Ibanez hit a career peak in 2006 with 33 home runs, and 17 percent of his outfield flies were homers (six points more than the major league average). His home run production has declined since then, and he hit an average proportion of outfield fly home runs last year.

The next two columns are the percentage of each type of batted ball that was fielded for an out. We track this for two types: ground balls and outfield flies that aren't home runs. And here we see something surprising about Ibanez: He's a high-average ground ball hitter. In each of the past three years, Ibanez has had more of his ground balls scoot through the infield for hits than the average major league hitter.

For some perspective, try turning the percentage around: The average major hitter has roughly a .260 batting average on ground balls. Last year, Ibanez hit .290 on grounders, and in 2007 he hit .330. That kind of shows you how prolific Ibanez has been with his grounders. How does he do it? I have no idea, but three years of data would seem to indicate that we're not talking about a statistical fluke here. Now you know: Raul Ibanez is a ground ball hitting dude.

Personally, I find this sort of thing fascinating—the type of insight you don't expect but can get from batted ball stats. If you also find it fascinating, I guarantee that you'll enjoy the Batted Ball Reports. If you don't find it fascinating, well, I envy you your sanity.

The Hardball Times Batted Ball Report

Last year, Ibanez was about average in outfield fly outs, but that figure has declined the last two years. In 2006, 89 percent of non-homer outfield flies were outs. Not good.

The rest of the table is devoted to the run values of each batted ball type. Under “Runs per Event,” we list the number of runs the batter delivered for each type of batted ball. These figures are driven by the number of outs, double plays, triple plays, singles, doubles, triples and home runs the batter hit in each category.

The table again:

Raul Ibanez

Year	PA	% of PA		% of Batted Balls					Out %		Runs per Event				Total Runs vs. Avg.				
		K%	BB%	GB%	LD%	FB%	IF/F	HR/OF	GB	OF	NIPR	GBR	LDR	OFR	NIP	GB	LD	Fly	Tot
2006	699	16	9	42	19	39	.11	.17	71	89	.05	.07	.45	.23	1	5	8	11	25
2007	636	15	9	42	18	40	.09	.12	67	86	.05	.08	.41	.19	0	8	1	7	16
2008	707	16	9	41	19	40	.14	.11	71	83	.06	.06	.45	.20	2	4	8	6	20
MLB Totals		17	9	44	19	37	.10	.11	74	84	.05	.05	.39	.18	--	--	--	--	--

Ibanez has had average strikeout and walk rates, so his “NIP” run values are about average. Thanks to his low out rate on ground balls, he’s above average in that category. As we said, Ibanez hits line drives at the major league average rate, but he gets more out of his line drives than the average hitter—about .06 more runs per line drive. He has also gotten more out of his outfield flies each year, even when he hasn’t hit as many outfield fly home runs, but the difference hasn’t been as great as it has been with his line drives.

The five final columns put it all together. You can think of them as a combination of the “frequency” columns (% of Batted Balls) and the “per value” columns (Runs per Event). Here’s what we can say about Raul Ibanez’s strengths as a hitter:

- He strikes out slightly less than average.
- He doesn’t hit a lot of line drives, but he does get more out of them than average. Presumably, he hits them harder or “places” them on the field better.
- He hits fewer ground balls than average, but he gets more out of them than average (surprise finding!).
- He hits slightly more fly balls than average, but he’s not really a particularly strong fly ball hitter because he’s not a power home run hitter.

Raul Ibanez is one of the many players we’ll be watching in 2009. How will his switch to the National League and Citizens Bank Park affect his batting style? Will he become more of a fly ball hitter? Will he still beat out ground balls? Keep reading THT’s Batted Ball Reports and find out.