

Importance of The Leadoff Hitter in Baseball

In baseball the leadoff hitter has many important roles in the lineup. Among those, their primary goal is to get on base and in scoring position. They set the table for the best hitters in the lineup that follow. OBP, SB, and runs scored stats are most indicative of a successful leadoff hitter.

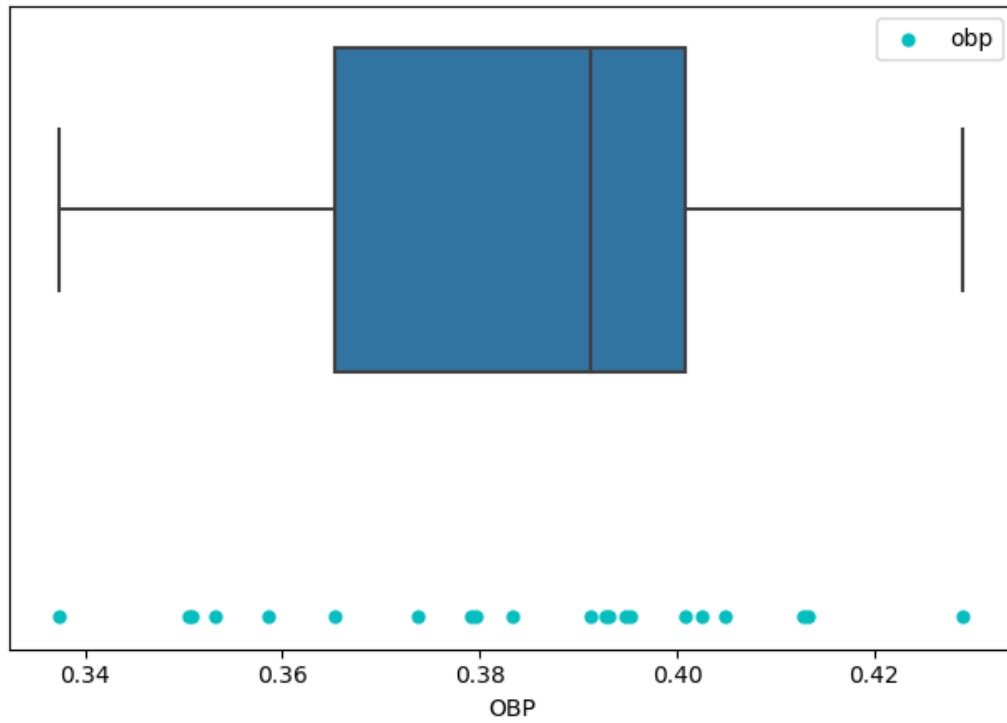
From a pitcher's perspective, it's significantly more challenging dealing with a hitter when a runner is on base. Even more so if the baserunner has speed, which the prototypical leadoff hitter will possess. The pitcher can become over concerned with the runner stealing second base drawing attention away from the hitter. A team has a 37.8% chance of scoring when the leadoff hitter reaches 1st base to begin an inning with 0 outs as opposed to 15.5% when making the first out.

Those who have read the book "Moneyball" know how important a measure OBP is. A statistic used by former 1st round draft pick and Oakland A's general manager Billy Beane. He used OBP find undervalued players at bargain prices that Major League scouts overlooked. It's an obvious statistic which is simply the fraction of plate appearances where the player gets on base. Beane brought a new way of thinking into the front offices of Major League Baseball. Sabermetrics.

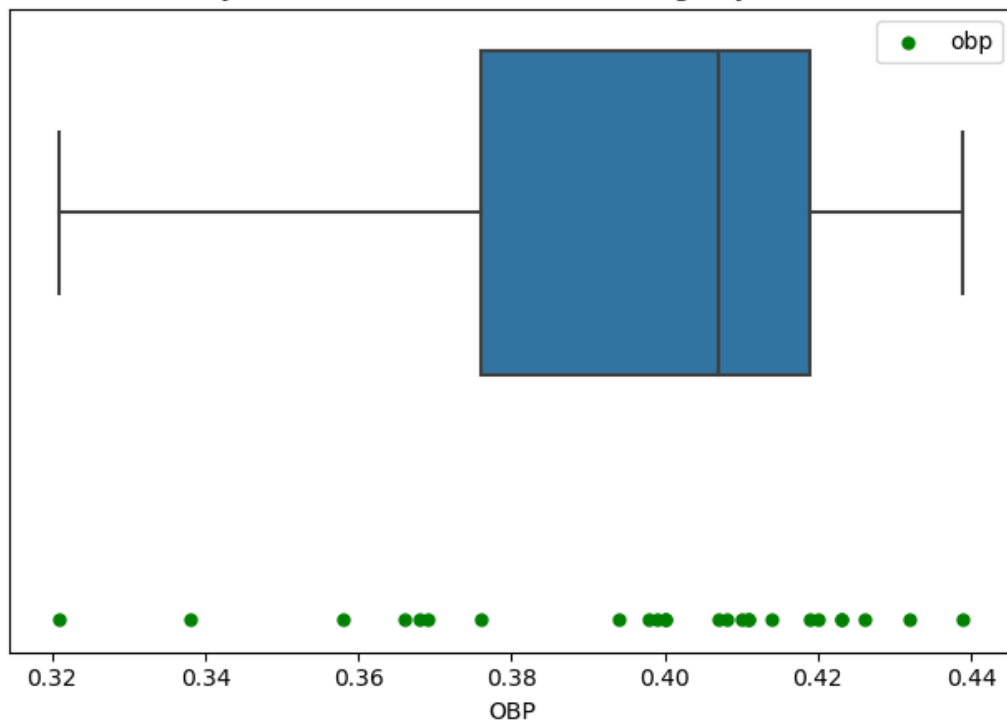
When discussing the best MLB leadoff hitter of all time, only one name should be mentioned. Ricky Henderson. He's the all time MLB holder in runs scored. He batted a .400 OBP or higher in 16 of his 25 seasons played. He led the league in stolen bases 12 times and scored over 100 runs in 13 seasons. The Python dot plot indicates the majority of Henderson's seasons fall in the .400 to .420 OBP range. We can also see there is a small cluster of values in the .340 to .380 range. Why the few seasons out of the norm? Henderson played into his 44th birthday where his numbers tailed off his last 4 seasons.

Another great leadoff hitter was Tim Lincecum. Many baseball analysts consider Tim the second-best leadoff hitter of all time. Lincecum was a contemporary of Henderson, often overshadowed by Henderson's greatness. Side-by-side box plots are most useful in comparing datasets. Below is a comparison of Henderson vs Lincecum career OBP by season. What can we learn from this comparison? On average, Henderson is slightly better than Lincecum at getting on base. The median OBP for Henderson is .407 and the median OBP for Lincecum is .391. So, Henderson is .016 better using this measure. This means that for every 1000 plate appearances, Henderson is likely to get on base 16 more times than Lincecum. On the other hand, the standard deviation or variability of Lincecum OBP values (.024) is smaller than the spread of Henderson's OBP values (.029). A slight, negligible difference. Both hitters were consistent over their careers. Like Henderson, Lincecum had a long and successful career retiring at 43 years old. However, Henderson trumps Lincecum in the stolen base and runs department by a wide margin.

Tim Raines On Base Percentage by Season



Ricky Henderson's On Base Percentage by Season



References:

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