

Baseball tidbits newsletter – interesting and random stuff, fodder for bar bets.

5.1.2022

Good morning baseball fans,

Sipping coffee in North Carolina this morning. This week featuring an interesting analysis from The Athletic on how the baseball travels, Miguel/3K hits/how hard it is to achieve, concerns about hitting, and of course Trivia. Enjoy.

THIS WEEK'S TRIVIA CHALLENGE

Back-to-Back MVP seasons not named Bonds. Can you get all 7?? Answers at the bottom.

2012-2013 AL

1993-1994 AL

1982-1983 NL

1980-1981 NL

1975-1976 NL

1960-1961 AL

1958-1959 NL

MISCELLANEOUS STUFF

Last week I called **Juan Soto** this generation's **Ted Williams**. Soto got his 500th career hit this week, Thanks to Baseballreference.com and Jayson Stark:

MOST TIMES REACHING BASE, FIRST 500 HITS

Soto — 896 times (500 H, 389 BB, 7 HBP)

Williams — 789 times (500 H, 281 BB, 8 HBP)

Byron Buxton of the Twins hit 2 HRs last Sunday. The second was a 469 foot walk-off in the 10th to seal Minnesota's 4th straight win. It was the longest walk-off HR Statcast has recorded. Same game—**Tim Anderson** of the White Sox homered on the first pitch of the game. So first and last pitch of the game HRs. Only the 6th time in the last 35 years that's happened.

Last Sunday **Joc Pederson** of the Giants homered twice including his 18th career lead off HR.

All-time leaders: **Rickey Henderson** 81, **Alfonso Soriano** 54, **Craig Biggio** 53, **Ian Kinsler** 48 and **Curtis Granderson** 47. (Sunday morning update—**George Springer** of the Blue Jays hit his 46th lead off HR yesterday to move into 6th).

As **Tyler Zombro** scaled the mound Sunday afternoon at Harbor Park in Norfolk, Va., players and coaches from the Durham Bulls and Norfolk Tides poured out of both dugouts and made their way onto the field. They stood and cheered, all for the same reason -- celebrating the mere fact that Zombro was about to pitch.

Last June 3, Zombro was pitching for Triple-A Durham against the same Norfolk team when he was struck on the right side of his head, just above his ear, by a 104 mph line drive off the bat of **Brett Cumberland**. He underwent emergency brain surgery that night at Duke University Hospital, a 2 1/2-hour procedure that left him with 16 plates and 36 screws stabilizing his skull.

Now, Zombro is back, his full-circle comeback complete. The 27-year-old right-hander worked around a leadoff double in a scoreless second inning for the Bulls on Sunday afternoon, his first regular-season appearance since the terrifying incident that unfolded last summer.

Five active players with at least 2,000 career hits--**Albert Pujols, Miguel Cabrera, Robinson Canó, Yadier Molina and Joey Votto**

I was surprised to read that the going back to 2020 **Brandon Belt** of the Giants has the third highest slugging pct (.585) for batters with at least 500 plate appearances behind San Diego's **Fernando Tatis Jr. and Atlanta's Ronald Acuña Jr.**

If you are into betting MLB you probably know this. Betting on total runs in a game—over or under—unders are cashing at over 60% forcing Vegas to reduce game run totals.

Angels superstar **Mike Trout** became the third player in club history to reach 50 career triples this week. Trout became the third player in Angels history to reach 50 triples, joining **Jim Fregosi** (70) and **Chone Figgins** (53).

Because you were wondering, **Sam Crawford** had 309 career triples. The all-time list has lots of old timers at the top—**Ty Cobb**, **Honus Wagner**, **Tris Speaker** in the top 10.

Some others in the top 100—**Musial** 177 /19th all time, **Clemente** 166/27th, **Gehrig** 163/33rd, **Willie Wilson** (from Summit, NJ and the KC Royals) 147/56th, **Brock and Mays** 141/tied 63rd, **Rose** 135/75th.

Active leaders **Dexter Fowler** with 82. Trout is tied for 6th at 50.

Maury Wills' game. In his career, he had 1,866 singles out of 2,134 hits. That means more than 87% of his hits were singles, far and away the highest percentage for any player since Deadball (min. 4,000 plate appearances).

The **Dodgers** used 146 different lineups in 2021. The **Giants** topped them at 148. The **Rays** ran through 158 unique configurations. The Rays ranked second in the sport in runs last season; the Dodgers ranked fourth. By some metrics, like OPS and weighted on-base average, the Giants sported the best offense in the National League in 2021.

The pandemic uprooted the Blue Jays for much of the 2020 and '21 seasons. They played 26 home games at Sahlen Field, their Triple A ballpark in Buffalo, in 2020 and were the home team in four other games played at opposing parks. In 2021, the Jays played 21 home games at their spring training ballpark in Dunedin, Fla., 23 in Buffalo, and finally 36 in Toronto once they got clearance from the Canadian government. The Jays still managed to win 91 games, missing the postseason by one game. They closed the season by winning 25 of 35.

Albert Pujols has homered in 40 ballparks over his career. That's tied for seventh all time. **Sammy Sosa** (45), **Ken Griffey Jr.** (44), and **Fred McGriff** (43) are the leaders

Last year, there were 5,843 fewer hits than there were in 1999, the year **Gwynn and Boggs** joined the 3,000-hit club. Over the past two decades, we've seen a 10 percent decrease in hits, a 30 percent increase in strikeouts and a 20-point drop in batting averages.

Jim Palmer never struck out 200 batters in a season.

Three of the past six pitchers and four of the 10 this century to allow a 3,000th hit were **Rockies: John Thomson** (2001 to **Rickey Henderson**), **Aaron Cook** (2007 to **Craig Biggio**), **Chris Rusin** (2016 to **Ichiro Suzuki**) and **Antonio Senzatela** (to **Cabrera** on Saturday).

Andrew McCutcheon of the Brewers. I've always been a fan. Above average player who plays hard. This week he joined **Mike Trout** as the only active players with 200 HRs and 200 Stolen Bases.

McCutchen is the 51st player to reach both milestones, a list topped by a former Pirate (**Barry Bonds** finished with 762 home runs and 514 steals)

Most career three-homer games by a first baseman--Hall of Famer **Johnny Mize** (6 games with 3 or more home runs).

Cubs rookie outfielder **Seiya Suzuki** needs to clear off a shelf on his bookcase because he's practically clinched the National League Rookie of the Year Award in the first month of the season. So far, he's slashed an impressive .327/.463/.635 with four doubles, four home runs and 13 RBIs in 17 games.

Saw this week that the Yankees settled a lawsuit with **Jacoby Ellsbury** in which the Yankees tried to claw back some of Ellsbury's salary after he went to a non-team approved doctor. The nightmare included a 7 year, \$153 million deal.

I was surprised to see (I had blocked it from my mind) that Ellsbury had 2171 plate appearances in 520 games as a Yankee, batted .264. That represents 53% of the possible games. He was paid \$21 million not to play in 2020. Ellsbury hit 39 HRs with 198 RBIs, stole 102 bases for New York.

Lots of Miguel Cabrera 3,000 hits talk this week. Reminded one subscriber that two former Yankees homered for their 3,000th hit—**Wade Boggs and Derek Jeter**.

Yadier Molina has 16 seasons with at least one stolen base. The AL/NL record among catchers for most seasons with at least one steal is Hall of Famer Carlton Fisk (18 seasons with at least 1 SB)

Is **Max Scherzer** off to a good start with the [Mets](#)? How about 3-0, a 1.80 ERA and 33 strikeouts in 25 innings going into tonight's start against the Phillies.

Cubs beat the Pirates 21-0 this week at Wrigley Field. Last 21-0 game in MLB was in 1939, Yankees beat the Philadelphia A's. The last 21-0 game at Wrigley? Bears beat Packers 21-0 in 1944. And 21 runs was the biggest Cubs margin of victory at Wrigley ever—going back to 1914. Pirates took the other 3 games in the 4 game series. Minus 17 run differential. Largest differential ever for a team that won the series.

Reds lost 11 games in a row and never had a lead. Yes, 99 innings and never had a lead. Only 1932 Red Sox can match that since 1901.

First 19 games. Orioles 6-6 in games which they did not hit a HR. 0-7 in games they did hit an HR. That hasn't been done since 1951.

First 19 games of the season no Pirates starter got a win. Only other time in MLB history was 1988 Orioles who went 22 games without a starter getting a win.

Anthony Rizzo had 3 HRs for the Yankees (and 6 RBI) Tuesday. He became the second oldest Yankee to have his first regular season 3 HR game—behind **Babe Ruth**, also age 32 in 1930. Ruth had a 3 HR game in the 1926 World Series.

Mets-Arizona last week. Two Mets base runners are struck by batted balls. Hasn't happened twice in a game since at least 1974.

Roy Halladay led the majors in complete games 7 times, most of any pitcher since 1945.

Giancarlo Stanton hit his 350th career HR this week in his 1,341st game making him the 7th fastest to 350. **Mark McGwire** was the fastest to reach 350 homers in terms of games played, belting his 350th homer in his 1,280th game on June 2, 1997. The others to reach 350 home runs faster than Stanton were **Juan Gonzalez** (1,298), **Alex Rodriguez** (1,301), **Harmon Killebrew** (1,319), **Albert Pujols** (1,320) and **Babe Ruth** (1,329).

TIP OF THE CAP TO CLAYTON

Left-hander **Clayton Kershaw** became the Los Angeles Dodgers' all-time strikeouts leader in Saturday's game against the Detroit Tigers, passing Hall of Famer **Don Sutton** for the record. Kershaw reached the milestone by striking out **Spencer Torkelson** in the fourth inning for his 2,697th career strikeout.

Kershaw, 34, entered Saturday four strikeouts shy of surpassing Sutton's 2,696 career strikeouts with the Dodgers. Sutton, who played for Los Angeles for 16 seasons during his 23-year career, set the record in 1979.

In the third inning, Kershaw tied Sutton's record by striking out Tigers catcher **Dustin Garneau**.

Through six innings, Kershaw gave up four hits, one run, two walks and struck out seven batters on Saturday. He finished the night with 2,700 career strikeouts, becoming the 26th pitcher in Major League history to reach the mark. The Dodgers went on to lose 5-1 to the Tigers.

Kershaw is in his 15th season with the Dodgers, who selected him in the first round of the 2006 MLB Draft. The eight-time All-Star has won three Cy Young Awards and the 2014 National League MVP award.

NO NO METS

New York Mets starter **Tylor Megill** and four relievers combined on the first no-hitter of the Major League Baseball season, teaming up to throw a whopping 159 pitches and beat the Philadelphia Phillies, 3-0.

Megill was pulled after five innings and 88 pitches. The bullpen took over from there, with **Drew Smith, Joely Rodríguez, Seth Lugo, and Edwin Díaz** completing the second no-hitter in Mets history. Díaz finished it off in style, striking out **Bryce Harper, Nick Castellanos, and J.T. Realmuto** in the ninth. Mets pitchers combined to fan 13 and walk six.

Johan Santana threw the Mets' only previous no-hitter on June 1, 2012, when he struck out eight and needed 134 pitches in an 8-0 win over the St. Louis Cardinals. The Mets began play as an expansion team in 1962. A year ago, there were a record nine no-hitters in the majors.

Of the 315 no-nos at the highest level, only 17 have been combined efforts. Only 27 have included at least six walks. This one checked both such alternative boxes, while also requiring more pitches (159) than any no-hitter since pitch counts became a widely available statistic in 1987.

This no-hitter came 28 years and 237 days after the last one that **Buck Showalter** managed, thrown by **Jim Abbott** of the Yankees on Sept. 4, 1993. That's the second-largest gap between sequential no-hitters managed, trailing only **Connie Mack's** 29-year, 14-day gap, according to the Elias Sports Bureau. The no-nos for Mack? One by Bullet **Joe Bush** on Aug. 26, 1916, for the A's, and the other by **Dick Fowler** for the club on Sept. 9, 1945.

The Mets entered the day with an MLB-leading .700 winning percentage. This was the fourth time in the divisional era (since 1969) that a team leading the Majors in winning percentage threw a no-hitter, according to Elias. The last time it happened was May 17, 1998, when **David Wells** threw a perfect game for the Yankees. The others were Juan Nieves for the Brewers on April 15, 1987, and **Jim Palmer** for the Orioles on Aug. 13, 1969.

Friday's no-hitter featured five Mets pitchers. There have been only two combined no-hitters that involved more pitchers, each with six: the Astros' no-no against the Yankees on June 11, 2003, and the Mariners' no-hitter against the Dodgers on June 8, 2012 -- one week after Santana threw the first no-hitter in Mets history.

It was the fourth no-hitter at Citi Field, after Santana's in 2012, **Chris Heston's** no-no for the Giants on June 9, 2015, and **Max Scherzer's** on Oct. 3, 2015 (just the sixth pitcher with two no-hitters in a season).

This was the 20th time the Phillies have been no-hit in their lengthy franchise history, which dates to 1883. That ties the Dodgers for the most times being no-hit of any franchise, including the postseason, according to the Elias Sports Bureau.

This was the second no-hitter caught by **James McCann**, who was also behind the plate for **Lucas Giolito's** no-no for the White Sox on Aug. 25, 2020, against the Pirates.

It was the first time **Joe Girardi** managed a team that was no-hit. He caught two no-hitters in his career: Dwight Gooden's in 1996 and David Cone's perfect game in '99. In 2006, **Anibal Sánchez** threw a no-hitter for Girardi's Marlins. Girardi became just the fifth individual to manage a team that had a no-hitter, manage a team that got no-hit and play catcher in a game in which his team completed a no-hitter in his career, according to Elias. He joined **Scott Servais, Jeff Torborg, Herman Franks and Wilbert Robinson**.

RUNNING MAN, WALKING MAN

Rickey Henderson, his game was speed, and lots of it. The Man of Steal recorded more stolen bases (1,406) than any other big leaguer, and it's not particularly close: **Lou Brock** is second with 938.

But Henderson has more in common with **Babe Ruth** than you might think.

In 1930, Ruth passed **Eddie Collins** for the all-time walk record. When his career ended in 1935, Ruth had 2,062 walks. That mark held up for another six-plus decades, until April 25, 2001, when Henderson drew a base on balls for the Padres in the ninth inning against the Phillies' **Jose Mesa**. It marked the 2,063rd walk of Henderson's career, giving him more than the mighty Ruth.

Henderson recorded 80 or more walks in 19 different seasons, three more than anyone else. He added another 37 walks in 60 postseason games. It was Henderson who got the Blue Jays' rally started in Game 6 of the 1993 World Series, working a walk against the Phillies' **Mitch Williams** to lead off the ninth inning. Three batters later, **Joe Carter** hit his iconic, title-clinching home run.

Henderson would hold the walk record for only three years, until **Barry Bonds** passed him when he recorded his 2,191st career walk on July 4, 2004. Still, the fact that Henderson was in the

same range as Ruth and Bonds when it came to walks is a testament to what made him so special.

Intentional walks

Henderson, career: 61

Bonds, 2004 first half: 71

Bonds, career: 688

Intentional walks weren't officially tracked until 1955, so we have no way of knowing how many Ruth had during his career, but the number was likely high. SABR member John Tattersall researched Ruth's 1923 season (170 walks) and credited him with 80 intentional walks.

Ted Williams, the only other player besides Bonds, Henderson and Ruth with at least 2,000 walks, is credited with 243 intentional walks by Baseball-Reference, which has intentional walk numbers going back to 1941. Williams had 86 intentional walks after the stat became official, and he finished his career with 2,021 total walks.

That means Henderson is the only player who officially drew at least 2,000 unintentional walks. In total, he had 2,129 unintentional walks during the regular season, an all-time record that is even referenced on his [Hall of Fame plaque](#).

Henderson had 8,728 plate appearances with nobody on, and in 1,344 of those PAs, he walked. He also had 1,420 singles, 362 doubles and 60 hit-by-pitches in those situations, which means that more than 3,100 times, Henderson was on base with an unoccupied bag in front of him.

Henderson swiped 100-plus bases in three of his first five years in the Majors, including 130 in 1982, which set a Modern Era (since 1900) record. He also walked more than 100 times in each of those three 100-steal seasons.

Would Henderson still have set the all-time stolen-base record if he didn't walk so much? Probably. But it would likely be a lot closer than it is.

Overall, Henderson was on base 5,503 times (including errors) during his career, which ranks fourth in big league history, and he came around to score 2,295 runs, the most ever.

DOES SIZE MATTER?

Ballscouter.com

The average height of MLB players is about 74 inches (or 6 feet 2 inches) and average weight is roughly 209 lbs.

Among major sports in the United States, only hockey players are smaller on average, at about 6' 1". Average National Basketball Players are 6' 7" and pro football players are around 6' 2" tall. If you consider NASCAR a major sport, they are the smallest at an average of a little more than 5' 8" tall.

Tallest active players—Aaron Judge at 6' 7", Rays pitcher Tyler Glasnow 6' 8".

Jon Rauch is the tallest MLBer of all time at 6' 11".

Rauch last pitched in the big leagues with the Miami Marlins.

In 11 years of service with 8 different teams, Rauch amassed a career ERA of 3.90 working almost exclusively out of the bullpen. His age 28 season was his best, logging a career high in games pitched (88) and career lows in FIP (3.38) and WHIP (1.099), earning him some reps as the closer for the Washington Nationals in his age 29 season. He retired in 2013.

Some other points of reference:

Randy Johnson 6' 10"	Frank Howard 6' 7",
Chris Sale 6' 6"	Dave Kingman 6' 6",
Gerrit Cole 6' 4"	Mike Trout 6' 2"
Tom Seaver 6' 1"	Reggie Jackson 6' 0"
Greg Maddux 5' 11"	Mickey Mantle 5' 11"
Whitey Ford 5' 10"	Willie Mays 5' 10"

The shortest active/current major leaguers are **Jose Altuve** of the Houston Astros and **Tony Kemp** of the Oakland Athletics, each standing 5 foot 6 inches (5' 6") tall.

The shortest active/current MLB pitcher is **Rico Garcia** of the San Francisco Giants at 5 foot 9 inches tall (5' 9").

Hack Wilson was 5' 6", 190 pounds with an 18 inch neck but just size 5 shoes. Barrel chested, bow legged. In 1930 Wilson hit 56 HRs and drove in a still record 191 runs for the Cubs.

Remember what 5' 5" Freddie Patek, Royals shortstop said-"I'd rather be the shortest player in the Majors than the tallest player in the minors."

THE SCIENCE OF DESIGNING A BATTING LINEUP

Andy McCullough, The Athletic

Giants president of baseball operations **Farhan Zaidi** and manager **Gabe Kapler** indicated that assembling a lineup with a diversity of approach was not a prerequisite for offensive success. You can win with nine hitters all trying to do the same thing, both said. If, of course, that singular goal is a productive one.

“The one network effect that you can get in a lineup, for a lack of a better term, is when you have a lot of guys who have really high at-bat quality,” Zaidi said. “You get some scale from having nine guys who will grind at-bats, wear out the opposing pitching staff. But just in terms of like, ‘Is this a power guy? Is this a contact guy? Does this guy hit groundballs? Line drives?’ I don’t think having a diversity of attack in those dimensions is really that important.”

Kapler suggested elite lineups develop core common traits, either by design or osmosis. “The one approach that I think we want to be very consistent with, and not diversify too much, is being especially aggressive on drivable pitches, and more patient on pitches that you can’t drive,” Kapler said.

Mets manager **Buck Showalter** suggested there was a benefit in stylistic differences. “You want to make sure that you present a challenge for them, where they can’t have — what do they call it, a lane? — where they can use one [relief] pitcher for multiple hitters,” Showalter said. But Showalter was speaking more about the construction of a lineup on a given day, rather than the construction of a lineup in the aggregate. To Zaidi, a homogenous approach may only look like a problem in times of strife.

“When your offense lacks variety, in whatever way it is — let’s say you have nine guys who are really productive hitters but really aggressive hitters who chase a lot — any time things are going badly, it’s going to look way worse,” Zaidi said. “Because you’re seeing some of the same faults exposed over and over again. But that doesn’t mean that that is not going to course-correct, over the 162-game season.”

JOE POSNANSKI

One thought crossed my mind when the Giants’ **Mike Yastrzemski** led off the game with a bunt single against the shift. Well, honestly, two thoughts, because I can never see Mike Yastrzemski hit without thinking about his grandfather, the original Yaz.

But beyond that, my thought after the bunt single was: “Wow, that looks SO easy. Why doesn’t everybody do it?”

It's possible you thought the same thing.

I do realize that this is the devious brilliance of the shift — it really does look incredibly simple to beat. In a piece I just finished about Dusty Baker approaching 2,000 wins, I wrote a bit about the disastrous managerial tenure of **Maury Wills** with the Seattle Mariners. Well, one of the things that Wills believed in deeply was bunting.

I guess that should be obvious, since bunting was such a huge part of Maury Wills' game. In his career, he had 1,866 singles out of 2,134 hits. That means more than 87% of his hits were singles, far and away the highest percentage for any player since Deadball (min. 4,000 plate appearances). How many of those were bunt singles? I suspect a lot of them.

Anyway, Wills was so committed to the bunt that he had his players do a half-hour of bunting practice before batting practice, and he said that he would call on every single player on the team to bunt ... except for **Willie Horton**.*

I certainly can understand why he excluded Willie Horton; you didn't mess with Willie the Wonder. **George Brett tells a hilarious story about the time during a brawl with the Rangers when, by mistake, he tore Horton's jersey. The terror in Brett's eyes never left him.*

Now there are two ways you can look at Wills' commitment to the bunt, depending on your own particular baseball philosophy. One, you might say: "That's just a bananas strategy." Or two, you might say: "Hey, you know what? That seems pretty smart to me. Bunting is an important part of the game, especially now. And hitters can't do it anymore."

I'll admit that when I see Baby Yaz just make a mockery of the shift like that, I find myself thinking about Maury Wills' strategy and thinking a little bit about the second part. Could a team bunt their way to glory in 2022?

It's not as weird a question as it used to be. You're probably aware that offense is not just down right now, but SCARY down. Let's talk about that for a minute, because even though it's early, and the weather will turn and all that, at this particular moment in time, teams are averaging BARELY over four runs per game. I mean barely — if the Cubs had not scored 21 on the Pirates the other day, teams would be averaging fewer than 4 runs per game; it's that close right now.

The last time teams averaged fewer than four runs per game? That would be 1976.

Teams are hitting .232 right now. The last time the league batting average was that low? Never.

In the same spirit, teams are averaging 7.63 hits per game. The last time teams were averaging that few hits? Never.

Fewest hits per game:

1. 2022: 7.63
2. 1908: 7.75
3. 1968: 7.91
4. 1909: 7.92
5. 1907: 7.99

That's not the best company, no. And yet, this is the way the game has been going. Next on the list is the COVID season (8.04 hits per game) and then comes 2021 (8.13 hits per game). The lack of hits in baseball is kind of an epidemic.

So when you see Baby Yaz lay down an easy single like that, you have to think: Come on! Everybody should do that! Hitters could bat like .889 against these shifts! And then teams would stop shifting! And there would be peace across the land! And the game would be more fun to watch!

Lots of exclamation points.

Like Admiral Ackbar, I say, that's the trap. Yes, it's true, you can bunt for singles against the shift. No question. Trouble is that it isn't as easy as Yastrzemski made it look. These pitchers are throwing dynamite at the plate, it's not easy, facing that, to bunt the ball into fair ground, much less hit it where the ball will elude both the pitcher and catcher. Bunting against the shift is like stand-up comedy or making a pie or painting like Bob Ross. Looks easy when it's done right.

But it's actually very hard.

And the thing about the shift is that it preys on your mind. Sure, you can try to bunt for a single, and you might get it. But if you don't, you feel like a jerk. You feel like you've thrown away an at-bat. You feel like — "Well, if I wasn't even going to get a hit, what was the point of that?"

Sure, it's genuinely satisfying seeing Baby Yaz make the Mets pay for their insolent shift, but no matter how it seems, you know deep down that it's actually much more difficult than it looks.

MORE JOE

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Last Sunday 28 of 30 teams played. 14 games. They combined for 15 HRs. Fifteen home runs in 14 games is the fewest since 2014, when baseball was very different from the past few seasons. And it's the fewest for an April day since 1993.

the problem is that if this is a real trend — teams are averaging fewer than one home run per game, and that hasn't happened since the aforementioned 2014 season — hitters are basically helpless. Home runs (since 2014) have masked the absolute cratering of offense in baseball.

Batting averages, hits, triples, these are all at historic lows. Strikeouts, as everybody knows, are at historic highs.

And while the deluge of home runs may have become repetitive, they're just about the only thing that has kept baseball from going back to 1968, when so few runs scored that the powers-that-be in baseball freaked out and just started changing stuff — OK, uh, let's lower the mound, and uh, make the strike zone smaller, and, uh, maybe the pitcher shouldn't hit anymore? And, uh, let's crack down on those spitballs. Right? And, um, maybe we should call more balks? And, any other ideas out there?

In 1968, batters hit .237 — the lowest batting average on record.

This year — and again, it's SUPER early, so let's not jump to any conclusions — batters are hitting .233. That is not out of line from the last few seasons. Last year, batters hit .244, which was the lowest average since, you guessed it, 1968.

And the 11-point difference between this year and last year mostly comes down to the fact that batters are hitting many fewer home runs than they did last year.

MIGUEL CABRERA

Pretty exclusive company:

500 HRs and 3,000 hits: Two juicers **Palmiero, ARod**, plus **Aaron, Mays, Pujols, Eddie Murray**.

500 HRs, 3,000 Hits, .300 Average: **Aaron and Mays**.

500 HRs, 3,000 Hits, 600 Doubles: **Aaron and Pujols**.

500 HRs, 3,000 hits, 2 MVPs: **Mays, ARod, Pujols**.

500 HRs, 3,000 Hits, Multiple HR titles, Multiple batting titles: **Aaron**.

500 HRs, 3,000 Hits, Triple Crown. Just **Cabrera**.

Miguel Cabrera has 17 career triples – none since 2016. Only 1 bunt base hit. He's won four batting titles, topped a .300 batting average 11 times with a 12th season clocking in at .299. He even laced a single when the Orioles tried to give him an intentional pass on June 22, 2006.

Other sluggers have multiple bunt hits. **Albert Pujols** has two. **Nelson Cruz** also has two. **Joey Votto** has *three* -- including two in an eight-day stretch in 2015.

It came on June 9, 2006, when Cabrera -- then on the Marlins -- stepped to the plate to face the Padres' **Chris Young**. Young, now the general manager of the Rangers, was in the zone that day. He pitched six innings, surrendered one run, struck out 12 and gave up only five hits in the Padres' 3-2 victory.

WHY THE 3,000 HIT CLUB'S DOOR WILL BE CLOSED FOR A WHILE AFTER MIGUEL CABRERA

Stephen J. Nesbitt, The Athletic

It was 9:08 p.m. on Aug. 7, 1999, when the baseball blasted off **Wade Boggs'** bat, arced toward the outfield seats at Tropicana Field and caused Mike Hogan — the man in Section 144, Row V, Seat 7 — to say, “Holy crap, this is coming straight for us.” History hit Hogan in the right hand. He caught it and held on for dear life as the sellout crowd roared, Devil Rays poured out of the dugout and Boggs rounded the bases, dropped to his knees and kissed home plate.

Boggs had just become the first player to join the 3,000-hit club with a home run, making Hogan the first fan to ever be clutching the ball from a 3,000th hit. It was a valuable souvenir. Boggs figured he'd never get it back. Security hustled Hogan through the concourse and to the Rays clubhouse to negotiate.

“They asked, ‘What are you going to do with it?’ I said, ‘I’m going to give it back.’ It really wasn’t a question for me,” Hogan recalls now. “You see how hard people work for things. A moment like that is theirs. You’re a little story in their chapter of their professional lives. I would not have felt right keeping it.”

Hogan went home that night with a Boggs jersey, a game-used bat and an incredible story to tell about his brush with baseball history. After all, it’s not every day we see someone collect hit No. 3,000. Boggs was the first batter to join the 3,000-hit club in ... *well, how about that* ... 24 hours.

One night earlier, the Padres’ **Tony Gwynn** had hit No. 3,000 (and then Nos. 3,001, 3,002 and 3,003) in Montreal. Meanwhile, **Cal Ripken Jr.** was just 32 hits behind. If 1998 was the year of baseball’s home run chase, 1999 was the year of the race for 3,000 hits. Three future Hall of Famers were in a friendly competition to reach 3,000 first, and across the league hitting

numbers were better than ever, with surging (somewhat juiced) home run rates and a league batting average (.271) that had hadn't been higher since the 1930s.

That same summer, a 16-year-old Venezuelan named **Miguel Cabrera** signed with the Marlins. He's now the 33rd and newest member of the 3,000-hit club.

Who's next? Well, that's anyone's guess.

While the doors to the 3,000-hit club haven't slammed shut for good, there are a number of reasons why we won't see another entrant to the club for quite a while. Since **Robin Yount and George Brett** reached 3,000 hits in 1992, we've gone no more than four seasons before seeing another batter hit No. 3,000. The gap after Cabrera will surely surpass that. It'll likely be the longest drought since the 12-year gap between **Stan Musial** (1958) and Hank Aaron (1970).

Here's why.

It's a numbers game

There are only five active players with at least 2,000 hits — including Cabrera and Albert Pujols — which is as low as that total has been since 1954. At one point in the early 2000s, there were 27 (!) active players with at least 2,000 career hits, according to Fangraphs' Dan Szymborski.

Robinson Canó (2,629 hits) was once considered a shoo-in for the 3,000-hit club, but he torpedoed his chances with two performance-enhancing drug suspensions totaling 242 games. He's now 39 and playing part-time for the Mets. **Yadier Molina** (2,115) is retiring this fall. **Joey Votto** (2,033) is 38.

Looking at the hitters who have reached 3,000 hits in the past century, the average age when they surpassed 2,000 hits is 32.2. Here are the five active players aged 32 or younger who are closest: **Jose Altuve** (31 years old, 1,783 hits), **Freddie Freeman** (32, 1,720), **Eric Hosmer** (32, 1,646), **Manny Machado** (29, 1,444) and **Jason Heyward** (32, 1,400). Even Altuve, who Szymborski's projections gave the best chances of any active player of reaching 3,000 hits (34 percent), will need seven more years averaging 175 hits per season to get there.

The pandemic

These big, round numbers we hold as monumental career milestones — 3,000 hits; 500 home runs; 300 wins; 3,000 strikeouts — require health and longevity. No player can be faulted for the fact the season in 2020 was one-third of its regular length, but it has significantly impacted all of their counting stats. **Trea Turner** led the majors with 78 hits in 2020; he led again last year with 195.

The average age for a hitter to reach 3,000 hits is 38.8. Any playing time lost — to injury, to platoons, to contract squabbles, to military service, to pandemic — makes an extraordinarily difficult feat even harder.

The hitting environment

The hit has taken a hit. Last year, there were 5,843 fewer hits than there were in 1999, the year Gwynn and Boggs joined the 3,000-hit club. Over the past two decades, we've seen a 10 percent decrease in hits, a 30 percent increase in strikeouts and a 20-point drop in batting averages.

YEAR	HITS	HR	STRIKEOUTS	WALKS	AVERAGE
2021	39,484	5,944	42,145	15,794	.244
2016	42,276	5,610	38,982	15,088	.255
2011	42,267	4,552	34,488	15,018	.255
2006	45,073	5,386	31,655	15,847	.269
2001	43,879	5,458	32,404	15,806	.264

- **Hitting approach:** The league batting average so far this season (.230) would be the lowest ever, seven points worse than the 1968 “Year of the Pitcher” that prompted a lowering of the mound. But it’s only April, and hitting is harder in cold weather. Still, the league batting average in 2021 was .244, tied for the lowest since 1968. Today’s game rewards extra-base power, not singles, and so we now see more high-risk, high-reward swings that do damage or do nothing at all. Trends change. Outliers arrive. But, in this younger generation of hitters, we may have fewer candidates for the 3,000-hit club than ever.

- **Pitching dominance:** Here are the 15 years of MLB’s highest league strikeout rates, listed in increasing order: 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2022, 2020, 2021, 2019. It’s not just swing changes that are killing contact. The primary reason fewer pitches are being put in play? Pitchers. The average fastball velocity continues to steadily creep higher. According to Fangraphs, it was 91.1 mph in 2007, 92.7 mph in 2012, 93.5 mph in 2017 and 94 mph this year. Then there’s the popularization of pitching labs designed to help pitchers add ticks to their fastball while shaping and sharpening their off-speed stuff to be even harder to hit than the heater. On top of that, hitters have fewer chances to face the same pitcher in a game, as teams are shortening starts before turning to high-octane relievers out of the bullpen.

- **Defensive positioning:** The evolution of the shift has been one of the biggest stories in baseball over the past two decades. Countless base hits have been stolen — mostly from left-handed sluggers — by a perfectly positioned infielder situated in shallow right field. The last left-handed hitter not named Ichiro Suzuki (an all-fields king) to enter the 3,000-hit club was **Rafael Palmeiro** in 2005. If limits on defensive positioning are in the offing, more hits may be ahead.

The opportunity

If you were an optimist scripting a prospect's path to 3,000 hits, you'd plan for them to break into the majors as early as possible, average around 200 hits per season in their prime, avoid major injury throughout their career and be an everyday starter into their late 30s.

In today's game, that map comes with numerous roadblocks. There's service-time manipulation, as teams attempt to prolong the number of years a young player is under team control. There's the rise of position platoons, limiting playing time in the name of rest and lineup optimization. There's the reality of major or recurring injuries over the years, the type that have made a generational talent like **Mike Trout** (30 years old, 1,427 hits) an underdog to reach 3,000 hits. (Szymborski's projections give Trout a 5 percent chance.) And there's the fact past-their-prime veterans have a hard enough time finding interested teams in free agency — much less those eager to ensure them everyday at-bats in their mid-to-late 30s.

In 2018, MLB historian John Thorn told The Washington Post he felt "the long-term trend is for another burst of 3,000-hit players."

That was before the pandemic, of course. But Thorn might still be right. When Szymborski ran his projections last September for how likely active players were to reach 3,000 career hits, 17 came back with odds of at least 1 percent. Thirteen are still in their 20s, including the under-25 wave of **Ronald Acuña Jr.**, **Juan Soto**, **Vladimir Guerrero Jr.**, **Fernando Tatis Jr.** and **Wander Franco**.

ZiPS: The Next 3,000-Hit Candidates

NAME	AGE	HITS	ODDS of REACHING 3k
Jose Altuve	31	1,783	34%
Freddie Freeman	32	1,720	28%
Fernando Tatis Jr.	23	303	20%

Juan Soto	23	498	18%
Ronald Acuna Jr.	24	426	13%
Robinson Cano	39	2,629	12%
Vlad Guerrero Jr.	23	385	11%
Wander Franco	21	101	7%
Mike Trout	30	1,427	5%
Manny Machado	29	1,444	3%
Bryce Harper	29	1,284	2%
Mookie Betts	29	1,160	2%
Xander Bogaerts	29	1,253	1%
Francisco Lindor	28	1,013	1%
Trea Turner	28	853	1%
Rafael Devers	25	614	1%
Cody Bellinger	26	558	1%

For context, the average hit total for all 33 3,000-hit club members through their age-29 season was 1,499 hits. So, some aren't far off pace.

Late that August night in 1999, security walked Hogan to his car outside Tropicana Field, and he drove back over the Howard Frankland Bridge with an autographed Boggs jersey and bat in the back seat. He flipped on the radio and found a sports talk station discussing Boggs' homer. A caller came on and ripped Hogan for not cashing in. Hogan had just moved to Tampa for a new job — his wife and 1-year-old son were still back in Albany, N.Y. — and as he headed home to an air mattress and an otherwise empty apartment it did feel silly to have passed on a chance to sell the Boggs ball for some six-figure sum.

But he never regretted it.

The Rays gave Hogan season tickets for the following season and brought him back for Wade Boggs Day at the Trop. Hogan sat in then-owner Vince Naimoli's suite along with such Red Sox luminaries as Ted Williams, who told Hogan, "I read about you in the paper," and signed his program. Then Hogan was invited to Boggs' Christmas party that winter. Boggs showed him around his home and stopped at the trophy case. Boggs pointed to an empty spot beside his 1996 World Series ring and said, "Your ball is going right there."

Twenty-three years later, Hogan still has the Boggs bat and jersey stashed in a closet in his Tampa home. He's always planned to frame them, and he swears he'll do it soon. It's a special memory he'll never tire of telling: being on the other end of a 3,000th hit. That's just not something we see every day anymore.

AND MORE FROM THE ATHLETIC

The pandemic, the overall bottoming out of base-hit hitters, service-time manipulation, defensive positioning and pitching dominance are just a few of the hindrances.

Mike Trout, though, is not just a home run hitter. He debuted a month before his 20th birthday, and he can hit it to all fields, making it tougher to shift him into an out. There are several factors, at least on the surface, that make him a perfect candidate for 3,000. Still, according to the FanGraphs metric cited in Nesbitt's story, Trout has only a 5 percent chance to reach the mark.

The frustrating reality is that two of Trout's prime years were disrupted by a pandemic and a debilitating calf injury that comprised the final 4 1/2 months of the 2021 season. Trout posted only 95 hits in 2020-21. In the eight years prior (2012-19), he never had a hit total lower than 123 in just one season. He averaged a little more than 162 hits per year over those seasons.

FRANCHISE STRIKEOUT LEADERS

From mlb.com, as **Clayton Kershaw** passes **Don Sutton** for the all-time Dodgers strikeout lead. What do **Jorge De La Rosa**, **Yovani Gallardo**, **Ricky Nolasco** and **Kevin Appier** have in common with **Christy Mathewson**, **Nolan Ryan**, **Bob Gibson** and **Randy Johnson**?

Blue Jays: Dave Stieb -- 1,658

One of the most dominant starting pitchers of the 1980s, Stieb is famously remembered for losing a no-hitter with two outs in the ninth inning on three occasions, two of them coming in back-to-back starts in 1988. He finally got that elusive no-no in 1990, but he also holds the distinction of striking out more batters than anyone in Blue Jays history. The right-hander's career-high in strikeouts was 198 in 1984, though his best season overall came in '85, when he led the AL with a 2.48 ERA over 265 innings.

Orioles: Jim Palmer -- 2,212

Outside of the great **Tom Seaver**, there was no more dominant pitcher during the decade of the 1970s than Palmer, who won three AL Cy Young Awards in four years from 1973-76. Although he never struck out 200 or more batters (his career-high was 199 in '70), his consistent excellence resulted in a franchise strikeout record that hasn't even come close to being matched -- in second place on the all-time franchise list is **Mike Mussina**, who had 1,535 while wearing a Baltimore uniform. Palmer struck out 90 more in postseason play, to go along with a 2.61 postseason ERA and three World Series rings with the Orioles.

Rays: James Shields -- 1,250

Yes, he'll be remembered for giving up **Bartolo Colon's** lone home run. But Shields was a very dependable starter for Tampa Bay from 2007-12, a span over which his ERA was 3.80 and he made 196 starts. He averaged close to eight strikeouts per nine innings during that time, and the right-hander was an All-Star in 2011, when he posted a 2.82 ERA with a career-high 225 strikeouts and finished third in AL Cy Young Award voting.

Red Sox: Roger Clemens -- 2,590

Clemens, who won a record seven Cy Young Awards and struck out 4,672 batters, which is second all-time to only Nolan Ryan, fanned more than 200 batters in eight of his 13 seasons with Boston from 1984-96. He led the AL three times in that span (1988, '91 and '96), and led the Majors twice, in 1988 and '91. In 1986, he won the first of three Cy Young Awards he'd win with the Red Sox, as well as the AL MVP Award. He set a Major League record by striking out 20 in a game in 1986, and accomplished the feat again in '96 -- that record has since been equaled three times, once each by **Kerry Wood**, **Randy Johnson** and **Max Scherzer**. Clemens would, of course, go on to more success with other clubs, but it was in Boston where he rose to superstardom.

Yankees: Andy Pettitte -- 2,020

Just 64 strikeouts separate Pettitte from Hall of Famer **Whitey Ford**, who is second on the all-time strikeout list for the most storied franchise in baseball history. But Pettitte is at the top thanks to his consistency for the Yankees' dynasty from 1996-2003, when they won four World Series titles, and again from 2007-13, when Pettitte helped New York win another World Series in '09. The left-hander was runner-up in AL Cy Young Award voting in 1996, and his career-high for strikeouts was 180 in 2003.

Guardians: Bob Feller -- 2,581

If he didn't miss three years serving his country in World War II, Feller would likely have finished his legendary Hall of Fame career with more than 3,000 strikeouts. Considered the hardest-throwing pitcher of his time, the right-hander's first Major League start at the age of 17 portended things to come. On Aug. 23, 1936, he struck out 15 St. Louis Browns hitters in 4-1 complete-game victory. Then, after going back to high school for his senior year, Feller led the Majors with 240 strikeouts in 1938, the first of seven seasons in which he'd lead the Majors in strikeouts. His career-high was 348 in 1946, a season in which he completed 36 games. Feller

also threw three no-hitters and holds the franchise record for most strikeouts in a game, with 18 against the Tigers on Oct. 2, 1938.

Royals: Kevin Appier -- 1,458

Appier was one of the best starting pitchers of the early-1990s, posting a 3.22 ERA for Kansas City from 1990-97, a period in which he recorded 1,354 of his 1,458 career strikeouts. The right-hander's finest season came in '93, when he finished third in AL Cy Young Award voting after pitching to a league-best 2.56 ERA over 238 2/3 innings. His career-high in strikeouts came three years later, however, when he fanned 207 batters in '96.

Tigers: Mickey Lolich -- 2,679

Lolich will forever be remembered in Tigers lore for being the MVP of the 1968 World Series, in which he stymied the Cardinals in three starts, posting a 1.67 ERA with 21 strikeouts and just six walks over 27 innings during Detroit's seven-game victory. But the left-hander was also one of the greatest pitchers in franchise history, finishing his 13-season career as a Tiger with a 3.45 ERA and 2,679 strikeouts over 3,361 2/3 innings. His finest campaign was in 1971, when he led the Majors in wins (25), complete games (29), innings pitched (376) and strikeouts (a career-high 308) to finish second in AL Cy Young Award voting.

Twins: Walter Johnson -- 3,509

"The Big Train" was one of the most dominant pitchers in baseball history, ranking ninth on the all-time strikeouts list and owner of the all-time record for shutouts, with 110. And that's not even to mention his 417 wins and 2.17 ERA over a 21-year career with the Washington Senators, who moved to Minnesota and became the Twins in 1961. The all-time strikeout leader for the Twins in the Minnesota era is **Bert Blyleven**, who fanned 2,035 batters in 11 years (two stints) with the club. Blyleven actually struck out more batters for his career than Johnson, fanning 1,666 batters over 11 seasons with the Rangers, Pirates, Cleveland and the Angels, for a total of 3,701 (fifth all-time).

White Sox: Billy Pierce -- 1,796

Pierce is one of the more underrated pitchers in baseball history. He was a seven-time All-Star who had a 3.27 ERA over 18 Major League seasons, 13 of which were with the White Sox from 1949-61. He led the AL with 186 strikeouts in 1953, led the Majors with a 1.97 ERA in '55, and led the league in complete games each year from 1956-58. Overall, Pierce finished one strikeout shy of 2,000 for his career, during which he also pitched for the Tigers and Giants.

Angels: Nolan Ryan -- 2,416

That's already a ton of strikeouts, but we can make it even more impressive -- Ryan only spent eight seasons with the Angels, giving him an average of 302 strikeouts per season in his time there. As an Angel, Ryan led the Majors in strikeouts seven times, made five All-Star teams, finished in the top three in Cy Young Award voting three times, and had each of his top five strikeout seasons (his career-high was a single-season record 383 in 1973).

Athletics: Eddie Plank -- 1,985

Plank has held onto the A's record for over 100 years, and his total was well-deserved. He debuted in 1901 as a 25-year-old and never once led the league in strikeouts, pitching to a 2.35 ERA over sixteen seasons. He was so prolific in his career -- he made 458 starts, threw 362 complete games, and pitched 3860 2/3 innings -- that he remains the top player in franchise history by WAR (77.2).

Astros: Nolan Ryan -- 1,866

There are only 30 active franchises in Major League Baseball, so what are the odds of one pitcher holding the strikeout records for two of them? We're not sure, but they're probably substantially higher when you hold the Major League record too, as Ryan does. With 5,714 K's in a staggering 5,386 innings of work in his career, he is appropriately the only player to lead two franchises in the category.

Mariners: Félix Hernández -- 2,524

For most of the 21st century, Hernández has been synonymous with Mariners baseball, perhaps more than anyone not named Ichiro. The 2010 AL Cy Young Award winner also finished in the top ten of AL Cy Young Award voting five times, made six All-Star teams and won two ERA titles. While Hernández has since left Seattle, and hasn't pitched in Majors since 2019, he has still only officially pitched for the Mariners. Hernández's record is likely going to stand for some time, as the closest active pitcher on the list -- **James Paxton** at 619 -- is no longer with the organization.

Rangers: Charlie Hough -- 1,452

While many, if not most, knuckleballs are developed as a last resort, Hough is a rare example of a player who started his Major League career with one, and, as a result, he had incredible staying power, finally retiring in 1994 at the age of 46 after 25 years in the big leagues. While Hough only hit the 200-strikeout mark once in his career, he spent 11 seasons in Texas and still holds the franchise records for games started (313) and innings pitched (2,308).

Braves: John Smoltz -- 3,011

Smoltz was a mainstay in Atlanta, spending 20 solid years with the Braves from 1988-2008. That he's in the Hall of Fame is probably saying enough, but we can go on. He made eight All-Star teams and won the 1996 NL Cy Young Award after striking out a career-high 276 batters (which also led all of baseball) over 253 2/3 innings. And, unlike many on this list, Smoltz doesn't lead the Braves in any service time-related categories -- he ranks fifth in innings pitched, nearly 1,700 innings behind **Warren Spahn**.

Marlins: Ricky Nolasco -- 1,001

The Marlins are still a young franchise, so the eight seasons Nolasco spent in Miami from 2006-13 are still tied with Josh Johnson for the most by any pitcher. In addition to the strikeout record, Nolasco leads the franchise in games started (197), innings pitched (1,225 2/3) and wins (81).

Mets: Tom Seaver -- 2,541

Widely considered to be the greatest pitcher in Mets history -- Citi Field is literally located at 41 Seaver Way in Queens, and in 2022, a statue was erected outside of the stadium in his honor -- Seaver also holds the franchise records for innings pitched (3,045 2/3) and wins (198), and as of the start of the 2021 season, his Mets career ERA of 2.57 has only been surpassed by **Jacob deGrom** (2.50, min. 1,000 innings pitched). Seaver's career accolades are almost too many to count: He was the 1967 NL Rookie of the Year, winner of three Cy Young Awards and three ERA titles, a 12-time All-Star, won 25 games for the World Series champion 1969 Mets and was inducted into the Hall of Fame in 1992.

Nationals: Stephen Strasburg -- 1,718

Nats history only goes as far back as 2005, but the franchise's history goes back to the Montreal Expos' inaugural season in 1969, making Strasburg's place in their record books all the more impressive. The veteran right-hander has made three All-Star appearances, finished in the top five of NL Cy Young Award voting twice, led the NL in strikeouts in 2014 (242), and won a World Series in 2019. That season, he went 18-6 and pitched a league-best 209 innings, with a 3.32 ERA and 1.04 WHIP and 251 strikeouts. With the departure of **Max Scherzer**, who is third in franchise history with 1,610 K's as a National, this record is likely safe for a while.

Phillies: Steve Carlton -- 3,031

Carlton spent 15 seasons (out of 24 total) in Philadelphia, posting a 3.09 ERA and .600 winning percentage. The Hall of Famer also threw 185 complete games in that period, accounting for nearly 40% of his starts. Carlton made seven of his ten overall All-Star appearances as a member of the Phillies and won all four of his Cy Young Awards, the first of which came in 1972, a season in which he won the triple crown with a 1.97 ERA, 23 wins and a career-best 310 strikeouts. Carlton's closest active competition, **Aaron Nola**, is still behind by nearly 2,000 K's, leaving this record virtually unassailable for the time being.

Brewers: Yovani Gallardo -- 1,226

Gallardo barely edges out his old teammate **Ben Sheets**, who had 1,206 strikeouts during his eight-year Brewers career. Gallardo, who also spent eight years with the team, was a workhorse for the early-2010s Brewers, throwing more than 180 innings in every season from 2009-14. In 2012, he became the first Brewers pitcher to top 200 strikeouts in four straight seasons. He made the All-Star Game in 2010, and finished seventh in the NL Cy Young Award race in '11.

Cardinals: Bob Gibson -- 3,117

With an NL MVP Award, two NL Cy Young Awards, nine All-Star selections, nine Gold Glove Awards and two World Series rings (not to mention two World Series MVP Awards), Gibson was among the most dominant starting pitchers of all time during a career spent entirely with the Cardinals. The St. Louis legend topped 200 strikeouts nine times. In 1974, Gibson became just the second pitcher to record 3,000 strikeouts, joining **Walter Johnson**. During the 1968 season, Gibson posted what some regard as the greatest season from a starting pitcher when he

finished with 22 wins, a 1.12 ERA and 268 strikeouts over 304 innings en route to winning the Cy Young and MVP Awards, as well as the World Series.

Cubs: Fergie Jenkins -- 2,038

Best known for his tenure with the Cubs from 1966-73, Jenkins remains Chicago's all-time strikeout king. Jenkins led the Majors in strikeouts in 1969, and won the NL Cy Young Award in 1971, while making three All-Star teams during his tenure in Chicago. The Hall of Famer eclipsed 270 innings pitched during each of his seven full seasons with the Cubs, leading to a 2,038 strikeout number that doesn't appear to be getting broken any time soon.

Pirates: Bob Friend -- 1,682

Friend, nicknamed "Warrior" for his excellent work ethic, pitched in 15 seasons for the Pirates, including the 1960 World Series championship team. During that season, Friend went 18-12 with a 3.00 ERA and 183 strikeouts over 275 2/3 innings. Despite playing his final game with Pittsburgh in 1965, Friend still leads the franchise in games started (477) and innings pitched (3,480 1/3) as well.

Reds: Jim Maloney -- 1,592

Although injuries cut short what could have been a Hall of Fame career, Maloney edges out **Mario Soto** for the all-time Reds strikeouts title. Maloney, who led the Reds' rotation throughout the entirety of the 1960s, was one of the top starters of the decade. The right-hander was seventh in all of baseball in strikeouts from 1960-69. He had a penchant for silencing opposing teams' bats. Maloney had two no-hitters over his career, one in nine innings and another in 10 innings. He also once lost a no-hitter in the 11th inning and was forced to leave two no-hitters in the seventh inning thanks to injuries.

D-backs: Randy Johnson -- 2,077

Johnson, perhaps the best left-handed starting pitcher of all time, played for six franchises over his 22-year career. But he chose to enter the Hall of Fame representing only one team: The Arizona D-backs. The towering lefty leads the D-backs, who were established as an expansion team in 1998, with 2,077 of his 4,875 career strikeouts, which ranks second all-time to **Nolan Ryan**. Johnson spent more years in Seattle with the Mariners, but the most dominant period came in the Valley of the Sun. Johnson won four Cy Youngs and the 2001 World Series, of which he was the co-MVP, during his two stints and eight seasons with the D-backs.

Dodgers: Don Sutton -- 2,696

Sutton began his career as an overshadowed rookie alongside **Sandy Koufax** and **Don Drysdale** in a dominant Dodgers rotation. But by the time Sutton's Los Angeles stint ended, he sat firmly as the franchise's all-time strikeouts leader. Sutton helped the Dodgers win the NL pennant five times over 16 seasons. During a five-year stretch from 1972-76, Sutton won 93 games while posting a 2.73 ERA and finishing in the top five of NL Cy Young Award voting in each season. Three-time Cy Young Award winner and future Hall of Famer **Clayton Kershaw** enters his start against the Padres on Sunday six strikeouts shy of the franchise record.

Giants: Christy Mathewson -- 2,504

No surprise here. Mathewson spent 17 years with the New York Giants before being traded to the Cincinnati Reds during his final season. He pitched 1,200 more innings than any pitcher in Giants history, so his rank at the top of the franchise's all-time strikeout list isn't a shock.

Mathewson is regarded as one of the best pitchers in baseball history, recording a career ERA of 2.13 with 79 shutouts and 373 wins. **Juan Marichal** leads the franchise with 2,281 strikeouts since the Giants moved to San Francisco in 1958. More recent stars **Madison Bumgarner** and **Tim Lincecum** finished their Giants careers with 1,794, and 1,704, respectively.

Padres: Jake Peavy -- 1,348

Arguably the best starting pitcher in Padres history, Peavy's status atop San Diego's all-time strikeout list is fitting. He enjoyed eight electric seasons with the Padres to kick off his career. His tenure in San Diego reached its peak in 2007, when the fiery right-hander started the All-Star Game for the NL and eventually won the NL Cy Young Award unanimously. That year, he led the league with 19 wins, a 2.54 ERA and 240 strikeouts, recording the only pitching Triple Crown in Padres history. Peavy was traded to the White Sox in 2009, and won World Series championships with the 2013 Red Sox and 2014 Giants, but he will be remembered most for those dominant seasons in San Diego during the mid-2000s.

Rockies: Jorge De La Rosa -- 985

De La Rosa started games in Coors Field for nine years from 2008-16, a period in which De La Rosa earned a reputation as a sort of conqueror of the hitter's paradise in Denver, sporting the team's all-time record for best winning percentage at Coors Field (.763). That success earned him a long career with the Rockies and a spot atop the franchise's all-time strikeout list. But his number one ranking may not last much longer. **Germán Márquez**, whose contract with the Rockies runs through 2023, is within striking distance.

UMPIRE STRUGGLES

Umpirescorecards on twitter. Last week commented on umpire Jeff Nelson. Sunday Angel Hernandez, no stranger to questions of his umpiring, missed 11 strike calls.

Angel Hernandez

MIL vs. PHI
1 - 0



Sunday,
04/24/2022

@UmpScorecards
www.UmpScorecards.com

Overall Accuracy



Called 113 of 129
taken pitches correctly

Overall Favor

+0.77
runs for MIL

MIL: minus 0.22
PHI: minus 0.99

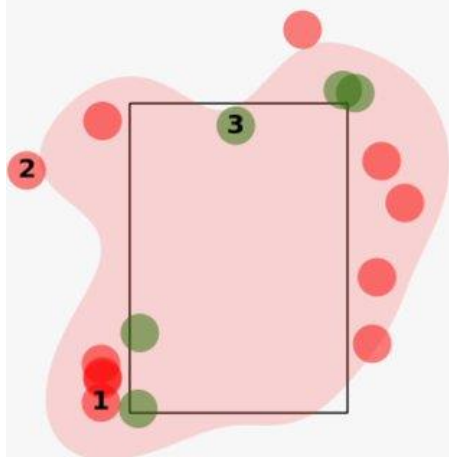
Overall Consistency



13 called balls inside EUZ
2 called strikes outside EUZ

All Missed Calls

true zone and Estimated Ump Zone (EUZ)



Impactful Missed Calls

largest changes in run expectancy

- 1: Bottom of the 9th
Hader to Schwarber
1 out, bases empty
3-2 count, ball is called a strike
- 2: Bottom of the 5th
Lauer to Segura
1 out, bases loaded
0-0 count, ball is called a strike
- 3: Bottom of the 5th
Lauer to Camargo
No outs, runners on first and second
1-0 count, strike is called a ball

Called Ball Accuracy



5 of 81 called balls
were true strikes



Called Strike Accuracy

11 of 48 called strikes
were true balls

BASEBALLS AREN'T FLYING AS FAR, AND HOME RUNS ARE DOWN ACROSS MLB. IS IT THE BALL ITSELF?

Enos Sarris and Ken Rosenthal, The Athletic

It's not just your imagination.

Home runs are down compared to recent Aprils, and the first thing to ask, of course, is why: Is it because of the ball, because of the humidors installed in 20 new stadiums this past offseason, or some combination of the two? And depending on the cause, will the rate rise in the summer months, when Major League Baseball anticipates that the humidors may actually increase offense, rather than decrease it?

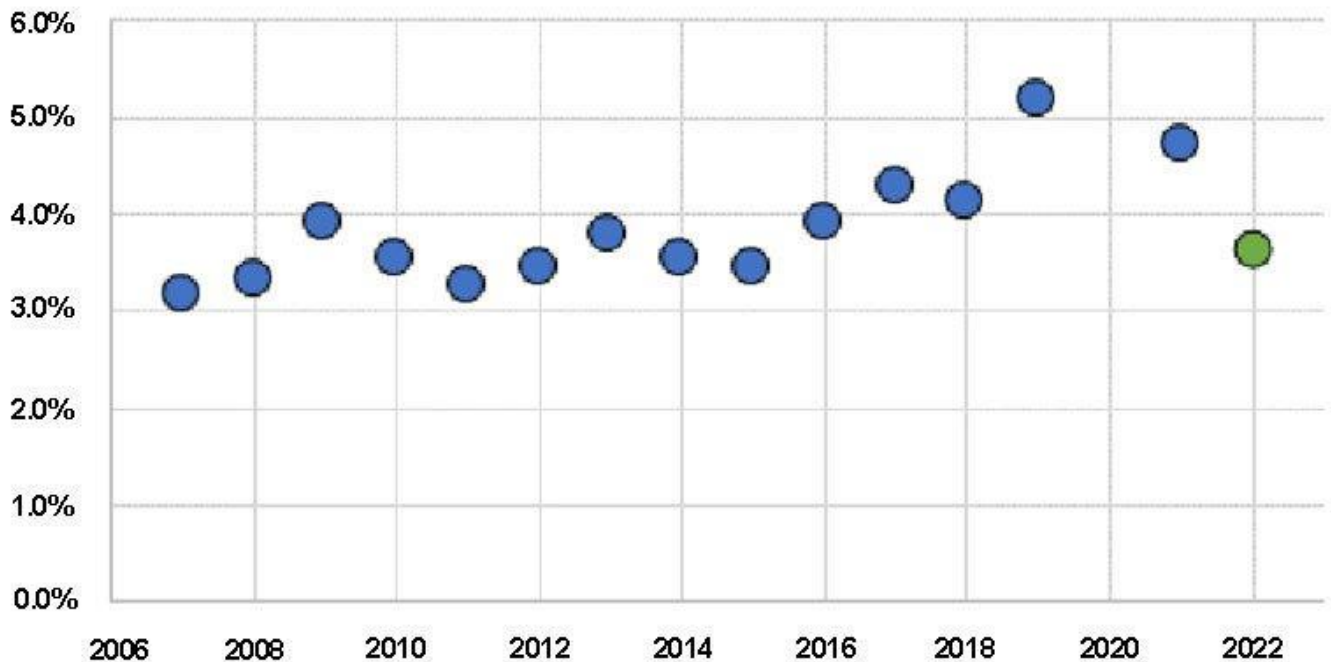
The ball is the first place to look. In the past, we might have said *balls* — a pointed reference to 2021, when production issues caused by the COVID-19 pandemic forced the league to use balls from both the shortened 2020 season as well as the “deader” ones introduced in 2021.

But this ball, at least, is coming from a single manufacturing batch, according to the league. In a March 29 memo sent to general managers, assistant GMs, managers, clubhouse managers and heads of stadium operations, the commissioner's office said, “Those production issues have now been resolved and the 2022 season will be played with only balls manufactured after the 2021 production change. No manufacturing changes have been made for the 2022 season.”

Of course, as demonstrated by the chart below, home runs are down only in comparison to recent so-called “juiced ball” seasons. A spike to end all spikes occurred in 2019. The league commissioned a Home Run committee. The committee made recommendations about the ball and its storage, the league followed most of them, and the home run rate essentially has returned to where it had been in the mid-2010s. Considering the league wants to reduce the prevalence of the three true outcomes (home runs, walk, strikeouts) and create more action, more balls in play, maybe the decline is actually consistent with what they're going for.

Home run rate to start the season

Home runs per ball in play, first 237 games, 2007-2022, excluding 2020



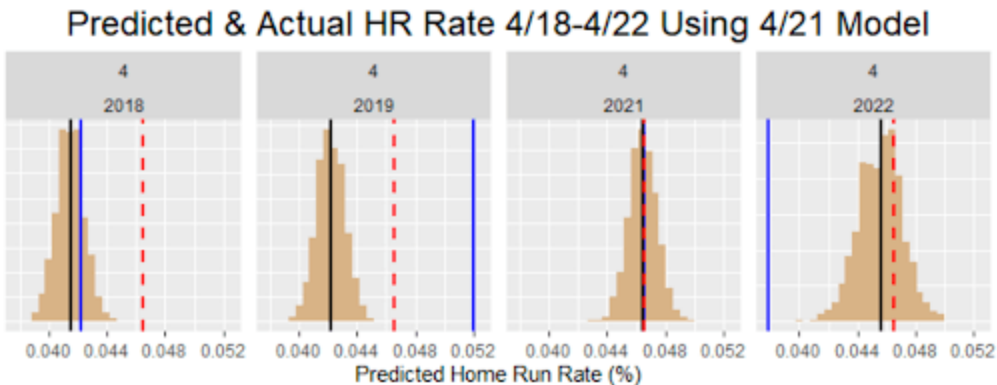
The problem is that the strikeout rate has been soaring through the latter half of this graph. If we combine 2014 home run rates with 2022 strikeout rates, we get the current .232 April batting average, which is worse than the mid-.240s we've grown accustomed to seeing. Run scoring is down big, back down to 1980s levels if the current trends hold.

Fans got used to the extra home runs, and they are currently gone. But the condition might only be temporary.

At the moment, hitters might be behind pitchers coming off the shortened spring in 2022, just as they were coming off the shortened spring in 2020. But rosters will be reduced from 28 to 26 on May 2, and teams, for the first time, will be restricted to carrying a set number of pitchers: 14, with that number further trimmed to 13 as of May 30, MLB announced Tuesday. Starting pitchers might need to go longer when extra relievers are not available. Hitters might benefit from seeing relievers more often during a series.

One thing seems certain about the current, depressed run-scoring environment: It almost definitely is not solely a product of the weather. Derek Carty, creator of THE BAT projections, includes weather as well as batted ball dimensions like launch angle and exit velocity in his model. His model says the current weather-adjusted home run rate is the lowest of the last five years, aka that aforementioned juiced ball era.

Alan Nathan, a physics professor who has advised MLB in the past, corrected for weather by comparing the months of April across that period by batted ball quality, and came up with similar findings. His work below shows that the number of home runs (in blue) comes far short of 2021's April (in dashed red) or even the projected number of home runs given their actual launch angle and exit velocity, as well as the assumption that the ball will act like it did last year (black).



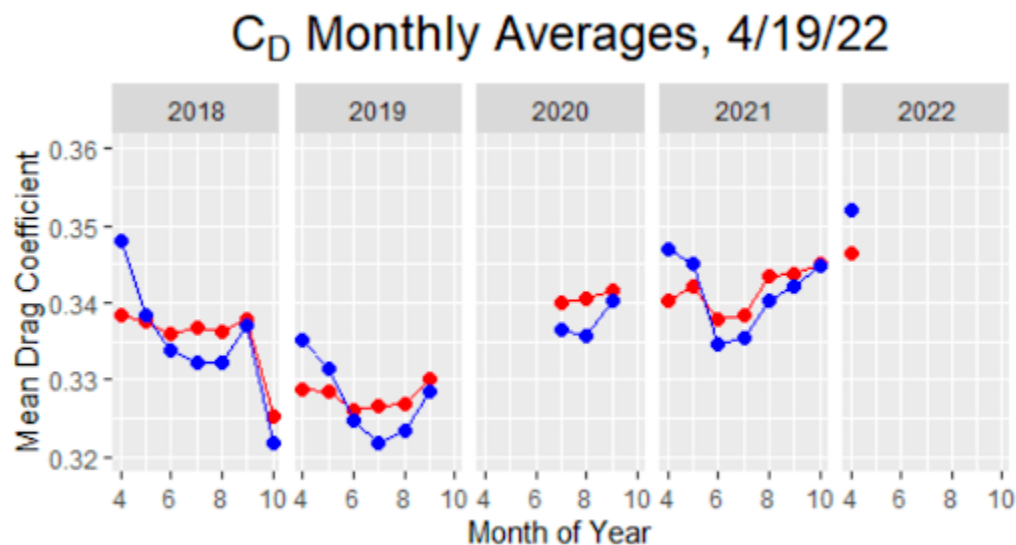
In a short paper he posted to Twitter last week, Nathan also found that the drag (C_d) on the ball — once atmospheric conditions were taken into account — is higher this year than last year. That's significant because higher drag on the ball means that it will not go as far, even if it's hit as hard.

"I don't have any explanation why C_d might be higher in 2022," Nathan said when contacted about his paper. "I'd prefer to see a few more weeks of data before speculating about that."

But if drag is indeed higher on the ball this year, then maybe much of what we are seeing could be due to a change in balls. We know two balls were used last season, thanks to Bradford William Davis and Dr. Meredith Wills, who used production codes to show the distinction. The original ball intended for use in '21, according to a memo obtained by *The Athletic*, was supposed to reduce batted ball distance by around two feet. And that ball, the league says, is the only one in circulation this season.

One fact that sticks out in any ball-centered explanation is that MLB, according to its own memo, intended to change the bounciness of the ball — they wanted to "center the ball with the specification range for COR and CCOR," and the Coefficient of Restitution is a fancier way of saying bounciness. There was nothing said about the drag on the ball in that memo about the new ball. In fact, drag was something that the league conspicuously didn't test before rolling out that version of the ball in 2021.

Now we have a ball that is producing the highest average exit velocity in the Statcast era but also some of the highest drag numbers, as Nathan shows in this figure depicting the coefficient of drag (C_d) both measured (red) and adjusted (blue).



Higher drag would mean lesser distance on batted balls, and that's what we're seeing in the data. But there's something else to consider. Baseball, by installing 20 new humidors this year, sought to improve consistency across the sport. And batted ball distance is decreasing more in the stadiums that installed a humidor than ones that already had one installed.

A "Barrel" is a Statcast-defined batted ball in play that is hit at the right angles and with the right exit velocities to produce power. Barrels aren't traveling as far this year in the air. The distances below are all weighted by the number of balls in play in each venue.

Barrels aren't going as far

<u>Situation</u>	<u>Number</u>	<u>Distance</u>
2021 April all MLB	1566	383
2022 April all MLB	899	375
2021 April humidor	404	384
2022 April old humidor	232	382
2021 April no humidor	1147	383
2022 April new humidor	637	373

(Source: Statcast)

We can see immediately from this table that there is some sort of interaction between the humidors and the ball when it comes to batted ball distance. Barrels are coming up two feet short in stadiums that had a humidors last season, so it's not all humidors. But barrels are coming up 10 feet short in stadiums that just installed a humidors this past offseason.

Why would a humidors make the ball less bouncy when most of the remaining parks that added them were in humid spots — meaning the humidors would dry out the ball, on average, and make it more bouncy?

The key is in that word: average. These more humid places become more humid *later* in the season. Oakland, for example, is one of the more humid parks over the course of the season, but this April it has been dry. The issue is the dew point.

"A room at 60 degrees and 65 percent humidity (dew point: 48 degrees) is effectively drier than one at 70 degrees and 50 percent humidity (dew point: 51 degrees)," said Dr. Wills, independent researcher and baseball deconstructionist. "If you keep the dew point constant, temperature fluctuations become less of a problem, since the ambient moisture in the air stays the same."

The humidors will try to keep balls at a 50-53 degree dew point, and over the last homestand in Oakland, the dew point was 46-48 degrees. The humidors was adding moisture to those balls, which would cause them to be less bouncy. This likely is at least part of the reason Oakland has the second-biggest downward turn in the distance on batted balls, losing a whopping 24 feet on barrels so far.

MLB chose to set the humidors to one setting — 70 degrees and 57 percent relative humidity — across all parks except Coors Field, which uses 65 percent relative humidity. Nathan, who was a member of the Home Run Committee that was commissioned in 2019 to understand why the ball was flying over the fence, wasn't sure this was the best choice.

"If I were advising MLB (and I did not on this issue), I would advise them to set the humidors to a setting that is an average of the temperature and humidity of the parks last year," Nathan said.

If the league had adopted Nathan's suggestion, we might see smaller differences between April and August in each park, or smaller differences between how each park played in the past and how it is playing now. As it is, we will need to see Oakland in August to fully understand how Oakland with a humidors will play over the course of the 2022 season.

Oakland was also the only place where sources could definitively tell *The Athletic* how balls had been stored before humidors: in a room with no air conditioning. All 19 other parks with new humidors used to follow their own individual protocols for storing the ball, known to those teams and MLB leadership, and those differences are relevant to how the humidors will affect their batted balls this season.

Over the winter, balls are stored in a humidity and temperature-controlled environment at the Rawlings distribution facility in Washington, Mo., league sources say. The environment when they are transported from a factory in Costa Rica to the Rawlings site is uncontrolled, as is the environment when they are transported from the Rawlings site to major-league parks. Scientific experts, however, advised the league that it could achieve the necessary consistency by requiring the balls to be stored in the humidors at the park for two weeks before being used in games.

Is two weeks actually enough? The drag is up at the beginning of the season in each of the graphs of the drag coefficient above from Nathan. Is there something about the process of drying out and then being put in the humidors to start the season that increases drag and decreases the distance the balls go in the air?

After taking apart nearly 200 balls from the 2021 regular season, Dr. Wills thinks the rehydration process the balls go through when they go from dry storage to the humidors may be causing the rise in drag.

“The wool yarn inside a baseball is sensitive to humidity,” she points out. “Under dry conditions, it loses structural integrity, and pressure from the covers shrinks the ball. If you add back moisture — say, in a humidors — the ball will expand again, but there’s no guarantee the yarn layers will do so symmetrically.”

“There’s a gap in the covers along the seams, meaning there’s not as much pressure,” Wills added. “The yarn should expand more into areas that push back less, raising the seams. Since the deader balls are wound more loosely, they collapse more when dried out and are better able to push up between the covers. As a result, their seams would likely go up even more, producing balls with even higher drag. In other words, storing those new balls in humidors may be killing offense.”

All of that should mean that the humidors have been dampening offense by reducing the balls’ bounciness, because of the current state of humidity around the league. The deadened ball now fully adopted by the league is reducing the balls’ bounciness as well. The humidors and ball may also be reducing offense by the way they interact, increasing drag by increasing the seam height.

Yet, the effects might be reversed as the more humid months come and the humidors instead dries up the balls. And the two-ball controversy last season, along with the length of time necessary to test and implement a new ball, likely means the league will not make an adjustment with the ball or humidors in the middle of the season.

So nope, the ball’s not flying as far right now. But if the current patterns hold — and if the league eventually perceives them to be a problem rather than the desired outcome — the commissioner’s office probably cannot act until next offseason. Maybe the good news is that the relationship between home runs hit and attendance is not a strong one. In the meantime,

hitters will hit the ball as hard as they can, hoping it goes over the wall more in the more humid months, and the rest of us will continue debating the relative merits of home runs.

TRIVIA CHALLENGE ANSWERS

Back to Back MVP seasons.

2012-2013 AL **Miguel Cabrera**

1993-1994 AL **Frank Thomas**

1982-1983 NL **Dale Murphy**

1980-1981 NL **Mike Schmidt**

1975-1976 NL **Joe Morgan**

1960-1961 AL **Roger Maris**

1958-1959 NL **Ernie Banks**

HOUSEKEEPING

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