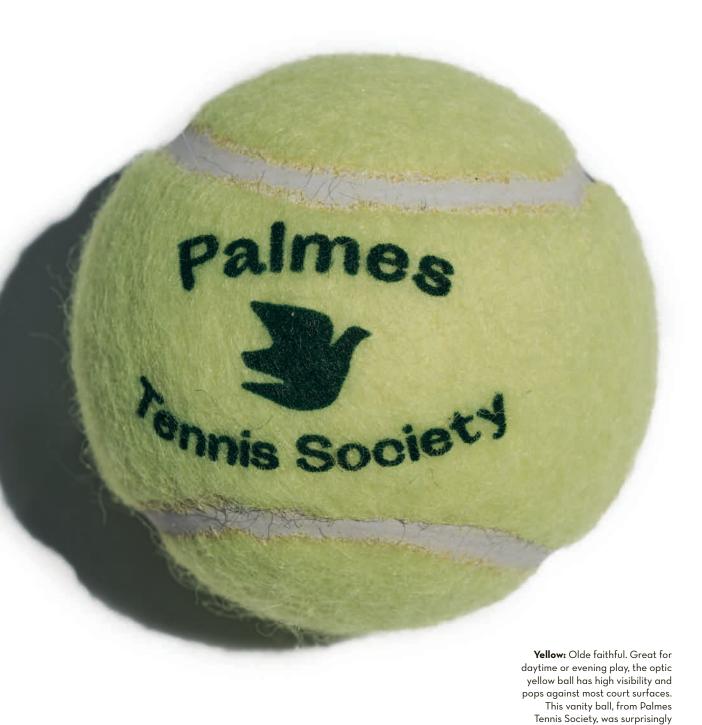
Newfangled Balls, Please

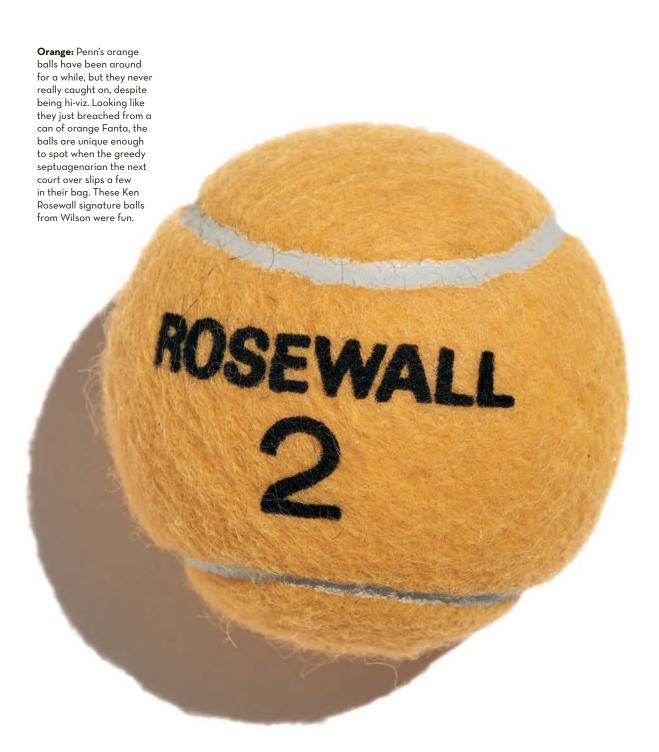
Optic Yellow Replaced White for Better Visibility on TV-but the Tinkering Didn't Stop There.

By Lydia Horne Photos by Matthew Salacuse

amie Capel-Davies, Head of Science & Technical at the International Tennis Federation (ITF), works in a small laboratory in Roehampton, London, on the grounds of the All England Lawn Tennis Club (AELTC). Every year, Davies and his team of three engineers evaluate between 3,000 to 5,000 tennis balls for ITF certification. Manufacturers are invited to submit ball samples in June; balls that have been approved by the ITF the year prior must be submitted again for retesting. Each ball variety undergoes a rigorous series of tests that take a total of three days, including a 24-hour period for



playable.





Two-tone: Popular among kids, two-tone balls are great for beginners learning to apply spin. Players can gauge the rotation of the ball by watching the two colors swirl together. In the late '80s, when neon was all the rage, Penn offered a two-tone regulation ball.

the ball to acclimatize to the laboratory environment. Pressure-less balls, commonly used for high-altitude play above 4,000 feet, must be acclimated for at least 60 days at the altitude of the specific tournament at which they are intended for use. And then there's the follow-up: Davies evaluates balls delivered straight from tournaments to ensure there's no discrepancy between the lab-approved product and the ball that's circulating in competition.

Davies, stumbling over large bags of tennis balls sitting on the floor, points out testing equipment around the lab, a surprisingly messy space given the exacting nature of the activity it hosts. In one corner, there's an open rectangular chamber with a granite floor for observing bounce height. Another transparent case holds a circular disc resembling a reel of film for testing the balls' dura-

bility after heavy use. Metal ring gauges for measuring diameter are scattered around a central table.

The ITF's website features a searchable list of approved tennis balls produced by roughly 300 brands. The organization has indexed professional-level balls into "types" that prove challenging for the uninitiated to parse. All of these balls are yellow—the last time the ITF approved a white ball (Wilsons) was in 2018. However, beginner balls offer more variety. Stage 1 balls, a mix of softer pressurized and depressurized balls, are green. Davies says Stage 1 balls are popular with adult beginners who don't want to be seen using the colorful balls aimed at kids, like Stage 2s (orange) and Stage 3s (red).

Davies' team formerly tested ball color using a spectrophotometer but found it too time-consuming. "People can tell whether



Pink: Part of the proceeds from the Penn Pink Championship Balls is directed toward breast cancer research. The balls are bright enough to follow from far away but light enough to make line calls a challenge.

something's white or yellow or some other color," Davies says. But there was a time when color was studied as meticulously as any other aspect of the ball in an effort to improve the quality of the game. Now it's significant for an entirely different reason: marketing. Brands have identified colorful tennis balls as a way to cash in on the rising popularity of the sport. The question is: Do these new vibrant balls offer anything of substance—or are they just full of hot air?

In 1968, Penn made the first fluorescent yellow tennis ball. It was introduced as a solution for folks struggling to follow the traditionally white tennis ball when watching on TV at home. An article published in 1937—the same year Wimbledon was televised for the first time—by the BBC's weekly magazine, *The Listener*, recounts the challenges of early televised tennis: "It has seldom been possible to watch the progress of the ball itself. But the strokes and the movements about the court have all been so clearly visible that the absence of the ball has

Tenez: Tenez's Hit Me Baby balls turn violet when they're rotating in the air, as the pink text stirs into the white felt of the ball. The balls have less air pressure than standard championship balls, making it hard to play a real set. But don't get me wrong—they look great, and I can't wait for the release of Tenez's next can: Blue Balls. Think about it.







hardly seemed to trouble the viewer after his eyes and his spectator's reactions have become accustomed in a minute or so to the strangeness of it all." Despite tennis fans' unwavering optimism, the networks wanted better. In 1972, the ITF approved the optic yellow tennis balls as an option for official tournament play.

At first, not everyone was convinced. After all, the decision to go yellow was made primarily in the interest of keeping up with modern communications as opposed to the enhancement of the sport itself. Wimbledon, the tournament most concerned with tradition, continued using white balls for years—even after the other three Slams transitioned. Faced with a surplus of white balls, manufacturers devised a new marketing strategy hawking the product as the preferred ball for grass-court play. This was smart thinking. Specializing white balls imbued them with one of tennis' highly valued and highly capitalized qualities: nostalgia.

Eventually, Wimbledon lost its resolve. On July 10, 1985, the organizers of the event conducted a trial match between two professionals on one of their grass courts. It was a bright day, and the grounds had practically turned into a dust bowl after heavy use during the recent Wimbledon tournament. The players used white balls for the first four games, yellow balls for the second four games, and a mixture for the final four games. The BBC filmed the event. Afterward, the players reported that they had no preference for either ball, echoing the general opinion of top players. While the BBC announced the test to be inconclusive by their technical standards, the AELTC committee concluded that the yellow ball popped more against the dried-out court. In the interest of improving TV picture and reducing the burden on Slazenger (Wimbledon's official tournament ball manufacturer) to produce two colored balls,

the committee voted to initiate yellow balls to the tournament.

Wimbledon continues to require that players wear all white, but in any other Slam, color is abundant. And this is a good thing: The way to distinguish different shapes is through contrast, and our eyes are usually attracted to the brightest part of an image. Optic yellow, for example, is an especially high-visibility shade, and yellow, more generally, is the lightest color. It's the obvious choice for a small, high-flying object. However, color doesn't exist in a vacuum-and on the tennis court, there's a lot to look at: the shade of the court, the hue of the opponent's dress, the color of the racquet. Depending on the playing environment, optic yellow might not be the best choice.

Leslie Harrington, executive director of the Color Association, explains that tennis' color palette is uniquely bright because players have independence: "When you're playing a team sport, it's less about personal color choice and more about the color as unifying the team. What you wear is radically different than when it's an individual sport." Given the freedom to choose, some might even intentionally wear tennis attire in shades that compete with the color of the ball. Harrington suggests that Nadal's tendency to wear neon colors on the court could possibly be less of a fashion statement and more of a strategy.

Recreational players are also attracted to colorful gear, although for arguably less Machiavellian reasons. Claudia Michelle Gaviria is the founder of Tenez, an L.A.-based tennis apparel brand and meet-up group that promotes a unified front—the banner on the front page of their website reads "We are not a club." Tenez's Instagram page features sweaty glamour shots of '80s tennis stars and occasional pictures of merchandise (vintage tees). At a glance, Tenez appears to be 90 percent vibes, 10 percent business.

"It's about the appearance of tennis and how that circulates as a kind of cultural symbol."



Black: These balls bounce, but they do little else. Black balls are tough to see until they're roughly 20 feet in front of you. Nearly impossible to pick up in low lighting. These Fred Perry novelty balls are very handsome, though—it's a shame they're useless for play.

Gaviria designed Tenez's tennis ball line in collaboration with artist Gaia Marcaccini. The balls are white and emblazoned with "hit me baby" in pink bubble letters, an ode to Britney Spears' 1998 hit. According to Marcaccini, this was a prescient style choice: "We [planned] the balls way before Britney was released from her conservatorship. And then we were like, 'Oh my God, she's out. We manifested this.'"

When researching the nuts and bolts of manufacturing, Gaviria discovered there would be sacrifices made to the quality of the ball if she decided to move forward with her intended design. The "hit me baby" logo would require a custom plate to stamp the lettering but, unlike Wilson or Penn, which benefit from a more standardized production process, the impact of the plate would reduce the air pressure of the ball. Gaviria decided to go for it, recognizing that the balls would be "playable" but not ITF-approved.

"That standard-colored tennis ball is cool and great," Gaviria explains, "but it's not really necessary unless you're watching on TV. I feel like for recreational play, it really doesn't matter. Changing the colors is always fun on the court, especially when tennis can sometimes be a little bit repetitive."

Testing a can on a sunny day in San Francisco, it was evident that Tenez's Hit Me Baby balls (\$18) are certainly not made for competitive play. They only sort of bounce, and the pink lettering against the white felt creates a faint violet color when the ball spins rapidly through the air. Daisy and Olive Maunupau, Division 1 players at UC Davis, rallied with the Tenez balls for a few minutes. "If you're playing at a more advanced level, [these balls] are harder to play with," Daisy explains. "The ball is moving a lot faster and a lot closer to the lines."

Although lacking utility, the Tenez balls

are successful in capturing the ethos of the brand and the spirit of the game. Others have caught on too: The clothing brand Fred Perry designed a line of black tennis balls with Price of Bath, a family-run ball manufacturer in the U.K. Popping open a can produced a great waft of permanent-marker-scented air, one of those scents that instantly spark a headache but that you also can't stop sniffing. Unlike the Tenez balls, the black balls actually bounced, although they were impossible to see until 20 feet away. Like the Tenez balls, however, they photograph nicely against tennis whites.

While the proliferation of tennis has made it easier to join in, it's also now easier to buy in: Over the past year, the women's workout brand Alo Yoga released tennis skirts and dresses priced between \$75 and \$100. It's unclear whether the clothing is intended for serving or strutting; one shopper relayed that the skirt's built-in shorts can hold only one tennis ball at a time. A.P.C., the French ready-to-wear brand, recently collaborated with Lacoste for their collection Interaction #14, an "essential sportswear infused with a military touch and a splash of colors and 90s volumes." Advertisements show a blond model in a sporty pixie cut wearing sneakers, calf-high socks, and an oversize alligator-print white tunic. She reaches for an invisible ball, hands clutched around an invisible racquet. She could be mistaken for any '90s tennis star, minus the muscles. Minus the sweat. Minus her apparent preference to mime tennis rather than actually play it.

Is the expansion of the tennis industry an indicator that the historically rigid sport is becoming inclusive? "Democratizing the market often stands in for expanding the market," says artist and writer Carlin Wing, Lydia Horne is a Los Angelesbased artist and journalist. She's written for publications including Art Papers, Hyperallergic, and Wired. who's working on her forthcoming book Bounce: A History of Balls, Walls, and Gaming Bodies. "It's about the appearance of tennis and how that circulates as a kind of cultural symbol." Wing separates tennis players into two categories: those who care about specifications and those who could care less. But which group holds greater influence? Hardcore players are expected to uphold the aesthetic traditions of tennis, but the substantive changes to the sport are made in the interest of attracting non-players. Balls turned yellow for spectators. Tennis skirts appeared in popular stores. Wimbledon added court lights to extend broadcasting into the evening. Though often preserved in aspic, the stodgy rules of tennis are not immune to expiration.

The Maunupaus chafe at memories of the overly competitive sticklers they've encountered over the course of their tennis careers. Olive recalls, "I was wearing a neon yellow shirt and these two 45-year-old guys we were playing told me to change. They said my shirt was too distracting with the ball." Daisy snorts, recalling the moment. "I refused," Olive continues. "They just weren't very good."

This summer, the sisters are leading a tennis clinic at a summer camp hosted by the Randall Museum in San Francisco. They purchased a few cans of Penn's Pink Championship Balls to fill the hopper—the kids love them, the Maunupaus say. On the court, their elementary school campers zoomed around the court in circles, sprinting up to the net for volleys before running to the other side to pick up their ball. At the end of the lesson, the Maunupaus gave out awards to individual players, and the group cheered excitedly for the recipients of "most improved" and "best attitude." Dressed in jeans, skirts, sandals, and lightup shoes, the next generation of tennis players were writing their own rules.



The legend.