Forward Tees: Their Placement and Golfers' Decisions to Play Them

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LITERATURE REVIEW SUMMARY

At first glance, the topic of forward tees – and their subsequent use – is a simple one. Golfers should play from a set of tees that provide a length (yardage) that matches their ability level, clubhead speed, or driving distance.

Consequently, several initiatives have been introduced that encourage golfers to play from the appropriate set of tees. By having golfers play from the correct set of tees, courses can drive more revenue, golf can become more fun, players will experience more of a feeling of success, and pace of play may improve.

However, logic is not the only factor affecting where forward tees are placed, who plays from them, and why. For example, there are industry trends and social stigmas that outweigh pragmatic arguments about tee selection. The following literature review provides some evidence for the considerations around forward tee placement and their use. Content within each category often relates to other

categories and sometimes overlaps. The bibliography is organized by the following categories:

1. Tee choice based on golfers' ability level, course length and conditions

Pragmatic recommendations for tee selection that focus on course length, course conditions and the players' ability level (driving distance, clubhead speed, and/or Handicap Index®).

2. The stigma of forward tees

Despite a movement to change names or colors associated with specific tee boxes, forward or red-colored tees remain associated with "ladies' tees." Male golfers are reluctant to play from forward tees because of this association, even if it's a more appropriate length and their enjoyment of the game would likely increase.

3. Golfers overestimate their driving distance

Incongruence between actual and perceived driving distance means that when golfers are asked to select tees aligned with their ability level or driving distance, they will be less likely to select forward tees.

4. Female golfers are conflicted about forward tees

Female golfers face a dilemma when advocating for appropriate tee box positions. Since forward tees largely remain associated with "ladies' tees," asking for a reduced length course reinforces stereotypes about female golfers. Furthermore, female golfers scores may be less respected if forward tees are perceived to offer a significant advantage compared to other, "longer" tees.

5. Forward tees – An afterthought

Those responsible for naming and/or assigning a specific color to tees, and those who set up tee boxes for play, may or may not value correct

forward tee positioning. Tee box selections tend to offer one forward tee and two or three others that are significantly farther back. This means that female golfers have a very limited tee box selection compared to male golfers, i.e., female golfers with a low Handicap Index are assigned to the same tee box as female golfers with a high Handicap Index, because the next farthest set of tees make the course too long. This creates a homogenizing effect of female golfers and reinforces the cultural belief that the forward tees are, in fact, tees for female golfers. Only having one tee option also gives highly skilled female golfers a significant advantage.

6. Forward tees to drive revenue

Golf course operators recognize that forward tees can speed up play and make golf more accessible. Therefore, forward tees are used to attract a wider range of golfers and increase the number of rounds played.

CONCLUSION

Forward tees can be an asset for both golf courses and golfers. Forward tees can make golf courses more playable to a wider range of players, they can make golf more enjoyable, and they can speed up play. The challenge for the golf industry is to present forward tees in ways other than the presumed "ladies' tees." This requires golf course architects, green committees, owners, operators and other decision-makers to recognize the need for forward tees and develop strategies that will change golfers' behaviors around using them.

ANNOTATED BIBLIOGRAPHY

1. Tee Choice Based on Golfers' Ability Level, Course Length and Conditions

18 Birdies (n.d.). What set of tees should I play?

An online guide for new golfers transitioning from the practice range to the golf course. It describes the terminology of tees, how to expect them to be presented and which tees to select based on the golfers' driving distance, not gender. The article recommends taking the distance hit by a player's five iron, then multiplying that distance by 36. For example, if a golfer hits a five iron 150 yards, they should play from tees set at approximately 5400 yards.

Adams, B. (2011). Creator of tee it forward weighs in. USGA.

Retrieved from: https://www.usga.org/articles/2011/09/creator-of-tee-it-forwardweighs-in-21474842437. html

Barney Adams, founder of Adam's Golf Inc., coined the phrase "Play it Forward." He argues that golf is more enjoyable when playing from forward tees, but the certain aspects of golf culture encourage players to play from tee boxes that make the course too long.

American Society of Golf Course Architects. (n.d.). Longleaf Tee Initiative.

Retrieved from: https://asgca.org/longleaf-tee-initiative/

The American Society of Golf Course Architects' (ASGCA) "Longleaf Tee Initiative" – named after Longleaf Golf & Family Club – is designed to increase playability of courses and golfers' enjoyment. Golfers are directed to hit balls on the practice tee, note the shot distance, and play from

associated tees. A one-size-fit-all approach for where to locate teeing grounds is not recommended and the location of new tees or redesigned tees on courses should be on a case-by-case basis.

American Society of Golf Course Architects (2017). Longleaf Tee Initiative. *By Design.*

This issue of the ASGCA's magazine is devoted to the Longleaf Initiative. The system provides a variety of options for selecting tees to accommodate golfers of all skill levels. It guides readers through recommended processes for using the Longleaf system at their course – evaluating clubhead speed on the practice tee, then using easy-to-follow recommendations for tees based on driving distance. Another notable item mentioned is that with more teeing grounds you can become construction and turf-friendly through building and maintenance processes.

American Society of Golf Course Architects (2018). Forward tee: Case studies in additional tees.

Retrieved from: Forward Tee Interior FINAL.pdf (asgca.org)

This paper cited a survey of golf course superintendents (conducted by the Sports & Leisure Research Group) that demonstrated their desire to offer different tee boxes for players. The paper goes on to summarize case studies of 15 clubs that have introduced different tees (Forward Tees, Scoring Tees, Longleaf Tee System, Golf for Life Tees). All highlighted case studies reported that the tees have been well received. Among the benefits cited was that the course was more playable to a wider section of players.

Commented [JP1]: I don't understand how more tees equal friendlier construction and maintenance practices. Not sure what to suggest - Probably delete it.

Commented [JP2]: Existing link wasn't working. Feel free to adjust

Barefoot Resort & Golf (2020). Pro tips for playing in cooler weather. Barefoot Resort & Golf.

Retrieved from: www.barefootgolf.com/pro-tips-forplaying-in-cooler-weather-2/

A discussion of the impact weather has on tee selection. This website for Barefoot Resort & Golf simply recommends to consider hitting a stronger club or moving up a tee box in cooler weather. Considering weather is not often mentioned in searches, it points to weather being an overlooked or minimal factor.

Blake, J. (2000). Narrowing the gap. The Atlanta Constitution.

The author suggests that "personal tees," or selecting any location on a hole you would like to use as a tee, could be used for junior and novice golfers – like bunny slopes at ski resorts. Young and novice players can play without holding up the course.

Bohannan, L. (2017). Shorter tees for older golfers. The Desert Sun.

Bohannan argues that current trends in golf course length do not accommodate aging golfers. The article recommends Barney Adams' "Play it Forward" suggestion that players ages 70 or older play from tees of 100/300/450 yards for men and 75/150/250 yards for women on par 3/4/5 holes. It is suggested that players would then be hitting the same clubs into greens as elite players.

Commented [JP3]: Is this what "personal tees" means?

Cowan, J. (2013). Tee it forward—Use combo tees to have more fun. *Northern California Golf Association*.

Retrieved from: www.ncga.org

This article references the utility of combination tees (a mixture of forward and back tees). When rating courses, the author sees the value of including combination tees, thus providing more options that will count toward a players Handicap Index and provide a more enjoyable experience.

Covey, T. (2018). Results: The MyGolfSpy distance survey. (Does the ball go too far?) MyGolfSpy.

Retrieved from: https://mygolfspy.com/results-themygolfspy-distance-survey-does-the-ball-go-too-far/

An opinion piece about the USGA's 2019 Distance Insights survey. The survey design was criticized for being overly long and biased. In response, MyGolfSpy conducted its own survey of 3305 golfers. Participants were typically recreational golfers without a handicap. They reported they did not hit the ball too far, were satisfied with their driver's distance, and played courses from 6000 to 6500 yards. Conclusions were that this sample of golfers is satisfied with current equipment, rules and courses. Golfers did not want the ball or equipment rolled back. Lastly, the article suggested golfers were receiving contradictory information on: 1. Courses are too long so play it forward; 2. Technology may enable hitting the ball too far. Data are presented descriptively with no deeper investigation.

Dorman, L. (2011). Tailoring the tees to the players to bring the fun back to golf. New York Times.

Retrieved from: https://onpar.blogs.nytimes.com/2011/07/10/tailoring-the-tees-to-theplayers-to-bring-the-fun-back-to-golf/.

A blog post in the New York Times that reviews Barney Adams' "Play it Forward" campaign as a way of increasing golfer satisfaction and retention in the game. It includes a chart that recommends course length based on golfers' driving distance. The article acknowledges that shorter courses are not a panacea and that golf faces many other issues. And, that players enjoy playing from longer tees so they can try to emulate what the pros do.

Gaines, R. (n.d.). Tee selection for dummies. GAM.org.

Retrieved from: www.gam.org/?page=Tee+Selection+for+Dummies

According to the Golf Association of Michigan (GAM), players should choose tees based on distance, course rating and slope rating. These suggested yardage guidelines take a player's handicap and translates it to yardage for both men and women. Ron Gaines, GAM handicap chair, also recommends removing the "red tee" or "ladies' tee" stigma as well. He also recognized that most male amateurs are playing from tees which are too long for them. While these are suggestions, there is no data showing whether players follow these recommendations.

Hall, Z. (2014). USGA's, PGA's tee It forward can be fun for any golfer. *Bend Bulletin*.

Retrieved from: https://www.bendbulletin.com/sports/usga-spga-s-tee-it-forward-can-be-fun-for-any-golfer/article 7ef3ebbb-b132-5240-a0e3-217ee80629ba.html

The journalist wrote about his experience of playing a combination set of tees that equaled a course length of 5851 yards, 800 yards shorter than his usual tees. He summarized how the shorter yardage changed his strategy and how he experienced more success and had more fun.

Hueber, D. A. (2012). *The changing face of the game and golf's built environment*. Clemson University, Ph.D. Dissertation.

This dissertation is focused on the changes to golf course construction over time, from the "Golden Age" to present. Chapter 4, Table 4.8 on Golf Course Length was potentially useful background information on the growth (in length) of courses over time. In the 1920's 46.6% of courses were <6400 yards in length. By the 1990's only 18.6% of courses were <6400 yards.

Kaspriske, R. (2011). Living large. Golf Digest.

Retrieved from: https://www.golfdigest.com/story/fun-living-large

In this "Fun" issue of Golf Digest, the author described how he started playing the forward tees to make golf more fun. Although he had a 13 handicap, he played courses less than 5000 yards and got to enjoy breaking 80 and putting for birdies.

Kerr-Dineen, L. (2020). This simple formula can tell you which tee box you should play from. *golf.com*.

Retrieved from: www.qolf.com/instruction/what-qolf-tee-box-should-i-play-from/

The author, who is director of game improvement content at GOLF Magazine, suggests handicaps might be the standard for choosing a tee shot, however it does not translate to all players. This is especially true for those with shorter tee shots as well as female players. He suggests that beginning golfers take the distance of their 5-iron and multiply it by 36 to get their ideal course yardage. Again, this article does not indicate whether most players follow this guidance.

Oregon Golf Association (2018). What's up with the numbered tees? *Golf Course*.

Retrieved from: https://ogagolfcourse.com/numbered-tees-clubhead-speed/

A review of a numbered tee system based on research from the PGA of America and the USGA. The article suggests that if your clubhead speed is less than 75 MPH you should play from tees #1, if it is between 70 and 85 MPH then tees #2. If clubhead speed is greater than 90 MPH select tees #3, and players with a clubhead speed exceeding 100 MPH should select tees #4.

PGA of America (2015). Setting up golf courses for success: A critical factor in attracting more women to golf.

This document uses tee placement to explain the high attrition rate of women golfers. Specifically, the recreational golfer who hits her drive approximately 140 yards. In addition to considering the total course length (recommended at 4080 yards), this document suggests that new tees are

required if forced carries of over 50 yards are necessary. On these holes, female golfers with a handicap higher than 25 are forced to layup with second shots because of hazards. Additionally, forward tees are positioned at the bottom of slopes resulting in the effective playing length of holes being longer by needing to play uphill. Course setup should also consider other characteristics of slower swing speeds – low flight and less spin for example. Advice is also given for "Design Fairness," recommending tees based on swing speeds, and ensuring forward tees do not appear as afterthoughts. Lastly, the document recommends changing the color codes of tees so that forward tees are not just associated with female golfers.

R&A & USGA (2020). Distance insights project: Conclusions from the distance insights project: Implications of hitting distance in golf.

Retrieved from:

https://www.usga.org/content/dam/usga/pdf/2020/distanceinsights/SOC-FINAL.pdf

Overall, golf course lengths have increased over time to accommodate both the desire for golfers to play longer courses and golfers increased hitting distances. For non-elite male golfers and female golfers this trend has consequences. The report notes that as golf courses increase in length, the distance from forward tees also increases. It reports that the average forward tee course length in the United States is 5200 to 5300 yards. This is much longer than research suggests it should be to make golf enjoyable for players with slower clubhead speeds. Thus longer courses result in many golfers playing from tees that exceed recommendations. This means golf becomes more difficult, less fun and play becomes slower.

Shelley, J. (2018). Green committee chairs must perform a balancing act. Washington Golf.

Retrieved from: https://wagolf.org/news/greencommittee-chairs-must-perform-balancing-act/

Is it a positive or negative thing if the leader of a club's Green Committee is one of the club's best players? It is argued that it does not matter if leadership recognizes, 1. How the course plays for golfers with slower swing speeds, and 2. There are at least three women members on the committee to put forth a different perspective. Initiatives like Play it Forward have helped navigate the issues of shorter holes for clubs.

Shooting Your Age (2018). When to move to the "senior" tees.

Retrieved from: http://shootingyourage.com/2018/01/10/when-to-move-to-the-seniortees/

In a series of interviews with golf experts and players, this article discusses issues about senior golfers moving to forward tees. Recommendations for senior golfers include: play from tees that match your playing ability level, play from tees that allow you to succeed, play from tees from which you can hit irons into par fours, play on the same tees as your group to be more social. The author suggests that men will not play from tees associated with being women's tees.

USGA (2020). Distance Insights Report. *USGA Journal; Turf Management. Retrieved from:*

www.usga.org/content/dam/usga/pdf/2020/distanceinsights/DIPR-FINAL-2020-usga.pdf

The USGA's Distance Insights Report from 2020 discussed the availability of shorter tees for golfers who hit the ball shorter distances The chart on page 55 pointed out what other studies have shown, which is that many golfers play from tees longer than recommended. Additionally, many of the shortest tees on golf courses may not actually be short enough to suit shorter-hitting players (See also: "Tee It Forward").

Wilson, E. (2019). Has golf course length increased over the years? *Keiser University College of Golf*, Keiser University College of Golf.

Retrieved from: www.collegeofgolf.keiseruniversity.edu/has-golf-course-lengthincreased-over-the-years/

This article correlates the increase in technology with farther driving distance off the tee. While the increase in technology that satisfies golfer's desire for longer drives is a controversial path, this could also be an indicator of which tees players will ultimately use. Consequentially, players may continue to use tees farther back, even if their handicap or 5-iron distance (as mentioned in other articles here) indicates otherwise.

Yoder, G. (n.d.). The case for tee it forward and combo tees. *Oregon Golf Association*.

Retrieved from:

https://oga.org/sites/default/files/A%20case%20for%20Tee%20it%20Forward 0.pdf

This Q&A with the Oregon Golf Association answers a query about playing combination tees and the score's eligibility for posting in the Golf Handicap & Information Network (GHIN). The answers encourage players to use combination tees if that yardage is more suitable for the player. It also offers suggestions for courses that want to rate a combination course before an official in-person rating. It is recommended that players can still record a score from combination tees – even if it is not rated – by entering the course yardage.

2. The Stigma of Forward Tees

Arthur, M.M., Del Campo, R.G. & van Buren, H.J. (2011), The impact of gender-differentiated golf course features on women's networking.

Gender in Management, 26(1), 37-56.

Considering the well-documented career benefits of playing golf, researchers investigated the relationship between tee positions, participation of female golfers, and salaries in network-orientated professions. They surmised that a bigger difference in tee placement would encourage riding on different carts and less informal networking with colleagues, therefore defeating the benefits of women playing golf for business purposes. The study investigated if locales with greater differences in distance between tees would have lower participation of women golfers who worked in networking professions. They also hypothesized that in locales where tee distance differentials were greatest, salary differences between men and women would also be greatest. In addition, women's salaries in locales with big tee distance differentials would be lower than women's salaries in locales with smaller tee distance differentials. A sample of 496 golf courses were selected across the United States to examine tee placements. Census data was used to evaluate professions and earnings. The study hypotheses were either fully or partially supported and suggest that when tees are identified as "women's" tees – and are significantly closer to the hole than "men's" tees – it can reflect or be indicative of a negative image of women.

Diaz, J. (2011). A tee too far. Golf Digest.

Retrieved from: https://www.golfdigest.com/story/golf-barney-adams-forward-tees

A review of the assumption that golfers play from the wrong tees (too far back) which makes the game more difficult. It discusses Barney Adams' concept of "Tour Length" – which evolved into "Play it Forward." Golfers should hit the same clubs into greens as the professionals. Based on this theory, men who hit the ball 200 yards should play tees equaling a total distance of 6200 yards and women who drive 140 yards should play tees equaling 4600 yards, assuming consideration is given for individual hole setup and difficulty. Adams acknowledges that the biggest obstacle is ego. Golfers think the shorter tees are for "other" players, not them.

Fornoff, S. (2012). Helping players overcome that red-tee stigma. *SFGATE, San Francisco Chronicle*.

Retrieved from: www.sfgate.com/sports/article/Helping-players-overcome-that-red-teestiqma-3095413.php

This article acknowledges that professional golfers may be challenged by longer tees, however recreational golfers should tee off closer to the hole. This article investigates the suggestion that tee selection can be attributed mainly to male ego, and results in males playing from farther back than recommended for the player's skill level. It also offers the same solution of recoloring the tees to eliminate the stigma of "ladies" tees. Additionally, this article addresses other ways to choose tees based on a player's skill level, including which clubs are used most often or using a player's handicap.

Hundley, H. L. (2004). Keeping the score: The hegemonic everyday practices in golf. *Communication Reports*, *17*(1), 39-48.

This article presents a semiotic analysis of language used on golf score cards. Semiotics is a decoding process to examine language and symbols. Applied to golf score cards, the language of golf frequently presents available tee choices as either men's and ladies' tees, regular and ladies' tees, or regular, champion, and ladies' tees. There is a pattern of naturalizing men's playing of golf and while not doing the same for "women's" tees.

Johnson, E. M. (2019). Does this overly simple formula for figuring out what yardage you should play from actually work? *Golf Digest*.

Retrieved from: https://www.golfdigest.com/story/does-this-overly-simple-formula-forfiguring-out-what-yardage-you-should-play-from-actually-work

This article by Golf Digest recommends multiplying a player's 5-iron distance by 36. However, this article recognized that many male golfers often insist on playing the farthest tees as a boost to the ego. So, while this article recommends a quick calculation to determine the correct tees, it also acknowledges players choose their distance based off their ego.

Limehouse, F. F. (2010). On chivalry in golf. Public Choice, 142, 335-337.

This is a commentary on McCormick and Tollison's article that reports larger discrepancies in men's and women's tees in the southern U.S. than the northern U.S. They report, however, that the discrepancy is reducing with newer golf courses and that tee positions may correlate to chivalry – but it is evaporating over time. Limehouse argues that tee position only subsidizes tee shots, and not approach shots or short game. He argues

that handicap, in contrast, subsidizes all shots. Lastly, Limehouse suggests looking at the tee position for senior players and whether the differential is bigger for them in the South – suggesting chivalry may not be limited to female golfers.

McCormick, R. E., & Tollison, R. D. (2010). Chivalry in golf? Significant tee ratios. *Public Choice*, 142, 323-334.

Framed in economic decision-making, this paper uses the tee selection to explore the unregulated positioning of them. Of interest was the ratio of female to male tee positions. The authors compared the ratio of professional male and female driving distance to tee marker positioning at golf courses. Based on all 50 States, the ratio's matched. They also found that longer courses have bigger tee ratios. The same is true for more expensive courses, newer golf courses and courses that allow metal spikes. The ratio was smaller for courses with more holes, courses that offer caddies and courses with higher cart fees. Courses in the South had larger distance ratios (larger subsidies for female golfers) and the authors suggest that this could be attributed to the chivalrous culture of the South.

ModGolf Podcast (2019). Tee it forward to increase enjoyment and participation in golf. *The ModGolf Podcast*.

Retrieved from: https://modgolf.fireside.fm/067-larry-gilhuly.

Larry Gilhuly, a former agronomist with the USGA is a passionate advocate of the "Play it Forward" program. He reports finding that Play it Forward resulted in 56% of golfers playing faster, 56% of golfers want to play more, 83% of golfers hit more lofted clubs into the green, and 85% of golfers had more fun. He recommends that tee positions (hole length) should be based

on players' swing speeds. Based on that, forward tees are approximately 1000 yards too long. He recommends not having red tees since they are associated with female golfers and men will not play from them. Instead rebrand with numerical values.

Weems, S. (2019). Sexism on the golf course? *Psychology Today*.

Retrieved from: https://www.psychologytoday.com/us/blog/feed-yourhead/201905/sexism-the-golf-course

This opinion article reviews the study by McCormick and Tollison about the tee distance differential between male and female tees based on whether courses were above or below the Mason-Dixon line. Other research has shown that states with the most favorable female tee box locations also have the lowest average salary for women in marketing or managerial positions.

Wolfsie, D. (2013). Golf course shortcut evoke subpar jesting. The Daily Journal.

Is playing from the "ladies" tees emasculating? The journalist reported on playing a round from the forward tees. He enjoyed the golf. But after his round he said that amongst other things the bar tender put a flower in his drink, his friends teased him for being in the men's locker room (suggesting it was the wrong one), his playing partners referred to his purse and he reported that a female club member jokingly accused him of winking at her husband. The piece reflects the perceived treatment of men who choose to play from the forward tees.

3. Golfers Overestimate Their Driving Distance

Dethier, D. (2020). This is "the biggest lie in golf," according to Max Homa. Golf.com.

Retrieved from: https://golf.com/news/max-homa-biggest-liegolf/

Dethier reported on Max Homa's interview with Ryen Russillo. Russillo claimed, "That the only thing more lied about than 40-yard-dash times are amateur golfers' perceptions about their driving distance." Homa says golfers conflate their best shot, under ideal conditions, with their average distance. Homa argues that golfers' perceptions of their driving distance do not align with industry research on driving distance.

McCleery, P., & Knuth, D. (2004). The real difference between you and Tiger. *Golf Digest*.

A sample of 87 recreational male golfers playing Torrey Pines Golf Course were tracked. Handicaps ranged from scratch (0) upwards with a mean of 12. The average score was 96 (+24 relative to par). The sample of golfers overestimated their driving distance between 15 and 29 yards.

Pennington, B. (2009). Swallow your ego and play the right tees. *The New York Times*.

Retrieved from: www.nytimes.com/2009/05/04/sports/golf/04pennington.html.

This article suggests ego and peer pressure play a concerning role when players choose their tee length. New technology does make the ball travel farther; however, this provides some false confidence for golfers. Notably, female golfers are less likely to overestimate the distance of their drives, suggesting it is a push for masculinity that causes men to choose tee

lengths above their skill level. The author points out the strategies courses have taken to address this trend including obscuring the tournament tees, using non-traditional tee colors, or requiring permission from pro shops to play the back tees. This article also addressed why a player's handicap might not be the best indicator of which tees to play. The author agreed with the indicator of a 5-iron distance multiplied by 36. This article gives more of an insight into recommendations as well as actual practices of golfers.

Tutelman, D. (2019). Tee it forward. The Tutelman Site.

Retrieved from: www.tutelman.com/golf/justgolf/teeltForward.php.

This article suggests most golfers choose their tees based on ego and opportunity. The stigma around senior tees and ladies' tees is a difficult one for most golfers to overcome, which is further stigmatized by the courses themselves. This article, similar to others, also acknowledges that male golfers often overestimate their driving distance. A unique aspect this article addresses is the lack of availability of an appropriate set of tees. Other excuses include playing the course as it was designed and not thinking their way around the course. Like other articles, the takeaways here included removing the stigma associated with shorter tees, encouraging the "Tee It Forward" program and providing appropriate tee distances. This article was written by a senior golfer, advocating for the Play it Forward program.

4. Women Golfers Are Conflicted About Forward Tees

Associated Press (2003). PGA to change rule for female qualification. The Golf Channel.

Retrieved from: https://www.golfchannel.com/article/associated-press/pgachange-rulefemale-qualification

A commentary on how the PGA of America has changed the rules for female PGA of America professionals playing in sectional events. After Suzy Whaley qualified for the Greater Hartford Open from tees 10% shorter than male players, the rules were changed. Female players now play from the same tees as men if qualifying for PGA Tour events.

Bowes, A., & Kitching, N. (2020). 'Wow these girls can play': sex integration in professional golf. *Qualitative Research in Sport, Exercise and Health*, 1-18.

The paper examines professional female golfers' perceptions toward forward tees. In 2019, Cameron Champ led the PGA Tour in average driving distance with 317 yards. Anne Van Dam led the LPGA in driving distance with an average of 286 yards. It was noted this would place her 166th on the PGA Tour list. Therefore, different tee positions are designed to "level the playing field" for females when they play the same course as their male counterparts. The authors conducted a study during the 2018 GolfSixes Team Tournament hosted by the European Tour, which included both male and female players in the same event. On five of the six holes, the tee boxes were moved for female players to account for the driving distance discrepancy (the tee boxes made the holes between 10 and 50 yards

shorter). When a female's team made the quarter finals, the players were apologetic for winning because of the advantage they received in the tee positions. In conclusion, female golfers have a dichotomous narrative about competing against male golfers and a perceived advantage from playing shorter tees. They used biological differences to justify forward tees but were also apologetic for their success because of the tee advantage. The authors conclude that gender-assigned tees perpetuate the perceived hierarchy in professional golf.

McGinnis, L., McQuillan, J., & Chapple, C. L. (2005). I just want to play: Women, sexism, and persistence in golf. *Journal of Sport and Social Issues*, *29*(3), 313-337.

The authors conducted a qualitative study of the female golfer's experience on the golf course. They framed those experiences using established theories. They theorized that forward tees may have the effect of reinforcing beliefs that males are naturally more superior at sport than females. They wrestled with this while knowing that males, on average, hit the golf ball farther than female golfers. Female golfers also recognized that if they hit a good drive and their male playing partner hit a bad drive, they were apologetic and diminished their performance by attributing her performance to forward tees. Although female golfers in the study knew that tee boxes were supposed to be used based on ability, not gender, that was not the reality, and assumed males would not play from forward tees associated with female golfers.

McGinnis, L. P., & Gentry, J. W. (2006). Getting past the red tees: Constraints women face in golf and strategies to help them stay. *Journal of Sport Management*, 20, 218-247.

This paper examines factors that contribute to the "churning effect" of females entering golf and then leaving. One of those factors is tee positioning. The article described the positioning of tees for female golfers as both a structural problem and interpersonal problem. The positioning of tees suggests that females are naturally inferior to male players. Secondly, female golfers were expected to use the "ladies" tees regardless of ability. The authors recommended that a female golfer's experience could be improved – and more women retained – by avoiding the awkwardness of a female golfer's experience. In relation to tee markers, this means ungendering the labeling of tees to avoid the "othering" of women.

5. Forward Tees: An Afterthought?

Bissett, F. (2015). Would teeing it forward bring greater enjoyment? *Golf Monthly* (U.K.).

Retrieved from: https://www.golf-monthly.co.uk/features/the-game/would-teeing-it-forward-bringgreater-enjoyment-73757

Would teeing forward would help address one of the biggest complaint golfers have – the game takes too long. The article argues that forward tees may bring more enjoyment, but there is no certainty it would make rounds faster. The article concludes that golfers should be given more tee choice.

Dye, A. (2017). Creating a two-tee system for women. *Women's Golf Journal*. *Retrievedfrom:* https://womensgolfjournal.com/wpcontent/uploads/2017/05/t woteesystem.pdf.

Alice Dye, (date of original article unknown) renowned golf course architect, suggests that only 1% of female golfers can manage courses of 5800 yards or longer. She advocates keeping the existing tees, but also offering a shorter alternative of 4800 yards. She suggests that these tees should be used for females and juniors who could then play the course as the legendary husband (Pete) and wife architect team intended.

Fornoff, S. (2013). Shorter tees for women wimpy or wise? Alice Dye weighs in. GottaGoGolf.

Retrieved from: https://www.gottagogolf.com/blog/susanfornoff/shorter-tees-forwomen-wimpy-or-wise/

Fornoff suggests that Alice Dye thinks female golfers are excluded from the "Play it Forward" debate, since females are already playing as forward as they can. She advocates for two tee boxes for women between 4600 yards and 5800 yards.

Lafoy, J. (n.d.). Tees. American Society of Golf Course Architects.

Retrieved from: https://asqca.org/design/existing-courses/course-renovationarticles/tees/

This article provides a brief, historical overview of tee location on golf courses. The author suggests that tee placement did not originally consider female or senior golfers who do not hit the ball far. When forward tees were added, they were frequently misplaced and put in a position convenient to the cart path but not consistent with the hole design, aligned

in the wrong direction, were too small, or were uneven. As such, forward tees are perceived as an afterthought.

R&A (n.d.). Pace of play manual. The R&A – Tees.

Retrieved from: www.randa.org/pace-of-play-manual/rules/3-the-golf-course/subrules/2tees

A common theme is highlighted in this article, which is that the gap between different tees is so large, that it forces players to pick tees that are too far back for them. While players will not find a distance that always matches their handicap, the availability (or lack of) of tee options leads golfers to choose the farther back tee box. This article also echoes the theme that changing the color of tees or referring to the tees as "forward, middle and back" rather than ladies' tees would change male golfer's willingness to use more suitable tees.

USGA (2003). *Interview by Alice Kendrick*. Oral History Collection, USGA Arnold Palmer Center for Golf History, Liberty Hills, NJ.

On the acceptance of forward tees. "I'm happy to say that, over the years, gradually, with just gradual acceptance, a lot of people come down to Florida and play where the newer courses in Florida all have some good forward tees. Jack Nicklaus has been very good. Tom Fazio has been very good with these forward tees...I'm hoping, eventually, we'll get a two-tee system for women."

6. Forward Tees to Drive Revenue

Hayden Sheets, B., Roach-Humphreys, J., & Johnston. T. (2016). Turnaround strategy: Overview of the business and marketing challenges facing the golf industry and initiatives to reinvigorate the game. *Business Education Innovation Journal*, 161-171.

This article summarizes initiatives that facilities looking to increase the number of rounds played can incorporate into their business plan to drive revenue. Online feedback of participants in the Tee it Forward program reported, 85% had more fun, 56% played faster, 56% were likely to play more often, 83% hit more lofted clubs into greens, 93% were likely to "Tee it Forward" again (Play Golf America, 2012).

Sheets, B. H., Roach-Humphreys, J., & Johnston, T. (2016). Turnaround strategy: overview of the business and marketing challenges facing the golf industry and initiatives to reinvigorate the game. *Business Education Innovation Journal*, 8(2).

This article offers management strategies to increase revenue at struggling courses. One strategy offered is reevaluating tee positions to make the golf course experience more fun. When new owners bought Province Lake Golf Club (Parsonsfield, Maine) out of bankruptcy, they designed a tee positioning system based on players' swing speed. The new owners claimed that the tee system encouraged seniors, women and other players to play faster and experience hitting greens in regulation.

Tiger, A. A., & Ellerbrook, J. E. (2016). Improving golf pace of play using time study analysis: Influencing factors on the green and tee box. *International Journal of Golf Science*, *5*(2), 135-151.

This paper studied golfers' behavior on the green and tee box to identify variables that increased and decreased the pace of play. One relevant

finding to this literature review is that female-only groups played significantly faster than other groups. This finding suggests that not only can female golfers be fast players, but their play from the tee may have been faster than other groups because the game did not stop and start between tee placements. If more players (male and female) played from forward tees together this might increase the impact that forward tee positions can have on faster play.

Walter, T. (2019). Savannah outfits its golf course with executive tees. *Florida Today*.

This newspaper article features Savannahs Golf Course in Merritt Island, Fla., which introduced executive tees on its course to speed up play for homeowners. The new tees were described as inexpensive and a good way to increase play among less committed homeowners in the community.