



# PACE OF PLAY

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**How to Design and Implement an  
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## National Golf Course Owners Association

# PACE OF PLAY

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# Preface



Improving the pace and flow of play on your course is good for the game of golf and good for business.

As a golf course owner or manager, you have a product to sell to your customers. Your product is a golfing experience that lets players know they have received value for the price they've paid. Surveys have shown that golfers rank pace of play among the very top features they look for when choosing a course to play. There is a high correlation between a player's perception of value and pace of play during the round. A player's memory of waiting before playing every shot will ruin the playing experience; it cheapens the "product" and destroys the player's perception of value.

When a course institutes a successful pace improvement program, the product not only matches but usually exceeds the expectations of the players. The total quality and value of the playing experience soar, giving your course the kind of reputation every course wants, and all the financial benefits that accompany that reputation. Players are usually willing to pay a premium for an exceptional experience. When *they can count on* coming to your course and always finding a challenging layout in top-notch condition and then experience a round of golf with a smooth uninterrupted flow of play, then *you can count on* their return, again and again. Just imagine being able to tell your customers with confidence that any available starting time, at any time of the day, will provide their foursome with the same consistent, high quality playing experience!

This manual will introduce you to several new and valuable concepts and tools that you never had before to help you win the slow play battle. It will also give you valuable insights into how the design of your course, your daily maintenance techniques, the behavior of players, the ability of players and the day-to-day management practices of your staff can have a significant positive or negative impact on the pace of play and the value of your product as perceived by each of your customers.

It is also important for the reader to realize that when confronting the issue of slow play, you will begin to see the complex dynamics that impact the pace and flow of play on your course. Many of your basic beliefs on the subject might be challenged and you will come to realize that because the design of each golf course is unique, as are management styles and management practices, **there is no one cause for slow play, nor is there one simple solution.** With that in mind, while the author has provided an "Owner's Checklist" and several rather specific improvement tips and suggestions, *this manual is designed to help you see and understand the root causes of the problems unique to your course, and to encourage you to creatively consider your response to a problem* based on the style, traditions, and overall ambiance you have established for your course.

Before beginning, it is important to introduce you to three key facts. When fully understood, these facts will open your eyes and your mind to new possibilities for increasing the value of your product, the golfing pleasure it brings to your customers and the revenue it brings you.



Following years of study, work and practical research, the approach to improving the pace of play as presented in this manual was developed based on the following facts:

1. **Course Design**, including length, obstacles and the distance between holes predetermines the *optimal round times* for each course.
2. **Operational Decisions** regarding course loading and cart policy determine the *actual round times* and throughput for the course.
3. **Day-to-Day Management and Monitoring Practices** determine the ongoing *quality and perceived value* of the golfing experience (your product) for each one of your customers.

This manual objectively addresses each of these major considerations in order to assist course owners in the selection of the optimal Operational Policies and in the development of the most effective Day-to-Day Management and Monitoring Practices for your course.





## Notes



# Introduction



## New Insights and Tools for Golf's #1 Problem

Just about everybody calls it the number one problem in golf today. Pace of play on a golf course is like the weather—people talk a lot about it but haven't been able to do much to improve it.

As the popularity of the game grows by leaps and bounds, it seems as if the game can hardly contain the swell of players surging onto our courses. According to the National Golf Foundation, there are 26.4 million players in the U.S. today and that number is growing. Courses are crowded, play is slow, players and course managers are frustrated, and the problem seems to be getting worse, yet our collective goal is to bring even more players to the game. In the face of all this, is there any hope of solving the pace of play problem on our courses? Can anything really be done? The answer to both of these questions is yes.

## New Approaches to an Old Problem

Today we have new insights and new tools to help us understand and deal with slow play. These insights and tools coupled with a "team building" approach to management and training have brought new hope for course owners and managers to cure the game of this age-old problem. *But the solutions require a "new vision" on the part of owners and managers*, and a willingness to look at things differently. Those courses willing to take on the challenge are realizing tangible rewards in the form of an improved reputation and increased demand for their course, increased revenues, higher customer satisfaction and improved staff morale.

## The Vision and the Myths

Clouding the "new vision" needed to win the slow play battle are myths about pace of play which have not only become widely accepted "truths" but which also form the basis of almost all traditional slow play "solutions"....solutions which don't work. These myths will have to be discarded in the face of new and overwhelming evidence about what *really* works, and what is actually enabling courses to cut their round times by 30, 40 and 50 minutes and provide their guests with a consistently smooth, uninterrupted golfing experience.

This manual will provide readers with new, often surprising, information and a fresh look at what is affecting the pace of play on their courses and what they can do about it.



## The Critical Questions and The Answers

**G**olf course owners have indicated that there are three things they really want to know: 1) how long it should take to play their course, 2) how to design and implement an improvement program, and 3) where to go for help. These pages will furnish answers to each of these questions and the facts behind those answers, and perhaps will also provide the inspiration for course owners and managers to accept the challenge. When you finish reading the manual, you will understand that whatever the situation on your course may be today, there *are* solutions for you, and these solutions are well within your grasp.

### The Manual is Divided Into Four Sections.

**S**ection One, "*Slow Play - The #1 Problem in Golf*" will expose the myths about slow play and enable you to fully understand the problem. You will learn about the five factors that actually affect the pace of play on your course and understand how it is possible to address each of these factors.

Section Two, "*The Pace of Play on Your Course*" will explore the new USGA® Pace Rating System in detail and show you how to use it on your course. You will learn to discover the difference between where you are and where you could be, and just exactly how you and your customers each will benefit from improving pace of play at your course.

Section Three, "*How to Design and Implement an Improvement Program*" will show you how to build your team and get started. You'll clearly see the critical elements of training for the management team and learn about the tools for maintaining the pace of play improvement program on your course.

Section Four, "*About the Author*" provides information on the author as well as a research list of many different kinds of resources for you, as you accept the challenge and make the commitment to excellence on your course.



## Notes



# Section One - Slow Play, The #1 Problem in Golf



## Chapter 1: The Myths

### The Myth of the 4-Hour Round

If you ask golfers on virtually any course what “slow play” is, they will probably answer “anything over four hours!” That’s a subjective answer, one not true for most U.S. courses. The 4-hour standard probably came from the Old Course at St. Andrews, which was also the source for making 18 holes the standard for a round of golf. But before any course embarks on a pace improvement program, it is essential to define slow play *on that course*.<sup>1</sup> The Pace Rating System developed by the USGA® (see Section Two) helps a course define slow play by providing objective data for each hole (“time par”) and for the course (pace rating) about the time it should take to play when the course is full, based on the playing length, obstacles, green to tee distance, and cart policies.

The conviction that all rounds should take four hours is one of the biggest obstacles that must be overcome in winning the battle over slow play. It hampers the ability of players and course managers to see the real causes of slow play. And without seeing the causes, the solutions are invisible as well.

### 4-Hour Goal May Set Expectations Too High

On American courses, the myth of the 4-hour round almost always sets expectations too high for management teams and players. Most American courses have pace ratings well above the 4-hour mark. Revenue quotas based on a 4-hour standard force managers to overcrowd the course in order to generate the number of rounds they need. And because players believe that a round of golf should take four hours, they walk away from almost every golfing experience angry with their hosts for not making good on a 4-hour round.

No wonder this unpleasant scenario is seen by everyone as the number one problem in the game today!

<sup>1</sup> The author’s calculations using the USGA’s Pace Rating System show that, for the Old Course, any round taking more than 3:57 can indeed be considered slow.



## Waiting on Holes is Players’ Real Objection

When a course can identify its own definition of “slow play,” only then is it possible to optimize the course’s individual capabilities, increasing the value of the golfing experience and the demand for tee times as customer expectations are met or exceeded. For those courses willing to break out of the mold and focus not on the time to play but on the flow of play, a unique market niche can be established.

Research has shown that when players grumble about slow play, what they really hate is having to wait on every hole. Properly designed and implemented, an effective pace improvement program can provide smooth, uninterrupted play with minimal delay on a very few holes, lower average round times, increased revenue, and an improved reputation for the course. And the pace improvement program begins with knowing the course’s pace rating.<sup>2</sup>

### Example 1: Sample Pace Ratings for U.S. Courses

Course	Length Time	Obstacle Time	Green-to-Tee Time	Cart Policy	Pace Rating
A	3:49	:19	:09	Walk/Carts on Fairways	4:17
B	3:24	:24	:23	Walk/Carts on Fairways	4:11
C	3:36	:25	:32	Carts Required-Stay on Paths	4:33
D	3:31	:22	:14	Carts Required-On Fairways	4:07

The routings of many modern U.S. courses take players through real estate developments, across streets, up and down steep terrain and around environmentally sensitive areas, adding extra miles with long travel times between holes.

<sup>2</sup> To obtain an official USGA<sup>7</sup> pace rating for your course, contact your local state or regional USGA<sup>7</sup>-affiliated golf association.

## The Myth that it’s All the Player’s Fault

If the time it actually takes to play your course when it’s full is different from your pace rating, it’s time to analyze what’s causing the difference. Most owners and managers automatically point the finger at players. But players are *not* the biggest reason for slow play on our courses, any more than slow drivers, for example, are the reason that gridlocked freeways are slow.





## Real “Slow Players” are Hidden on Crowded Courses

Course overcrowding, one of the culprits in slow play, is a management problem, not a player problem. When traffic is moving along smoothly and just a few foursomes start slowing down, they’re easy to spot. For these slowpokes, faster play tips or the order to move along will help them pick up the pace. But our courses often put too many players out there in too little space, and all the “fast driving” tips in the world won’t move traffic along.

When an effective pace improvement program is implemented, a balance is struck between management’s responsibilities and the player’s responsibilities, and real progress can be made. Starters are taught how to properly load the course to avoid overcrowding, making slow players stand out like a sore thumb. They can be easily and quickly spotted by properly trained marshals before the problem gets out of hand.

The causes of slow play are complex and unique to each course, and overcrowding is just one of them. But once these two myths are dispelled and the true reasons for slow play are understood, the solutions are fully achievable by course owners and managers. The chapter which follows will discuss the five major factors impacting pace of play on any course, and will begin to point the reader to the real causes of slow play and assist in the design of effective solutions.



## Chapter 2: The Five Factors Impacting the Pace of Play

Now that we've dealt with the primary myths about slow play, let's take a closer look at the factors that do impact pace of play. We'll group them into easily understood categories, with tips on how they may be addressed. A further discussion of how to use these factors as part of a course pace improvement program will be found in Sections Two and Three. A list of companies providing products and services specifically designed to help you implement your program will be found in Section Four.

For purposes of definition, from here on out we will use the term "slow play" only when we are describing players playing slowly, as opposed to the term "long round times," which have many causes. The dynamics that actually cause long round times can be separated into five recognizable and manageable elements: 1) Management Policies, 2) Player Behavior, 3) Player Ability, 4) Course Maintenance, and 5) Course Design.

### Management Policies

One of the most immediate ways to improve the pace of play on many of our courses is to change basic course management policies and practices. This is not to say that course management professionals are not doing a good job of using the tools and information they have. However, today we have new tools, new insights and new methodology to help us clearly see the impact that day-to-day management activities have on the pace of play, and that impact can be significant indeed.

### Managers Control Access to the Course

Unfortunately, some of the policies which courses employ actually create long round times. One of these, as we've already mentioned, is overcrowding. Fortunately, overcrowding can be controlled by course managers, as there is only one "on ramp" and access to the course is limited. The real trick is to determine how much traffic a particular course can comfortably carry while maintaining a healthy revenue stream.

Just as each course can have a different time to play, so too can each course have an optimum starting interval for its tee sheet. Generally, the shorter the starting interval (time between starting times) the more crowded the course. But because of their design, level of difficulty, the ability of their players, and several other key factors, some courses can easily start groups every seven minutes, while other courses should not start groups in less than eight, nine, or ten minute intervals.

Ironically, when the optimum starting interval for a course is eight, nine or even ten minutes, they can usually get as many players through, *with smoother rounds and shorter round times*, as if they had squeezed players in and overcrowded the course.



### Example 2: Starting Interval Comparison Chart

Starting Interval Minutes	Simulated Round Time	Actual Round Time	Groups Completing Play*
7	5:19	-	46
7/8	4:46	-	49
8	4:21	-	49
8/9	4:17	-	48
9	4:13	<b>4:10</b>	45
10	4:07	-	42

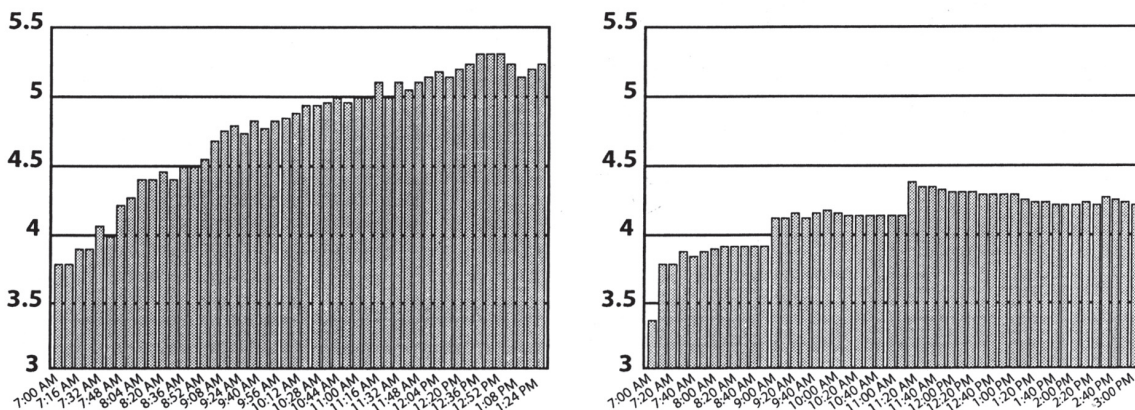
\*Note: Simulated estimate of groups "completing play" between 7:00 a.m. and 6:00 p.m.

The above table shows an actual course case study of the effect of starting intervals on round times and throughput.

### From the Player's Perspective: *Blaming the Group Ahead*

Overcrowding is the single biggest contributor to long round times (remember our new definitions?), and an unmistakable symptom of overcrowding is groups waiting to play on almost every shot. An example of this is the classic case where a foursome arrives at a course to find that things are behind schedule and the starter is blaming earlier "slow playing" groups for the delay. The foursome is finally called to the tee and is instructed by the starter to "play away when the group ahead is clear" and to "keep up with the group ahead."

**Example 3: The Effects of Overcrowding on Round Times**



You can see in the diagram that overcrowding causes round times to climb. The second diagram shows how the proper interval allows for a consistent quality "product".



It seems to make sense. Managers know how important it is to get back on schedule. And as a player you also want to make up time, and obviously you need to push the slowpokes ahead of you. They must be slowpokes; after all you stood on the tee waiting for them while they waited for the green to clear before hitting their second shots, and you waited while they took forever to putt. You're convinced you got behind the slowest group in the world.

In fact, what really happened was that before your foursome arrived, the course became overcrowded with too many players. The starting interval was too small and as the day wore on, the course became oversaturated, with more and more places to wait. By the time you teed off, there may have been a wait "built in" to every shot.

## A Full Course Doesn't Have to be Oversaturated

A golf course can hold only so many groups before it becomes overloaded. There's a difference between a full course and an oversaturated course. A full course generates optimum revenue and can maintain a good flow of play and satisfied players, but an oversaturated course defies any attempt at smooth play and results in very unhappy customers who probably won't come back. Because most course managers don't really know where the line is, each group ends up waiting its turn to play instead of moving along from one shot to the next. It's easy to see why the most desirable time to play is early morning, before the course becomes overloaded.

The finest example of oversaturation is created when courses host events and use a full-field (or more) shotgun format. Full field shotgun tournaments always take more than five hours because they purposely "saturate" the course so that players will all complete play about the same time. So, the saturation of the course that normally takes about 1½ hours of normal starting times happens almost immediately in a shotgun tournament. Therefore, those 5-hour rounds that are usually experienced only by foursomes who start after 9:30 a.m. are now provided for everyone in the tournament field. Why? Because waiting to play every shot is immediately built into almost every hole on the course.

## Management Policies Can Make the Difference

So what do we do? Here are a few recommendations:

- Course managers should determine the optimum starting interval (one that provides maximum revenue and the best round times) for their course and aggressively manage the course to that interval. There are basically two ways to do this.
  - 1) Experiment on the course by using different starting intervals and measuring the number of completed rounds in a specified time frame and the average time per round.
  - 2) Contact a consulting company that can simulate the pace and flow of play on your course under various conditions, then perform one well-designed experiment to prove the value of the proposed change.



- Course managers should establish a smooth and proper flow of play onto their course and train their marshals or rangers to know how to spot the occasional slow playing foursome, to maintain that smooth flow. Formal training programs are available which explain the complex dynamics of the pace of play and provide on-course direct training, coaching and teambuilding training for your staff.
- Throughout the round, playing groups should be told to “maintain a consistent distance” between their foursome and the one in front of them, as they had off the first tee. The proper starting interval provides spacing (distance) between playing groups. The goal is to create the proper amount of distance that fills the course to capacity and allows for the flow and open movement of each playing group.
- Courses and playing customers need to think of their relationship as a “contract”:
  - The course agrees to provide a high quality, well-managed round of golf.
  - The players agree to have their entire foursome on the tee and to have the first ball in the air at their appointed starting time.
  - Course managers should ask groups that are late to wait for the next available starting time to play. Late groups disrupt the flow of play and cause congestion.
  - No-shows also disrupt the flow of play. A course can insist that players who can’t make it call to cancel their tee time.
  - Starters must never agree to “squeeze in” a group. Adding late or extra groups shortens starting intervals, pushes back the starting times that follow, and overcrowds the course. This causes play to be slower for the extra group and all of those that follow.

#### **Example 4: Management Policies Which Signal Courses With Long Round Times**

- An aggressively short starting interval between tee times
- A starter who doesn’t actually “start” groups
- The pro shop or starter who agrees to “squeeze in” groups
- Rangers who just drive by and don’t provide assistance (because there is nothing they can do to effect a change)
- Carts restricted to cart paths
- Yardage marked only on sprinkler heads or not at all
- No knowledge or use of the course’s USGA® Pace Rating
- Little or no communication to players of realistic expectations for play or of progress during the round



## Player Behavior

It will come as no surprise that although players can't necessarily be blamed for long round times, they do indeed bear the responsibility for slow play (players playing slowly). Even here, however, course management can play a key role in creating the right kind of player behavior, and communicating with your players is the single most important thing you can do. This includes letting them know your expectations for round times, your policies, directions to and through the course, yardage and other critical information. And good course management policies will make it easy to identify those players who really are slowing down the pace and causing backups.

### Example 5: Pace of Play - Monitoring Sheet

Hole	Time Par	Add these times to the actual starting time to determine the "Tee Time" for each hole.
1	0:13	0:00
2	0:15	0:13
3	0:13	0:28
4	0:13	0:41
5	0:10	0:54
6	0:16	1:04
7	0:08	1:20
8	0:14	1:28
9	0:21	1:42
Front	<b>2:03</b>	
10	0:16	2:03
11	0:12	2:19
12	0:10	2:31
13	0:13	2:41
14	0:17	2:54
15	0:14	3:11
16	0:15	3:25
17	0:10	3:40
18	0:18	3:50
Back	<b>2:05</b>	
Finish	<b>4:08</b>	<b>4:08</b>

Marshals can use pace of play monitoring sheets (Example 5) that are based on the course pace rating to monitor groups throughout their round. Many course monitoring devices (from clocks to GPS systems) can be used to communicate the pace of play both to the players and to the management team. It's important to note that such devices must have accurate and achievable individual hole time pars as their foundation for the communication (see Chapter 6). Once again, communicating with your players is the single most important thing you can do to manage player behavior.



The previous pages provided recommendations to help course managers manage the flow of play onto and around the course. Following are three recommendations for players, to help them do their part as well as enjoy the game more...and managers can go a long way toward encouraging this behavior by their players.

## From the Player's Perspective: *Rules to Live By*

Relax, enjoy the game and play ready golf when it's safe to do so. Golf is a game of leisure, but one that requires physical skills and concentration. In exercising those skills and concentration, we often lose the "natural rhythm" of the game...walking at a normal pace, planning and playing our shots in a normal way. Too much time and rhythm are wasted when players are not ready to play, or when they consciously plod along and over-analyze every variable in the game.

All players want to play their best and have every competitive advantage, but it is unlikely that measuring the exact yardage to the pin, for example, will make the critical difference. Courses can discourage players from making a painstaking and time-consuming analysis of every stroke. When putting, for example, it is far better for players to relax, find a line that looks right, and stroke the ball in that direction. Nine times out of ten, time will be saved, players will be less critical of themselves and their strokes, and they will play better and enjoy the game more.

***[What Management Teams can do: 1. Have the golf professionals include golf etiquette, ready golf and shot preparation instruction with all golf lessons. Also, course professionals must begin to teach their students to track the actual distances they hit each club in their bag. This will bring value to the use of yardage information on the course. 2. Train marshals to recognize an "excessive" versus a "normal" approach to shot making.]***

Exercise common courtesy. Players can have an amazing impact on the pace of play by being courteous to other players. Having paid a green fee or membership fee doesn't entitle players to play as slowly as they want...even if they're retired or have all the time in the world. A "me-first" attitude affects every single player who comes after, all of whom have also paid the same fee. Players with an attitude better hope that the players in front of them don't have an attitude too.

Courtesy to the course is equally important. It's not hard to pick up the phone and cancel a tee time, a simple act that will go an unexpectedly long way toward improving the pace of play. When there's a no-show or a late group, the pro shop and the starter have to scramble to find a replacement or lose the revenue they had planned on. The starting time given to the player is their product. When the course has been "rented" to the player for that time, a contract has been made which needs to be honored, or cancelled so that the course can fill the time with someone else. Otherwise, players should be on time and remember that the tee time is the time the first ball in the group is in the air.



Players who arrive late shouldn't try to insist that the starter squeeze them in; this will overcrowd their entire section of the course. Upsetting the rhythm and flow off the first tee slows down play on the course for that group and everyone else behind. The best courses will try to find a free spot for late arrivals as near to the original time as possible. And just a tip-- if a course manager is willing to squeeze you in, you can be sure they will do the same for others. Chances are this is a five-hour-plus course.

**[What Management Teams can do:** Don't be bashful about reminding your players that others, too, deserve the same quality round of golf. Be sure players understand that you are working hard to "manage" the flow of play onto the course and what their responsibility is in helping maintain that flow.]

### **Example 6: What Happens to Pace of Play when Players are "Squeezed In"**

This practice overcrowds the course and pushes everyone's starting times back. As a course manager, consider whether you want pro shop personnel, starters and others sentencing your customers to long, slow rounds....for the sake of a few groups who may be willing to pay a bit extra. It's *your* reputation!

Communicate with your course. Players have the right to expect certain help from their courses in keeping play moving. The better courses do a good job of communicating with their players. They help with yardage information, their expectations for round times are clearly stated (players should know the pace which the management team feels comfortable they can deliver), course marshals actually help players, and clear signs direct players smoothly around the course. Many courses are even using sophisticated global positioning systems to provide such communication.

As a player, if your course isn't providing these features, then it's up to you to find out why. A good course will be pleased to answer your questions; a poor one might not even know how.

**[What Management Teams can do:** *Communicate yardage and directions around the course clearly and consistently (see Section Four for a list of products that can help you do this). Indicate preferred cart parking locations around greens. Work on your marshal training program, and develop a consistent policy manual that management fully supports and that marshals understand and can implement.*]





## Player Ability

The ability, attitude and ego of players on every course can move the game along or contribute to long round times. Course managers can help ensure that players develop the skills they need and use those skills properly, by encouraging players to:

- Work on their short game,
- Play from the right tees,
- Know their game and know their ability.

Work on the short game. Most experts will agree that the quickest way to improve enjoyment of the game, lower scores, and help pick up the pace of play on your course is to help your players improve their short game. If players can learn to consistently pitch and chip onto the green from 50 yards in, their scores will drop dramatically and so will the time to play.

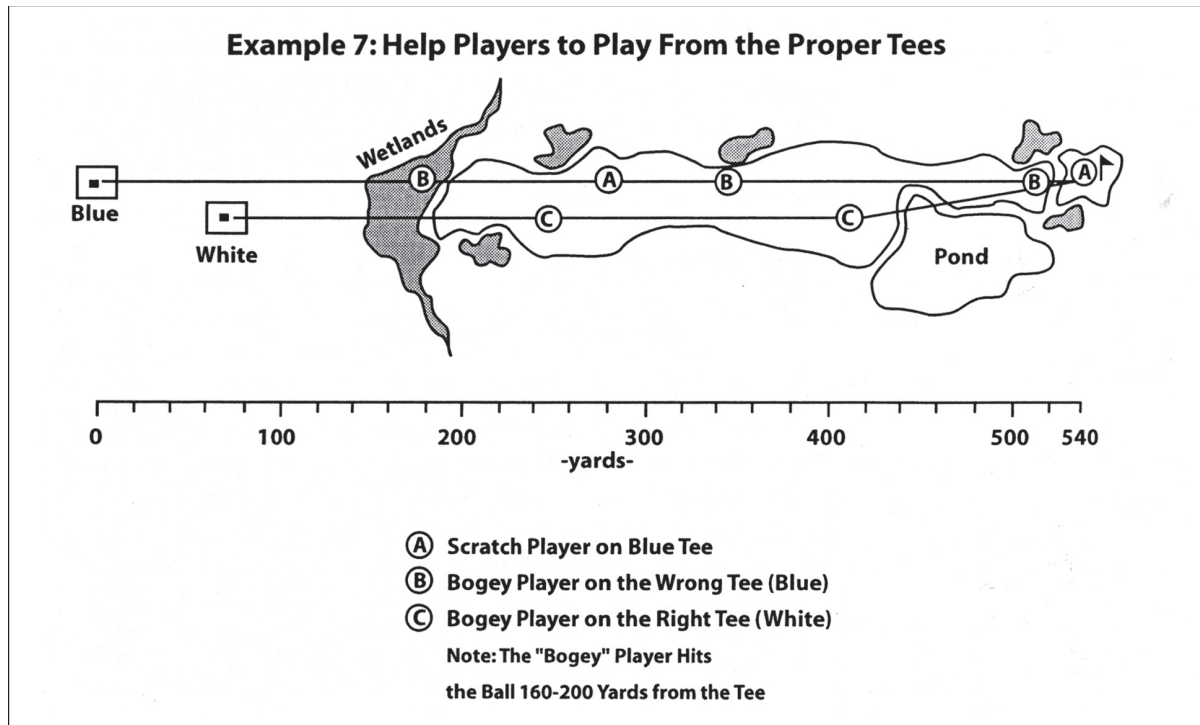
A recent study showed that 81% of players missed the green of mid-length to short Par 3 holes with their first shot, and of those, 37% missed the green again with their second shot. And of those players who missed the green with their second shot, 14% missed it again with their third shot *and had to play a fourth shot to the green.*<sup>3</sup>

Play from the right tees. Players who have spent years “playing from the tips” may not be eager to reconsider whether or not their skill is equal to the task. But when these players play from the championship tees, they’re probably not “playing the course like the pros do.” They’re probably playing it like a high handicap player who finds it impossible to get on in regulation and who almost never has a putt at a birdie. The whole point of having multiple tees is to bring the green within reach *so that a player has a reasonable chance of hitting the green in regulation.*

## Key to a Successful Round

If a player hits the ball 180 yards with his driver, on a 400-yard Par 4 hole it’s almost impossible to reach the green in regulation. The best second shot will land well short of the green, most likely in the general area where architects typically put water and sand. He will also find himself playing that tricky short game we just talked about, and in many cases taking two or even three more shots to get on the green. By playing the wrong tees, he can’t be having much fun. On the other hand, by finding the tees best suited to his game, he’ll begin to bring the greens back in play and enjoy the game a lot more.

<sup>3</sup> Results of a study conducted by the author at public and private courses.



Course managers can help their players use the selection of tees as a way of handicapping their next match. Players aren't hesitant to "negotiate" with their friends on the first tee for strokes, to make up for the disparity in ability between players. Why not negotiate for distance too? After all, distance, or the lack of it, is the primary difference in ability. If players try handicapping their regular foursome using various tees as well as strokes, they'll find they are playing the course the way the architect intended it to be played. They'll have a lot more fun playing an iron shot to the green from the same general area as their longer-hitting opponents. Now there's a match!

Know your game and know your ability. Players need to really work hard to find out just how far they *actually hit the ball in the air with the different clubs*. If they don't know how far their drives carry, they can find themselves playing from tees that could make several holes impossible to play. Many of today's courses are built over and through marshes, wetlands, canyons and deserts, providing many long forced carries from the tee. If a player doesn't know both how far he hits it *and how far he needs to hit it*, the game can be miserable and frustrating if he can't hit the fairway even with his best drive.

Course management needs to help players recognize both their ability and the unique demands of your course, prior to playing. This is particularly important on courses whose design requires many forced carries from the tees.



## Example 8: Sample Information to Provide Your Players on the Driving Range

Measure your longest forced carries from each tee and post the following sign (example only):

### Play From The Right Tees!

You should hit it past the flag to play from that (color) tee:

Red	145 Yards
White	180 Yards
Blue	205 Yards
Gold	220 Yards

## Managing Player Ability

- Course managers should measure the longest carry on your course that is required from each set of tees and print that distance on the scorecard. This will inform players just what it takes to keep the balls where they belong, on the fairway.
- On your practice range, place a flag (the color of the corresponding tees) at the distance measured in Step 1 above. The flag that the player consistently drives beyond represents the color tees that are best for him or her at your course.
- While warming up, players should compare their average with the measured distance, and select their tees accordingly.

Using the above techniques, a foursome consisting of a varsity college player, his mother, his beginning younger brother, and his grandfather can enjoy their day together and their game, even though they are all playing from different tees. Isn't this what the game is all about? When players improve their short game, understand their ability, and play from the right tees, the pace of play is improved for everyone.



## Course Maintenance

Now we will focus on the course itself and how daily course maintenance practices can impact the pace of play. Often it's not what you would think. For example, growing the rough, putting hole locations behind bunkers and moving tee markers back can all have the effect of making the course play faster. When properly executed by the superintendent and coupled with other elements of a pace improvement program, such elements of course maintenance can actually reduce round times. The trick is knowing not only what to do but where to do it. Let's look at the following practices on your course:

- Length and location of rough
- Rough around greens
- Green speed
- Course setup

Length and location of rough. Typically, our idea of the perfect course might be Augusta National or perhaps one of the U. S. Open courses. We see firm fast greens, wasp-wasted fairways that are mowed like greens, and lush deep rough that provides visual contrast and beautifully frames each hole, challenging the competitors with wrist-breaking dangers on every slightly missed shot. These are courses where par is the winning score - *for touring professionals.*

Most courses would pay a price for this, both in maintenance costs and in the pace of play. The real problem with long thick rough is that players know the ball is in there somewhere. We have access to the area and can search for the ball, tramping through grasses from three inches to two feet high, while groups back up behind. Had the ball gone into a lake or out-of-bounds, we would have teed up another one and been on our way. Of all the hazards on a golf course, deep rough and extreme rough are the worst when it comes to slowing the pace of play. And it is especially bad when it grows just off the fairway in areas that are blind from the tee. In these cases players don't even know where to start looking.

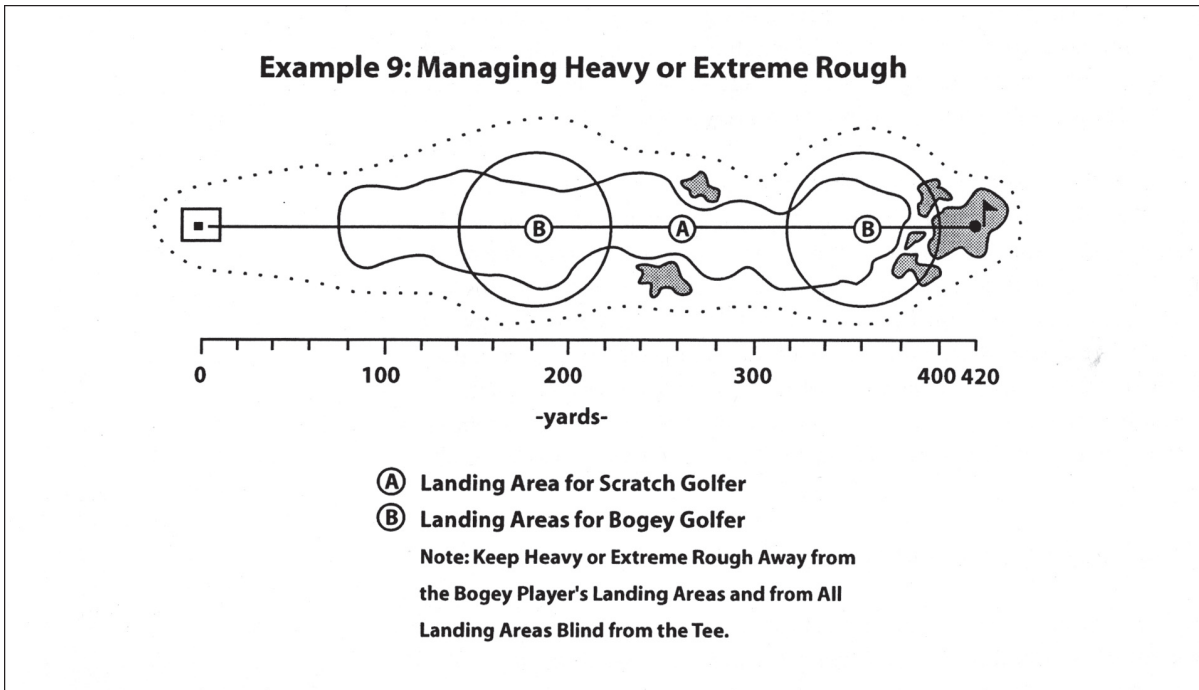
### Extreme Rough Needs Fine-tuning

Certainly rough should remain an integral part of the game. But deep rough and extreme rough, as found on environmentally sensitive courses in the form of tall natural grasses, should not be grown and allowed to flourish where bogey golfers are most likely to hit the ball. Such areas are those bordering the fairways that are 160 to 200 yards from the tee and 100 yards from the green. Extreme rough should also not be used to create a dogleg or protect the inside of a dogleg.

These are areas where most mid and high handicap golfers play from. Therefore, in these high traffic areas, the fairway and normal rough can be widened to accommodate the more erratic play of the higher handicapper without lessening the challenges for the scratch players. Rough in these areas should penalize players for hitting it off-line but not cause them to wade through wheat fields trying to find every ball that misses the fairway.



If you directly observe play on selected difficult, slow-playing holes on your course, you may be able to easily determine the need for mowing adjustments. You may even add rough in some cases, for example where the fairway is mowed tightly all the way to the edge of a creek or lake. These changes are inexpensive to implement and easy to reverse. By carefully selecting the areas for adding rough or for ensuring that extreme rough is out of play for the majority of golfers, you will still retain all the benefits and the natural beauty of the long grasses and other foliage as you create acres of wildlife habitat.



Rough around greens. Several years ago we were all treated to a classic display of the intricacies of the short game, thanks to Donald Ross, the USGA® and the owners of Pinehurst #2. In large part, it was the change in maintenance practices in preparing a course for the U.S. Open that gave us the opportunity to see first hand the differences in the use of heavy rough, as seen at other Open venues, and the closely mowed chipping areas that greeted most shots that were misplayed to the Pinehurst greens.

While it may not be true that one way of treating the rough around the greens is inherently slower than the other, it is true that in an effort to copy an Open course setup, many golf courses will get out the mowers and give all their green complexes a shave. As these courses are played by those everyday players discussed in the previous pages, it is safe to predict that both scores and the time to play will climb. Looking again at the statistics of players missing Par 3 greens with their first, second and third shots, we can ask what will happen without any rough around the green to help contain a slightly misjudged fourth shot.



Green speed. Unfortunately, we've all been persuaded by watching the pros that the longer you take to putt, the more success you will have.

During the 1994 U.S. Open at Oakmont, the greens were kept well over 10 on the Stimpmeter; they were rolled and watered only enough to keep them alive. Oakmont's greens are contoured and notoriously fast anyway. In fact if they were a 10.5 to 11 for the Open, most likely they were slowed down a bit to get them to that speed. But that's the way the members like it and have played them day after day for decades.

Playing on ultra-fast greens takes a deft touch, but most of all it takes personal experience. Pushing the green speed up too high on a resort course or a public course is asking for trouble. What we fail to recognize when we emulate the world class players is that not only are these pros exercising care and exquisite control over their putting strokes, they are also exercising skillful respect for the speed of greens which could send an average player's missed three-foot putt trickling on and on, leaving them with an eight-foot putt back.

Course professionals and superintendents need to evaluate the day-to-day conditions of the greens. Considering their contours, size and the players' experience at the course, they must establish an appropriate green speed for the unique conditions of their course.

Course setup. Daily, the maintenance team goes out and sets the tees and the cuts new holes. These activities can easily have an impact on the pace and flow of play on the course that day. The subtleties of tee placement and hole location can and do change the dynamics of play.

In the discussion of *player ability* in the previous pages, there was a recommendation that each player play from the tees that are right for his or her level of ability; i.e. carry distance with a driving club. But that advice will work only if the tee markers are consistently on the correct tees.

## Vigilance Identifies Problem or Careless Setups

Many architects design a course with four or five tees for each hole, thus giving flexibility to the management team to set up the course to fit their typical range of players. It is important for course managers and superintendents to go out occasionally and observe play on certain holes for the purpose of "tweaking" the location of the tee markers. And it is always good practice to have marshals and other management staff "audit" the course setup on a daily basis.

You may find a situation where the hole is simply playing too difficult and the markers are in a location where the majority of players using those tees have no possible way of carrying a pond or canyon that lies between them and the fairway. The regular or white tees might be placed such that a safe landing area is well beyond the 160 to 200-yard maximum carry distance of the average player. And it could be that the 180-yard mark from the tee is smack in the middle of the hazard.



### Example 10: The ABC's of Course Setup

<b>A</b>	Place each set of markers on the teeing ground that allows players to play over forced carry from any set of tees.
<b>B</b>	Tee markers should be carefully placed to line players up to the center of the fairway.
<b>C</b>	Holes should be cut representing varying levels of difficulty. The "easy" hole locations in the front of the green usually take longer to play.

On the other hand, many holes are set up to play too fast. Here's a scenario that is not uncommon. You're faced with a persistent backup on a reachable Par 5 hole, and your pace rating can document the fact that players are achieving or beating the expected time par for that hole. In looking at the previous hole, you see that *this* hole is playing too easy, and therefore too fast. What you find is that groups are simply getting to the Par 5 too quickly and having to wait. Moving both tee markers further back will smooth the flow to the Par 5, and once on that hole players will be less likely to wait for the group ahead to clear the green before playing their second shot. The overall time to play from the first tee through the second green will be reduced, and waiting on the second tee and again on the second shot to the green will be for the most part eliminated.

### Surprising Effects of Hole Location

**H**ole location can have a profound effect on the pace of play. A surprise on one course came when players were confronted with a situation where on a given day the hole was cut in a difficult location, behind a deep bunker on a narrow strip of green. It turned out that players were playing the hole in less time than when the hole was cut down in the front of the green in an area fronted by fairway with no bunkers or other hazards lying between the tee markers and the hole.

How could this happen? When the difficult location is used, players who even slightly miss the tee shot will most likely end up in either a water hazard or a bunker. If in the water, they quickly tee it up again or move up to a drop area to play their next shot, and then move on. If in a bunker, they play what some believe to be the fastest shot in golf...the bunker shot from sand. When, on the other hand, the hole is cut in the front center of the green, missing the tee shot only slightly will leave a player faced with a number of decisions about what club to use for a delicate chip, pitch, putt, run-up or flop shot. He or she may not even have those shots in the repertoire.

Remember the frequency of misses...81%, 37%, 14%? And the rest of the foursome is playing that game as well. Therefore, course superintendents may be cautioned to stay away from setting up the course easy on days when a group outing full of once-a-year players descends on the course. Otherwise, they're putting heavy demands on the weakest part of the high handicapper's game, a versatile short game.



## Course Design

In the next chapter, you will learn how the USGA® Pace Rating System objectively sets the bar for how long a round of golf should take on a given course. You'll see that none of the elements which make up the pace rating is under a player's control and only one of them is under the course manager's control. The rest are determined by the golf course architect...the course design elements.

These elements determine the time it should take to play the game. The features of course design to be discussed are:

- Green to tee distances
- Obstacles, hazards and playing length
- The sequence of holes

Green to tee distances. It used to be that houses were built around golf courses. Now golf courses are built around houses. In an attempt to provide as much golf course frontage as possible, developers and designers wind many of today's courses through residential areas. While the quality of the course may be top-notch and the homes may be gracefully secluded, distances from one green to the next tee can be extreme, and as a result, players will typically be forced to take longer to play 18 holes than they might expect.

When players have to travel between holes and find themselves crossing streets, winding their way through canyons and across bridges and ducking through tunnels under roads and highways, the pace rating and the expected time to play such courses will naturally be longer. This is not "slow play."

**Example 11: Green to Tee Comparison Chart**

Course	Playing Yardage	Green-to-Tee Yardage	Total Travel Yardage	Total Miles
A	5,899	2,543	8,442	4.8
B	6,254	1,373	7,627	4.3
C	6,524	2,910	9,434	5.4
D	6,130	5,160	11,290	6.4

Note: The samples above have been taken from real courses.





## Matching Expectations With Deliverables

A beautifully designed resort course with a modest playing yardage of 6,130 also had 5,160 in green to tee distances. Over the course of 18 holes, players traveled an additional distance of 2.9 miles just getting from the greens to the next tees. This routing added almost 30 minutes to the time to play 18 holes. And the course's policy of restricting carts to cart paths meant that the very best that their management and players could expect were rounds of 4:35. More often than not, their actual round times were well over five hours. Even so, the pace improvement program they implemented took 20 minutes out of their round times and, more importantly, brought everyone's expectations in line with what the course could consistently deliver.

Obstacles, hazards and playing length. Research has shown that obstacles and hazards don't have nearly the negative impact on pace of play that blind landing areas and extreme rough (deep grasses, trees and underbrush) in the wrong places have.

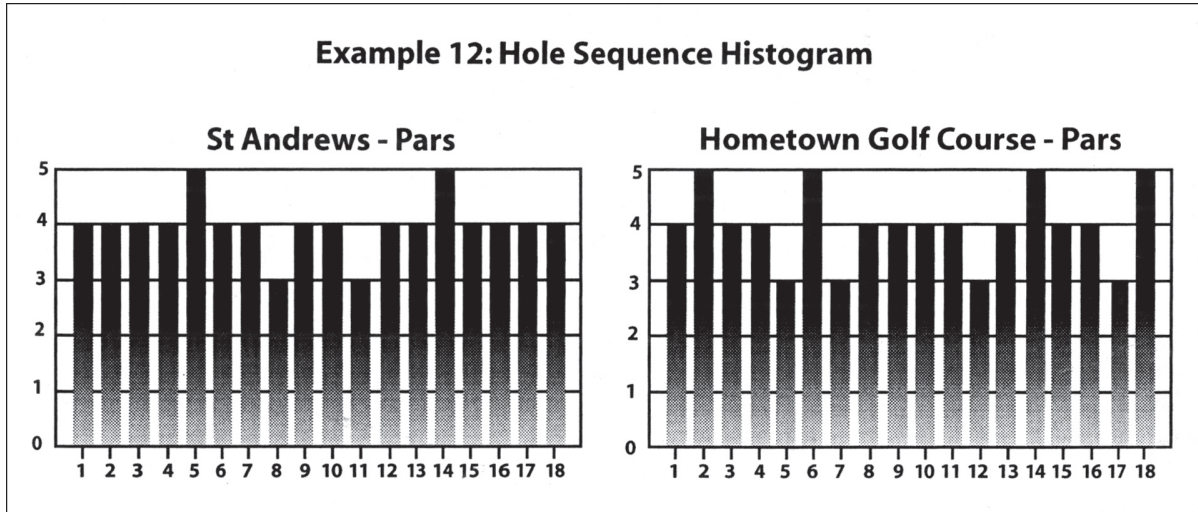
Believe it or not, players of varying abilities typically negotiate a well-designed or even diabolical golf hole in a reasonable amount of time, usually within the calculated "time par" (the calculated time it "should take" to play the hole). They seem to do this regardless of the number of bunkers or lakes on the hole. As you have seen in the previous section, the behavior that really slows down play is "looking for balls."

To minimize that behavior, course designers and superintendents must take great care to build courses where there are challenges other than deep rough and blind landing areas that are in play both for the scratch and the bogey golfer.

The sequence of holes makes a difference. Here is a fairly common situation. On a course where the first hole is a Par 5 and the second hole is a Par 3, a foursome approaching the tee of the second hole will see the following scene. They will see two carts just pulling away from the tee and two parked at the tee. And now the new foursome has become part of the backup.

Here's how it works. Following the direction of the starter, whose instructions were to "hit when the fairway is clear," the players on the first tee (the Par 5 hole) tee off when the group ahead is out of the way. Like most par 5 holes, this one can accommodate the play of three foursomes. However, the second hole (the Par 3 hole) can accommodate only one foursome. As groups come off the first green faster than groups can play the second hole, a backup occurs.... a backup that will last the entire day. And this is, of course, what we traditionally and incorrectly call "slow play."

As you can see, however, this is not a case of players playing slowly. It is the inevitable result of hole sequencing (a capacity problem resulting from the design) and overcrowding (resulting from management practices).



### Hole Sequencing Determines Player Movement

It is amazing how much impact the sequencing of holes, their length and their relationship to one another have on the ebb and flow (the rhythm) of play on the golf course. While the course itself remains static, much of the movement of the players is predetermined by the design and routing of the course. This too, is very predictable. In fact, it is possible to analyze and measure the complex dynamics of the intertwined effects of players, management practices and course design, and accurately predict what the pace of play will be on a golf course that has not yet been built.<sup>4</sup>

<sup>4</sup> Pace Designer Systems is a service of William Yates and Associates which provides the objective analysis of the pace of play and optimum management practices for golf courses under design or construction. See Section Four for more details.

Taking this to the next step, it is also possible to pinpoint exactly where player backups and delays will be, and roughly how long each foursome will stand there waiting to play. This capability helps developers quantify and predetermine the length of the round of golf under various designs and management policy options.

Today, for the first time, there should be no reason for a new course to open and in only a few weeks have a reputation for slow play. We have tools today that never existed before, to enable course managers to carefully predetermine the best management practices to optimize the use of their new course and raise the quality of the golfing experience to the highest level possible.



## Completing the Circle

To review the circle of five factors which impact the pace of play: The **course design** determines the course pace rating and the time it “should take” to play, and the course designer locates tees and obstacles that scratch and bogey golfers will find challenging to their games, beautiful to their eyes and elevating to their spirit. **Management policies** and **maintenance practices** will determine the quality of the golfing experience on the course and whether customers will have a fighting chance of moving smoothly and freely through the course. Players must, through their **behavior** and actions on the course, consider the rules of the course and the common courtesies that should be extended both to course managers and fellow players in front of and following the foursome. Finally, players have the added opportunity of improving their **ability**, and as a result, increasing their enjoyment of the game while keeping the flow of play moving at a smooth pace.

Perhaps now it is easy to see why the issue of slow play is complicated, why the solutions are not intuitive, and why attacking the problem requires the cooperation of architects, managers, superintendents and players. The next chapter will explore the USGA® Pace Rating System, an essential first step for any course determined to improve its pace of play.



## Section Two - The Pace of Play on Your Course



## Chapter 3: The USGA® Pace Rating System

### A New Tool for Improving the Pace of Play

In 1995, the United States Golf Association® released its USGA® Pace Rating System and the *Pace Rating System Manual*.<sup>5</sup> The USGA® Pace Rating System is made up of a set of mathematical formulae that can fairly accurately predict the time it “should take” to play a golf course when the course is full. It was developed with the proper assumption that *all golf courses should not take the same amount of time to play*.

When a course is officially pace rated, course managers receive a pace rating for the course, that is, the time it should take to play 18 holes when the course is playing to capacity. This pace rating is the sum of eighteen individual “time pars,” one for each hole. Each hole’s time par tells how long it should take to play that hole, an objectively determined time that accounts for the playing length (length time) of the hole, the unique obstacles on that hole (obstacle time), and the distance from each green to the next tee (green to tee distance time). Also considered is whether carts are restricted to the cart paths or given access to the fairways.

When courses are analyzed using all these variables, it makes sense that each course should have its own unique pace rating. Pace ratings reflect the fact that some courses have park-like settings where the greens and tees are adjacent to one another, and where there is minimal rough and little else in the way of severe trouble. Other courses are situated in real estate developments where streets, marshes and roads must be crossed between holes, and where heavy rough, water and trees are common.

<sup>5</sup> For a thorough discussion of the USGA® Pace Rating System, contact the USGA® and order a copy of the *Pace Rating System Manual*.

Remember the “myth of the 4-hour round” discussed in Chapter 1. When some courses cause players to travel over 1.5 miles, taking 24 minutes or more just to get from greens to tees, how could they possibly expect to play in four hours? Most of the time they can’t. Two courses might have the exact same playing yardage of 6,500 yards, but because of differences in obstacle difficulty and travel distances between greens and tees, the first course has a pace rating of 4:05 and the second has 4:30. This means that the *very best* round time that course can expect when the course is full is 4:30. And as we’ve discussed earlier, most of the time it will be longer.

The USGA® Pace Rating System is a critical tool in defining a unique standard for individual courses so that expectations can be kept in line with what is possible. To have a pace rating created for your course, contact your state or regional USGA®-affiliated golf association (see *Obtaining a Pace Rating for Your Course* below).



## Example 13: Sample Course Pace Ratings

## The Myth: “A Round of Golf Should Take Four Hours”

Course	Playing Distance (yards)	Green-to-Tee Distance (yards)	Total Distance (yards)	Cart Policy	Pace Rating
A	5,899	2,543	8,442	Req'd - On Path	4:17
B	6,254	1,373	7,627	Walk/Carts	4:11
C	6,381	1,985	8,366	Req'd - Fairways	4:09
D	6,377	1,651	8,028	Req'd - Fairways	4:07
E	6,524	2,910	9,434	Walk/Carts	4:13
F	6,680	4,015	10,695	Req'd - Fairways	4:25
G	6,130	5,180	11,310	Req'd - Fairways	4:18
H	6,130	5,180	11,310	Req'd - On Path	4:35
I	6,440	2,660	9,100	Req'd - Fairways	4:11
J	6,440	2,660	9,100	Req'd - On path	4:28



## Elements of the USGA® Pace Rating Formula

The formula for establishing individual hole time pars has three major components: length time, obstacle time, and green-to-tee distance time. The total of the individual hole time pars will be the pace rating for the course. The pace rating and measurements discussed below are taken from the most frequently-used tees, typically the middle tees on most courses.

### Length Time

There are two formulae for calculating the length time for each hole. One formula is used for those courses or holes where a majority of the players walk or where carts have access to the fairways. The other formula is to be used on those courses or holes where carts are restricted to cart paths. With this option, managers can immediately see the impact that cart policy has on the round times on their courses. And they can adjust their own round time expectations, and those of their customers, accordingly.

The length time formulae are designed to account for the time it should take a foursome to play the hole when the course is full. It includes time for preparing, swinging, travel and all play around the green. For example, the length time for a Par 4 hole of 425 yards would be 12.9 minutes for walking or when carts have access to the fairways, and 14.1 minutes when carts are restricted to cart paths.

### Obstacle Time

Obstacle times are added to the length time of the hole to account for those obstacles designed into the hole that are considered more difficult than usual. Values for obstacle times come directly from the slope rating values for each hole. This time accounts for the unique playing difficulties of each hole and each course.

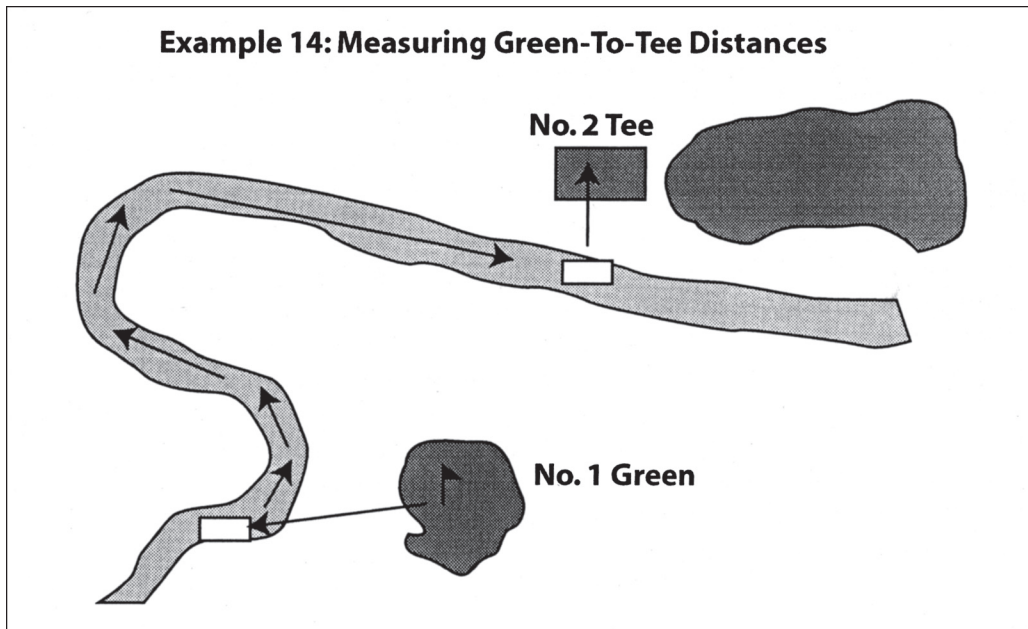
For example, on the 425-yard Par 4 hole mentioned above, which happens to be located at a country club that is a stop on the PGA Tour, the obstacle time might be 1.6 minutes. A different 425-yard Par 4 hole may have no obstacle time whatever added to the length time.<sup>6</sup>

### Green-to-tee Distance Time

What is often overlooked in considering the time to play a golf course is the actual time it takes for the foursome to move from one hole to the next. The USGA® Pace Rating System accounts for this time as “green to tee distance time.” Again, formulae have been created to calculate the time it takes for a group to exit one green and travel to the next tee.

The distance that is normally traveled walking or by cart is measured and one of two formulae will be applied. A course will determine whether players most frequently walk or ride carts to determine how to measure that distance (based on the typical route taken). For example, walking, the distance between one green and the next tee is determined to be 124 yards. The green to tee distance time that is added to that first hole’s length time and obstacle time is 2.2 minutes. If carts are used, both the measured distance and the time added will probably be different.

<sup>6</sup> When your regional golf association course rating team rates each hole on your course, they consider ten obstacle factors in determining the unique difficulties of each hole. Those ten factors are: Topography, Fairway, Green Target, Recoverability and Rough, Bunkers, Out-of-bounds/Extreme Rough, Water Hazards, Trees, Green surface, and Psychological. When any of these factors are rated higher than normal, obstacle time is added to the time par.



### Calculating the Totals

A hole's *total time* is the sum of the three calculated times above. The hole's *time par* is the total time, rounding to the nearest minute. The *pace rating* for the course is the sum of the 18 individual hole time pars.

### Example 15: Sample Time Par Calculation

The eighth hole is a 488-yard hole with a few obstacles of above average difficulty. The majority of players walk the course.

Length Time	13.8 Minutes
Obstacle Time	1.4 Minutes
Green-to-Tee Distance Time	<u>1.3 Minutes</u>
Total Time	16.5 Minutes

The sum of the time pars is the pace rating for the course. Example 16 shows an example of a pace rating for a course under two different management policies. When the majority of players at this course walk or when carts have access to the fairways, the pace rating is 4 hours, 8 minutes. On that same course, if carts are restricted to cart paths, the pace rating is 4 hours, 35 minutes.





### Example 16: Pace Ratings for Anywhere Municipal Golf Course

Hole #	Walking or Carts on Fairway <i>Time Par (Min.)</i>	Carts Restricted to Cart Paths <i>Time Par (Min.)</i>
1	13	13
2	15	17
3	13	14
4	13	14
5	10	10
6	16	19
7	8	9
8	14	16
9	21*	22*
<b>Front 9</b>	<b>2:03</b>	<b>2:15</b>
10	16	17
11	12	14
12	10	11
13	13	15
14	17	20
15	14	15
16	15	16
17	10	11
18	18	19
<b>Back 9</b>	<b>2:05</b>	<b>2:18</b>
<b>Pace Rating</b>	<b>4:08</b>	<b>4:33</b>

### Obtaining a Pace Rating for Your Course

Your regional golf association has already provided you with a course rating and a slope rating for your course. Contact the course rating division of the association and ask to have a USGA® pace rating calculated for your course. An association official will help you calculate a time par for each hole and a pace rating for the course. Generally a new pace rating may be calculated each time your course is re-rated with a new course rating. Officials can quickly create a pace rating for your course and fax or e-mail you the pace rating and time pars.



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## Information Needed to Calculate the Pace Rating

The yardage and obstacle ratings for each hole on your course are taken by the golf association rating team from the information gathered for the course's most recent course rating and slope rating. However, to complete the calculation of the course's pace rating, you will be asked to supply information about the cart policy for the course and the green to tee distances (see Example 14). Finally, when you provide information about which hole precedes the halfway house, a total of four additional minutes will be added to the time par for that hole. Conveniently, many golf associations will be willing to take this information from you over the phone and send you back a pace rating, without revisiting your course.

How to use the pace rating and individual time pars as a tool to compare where your course is, where it could be, and how to build an improvement program, will be the subject of the next chapters.

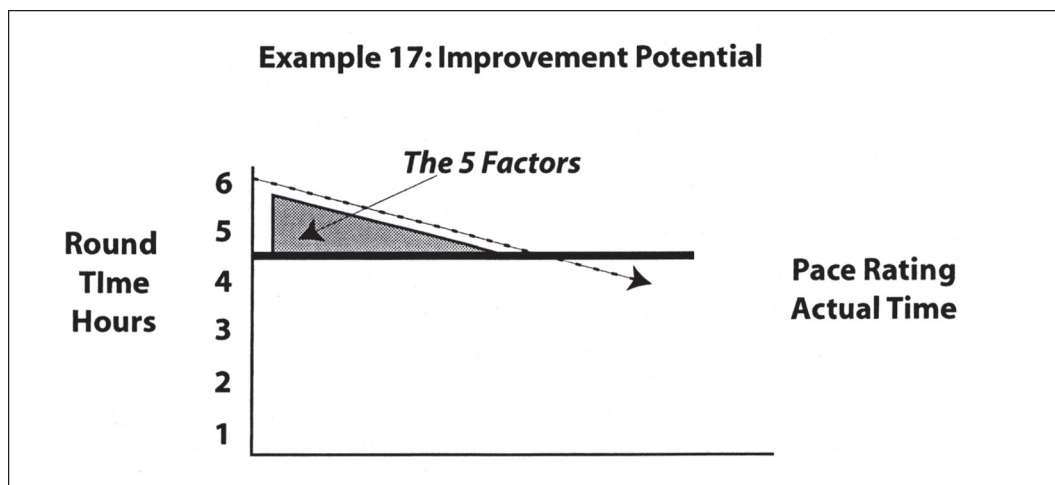


## Chapter 4: Where You Are and Where You Should Be

### Making the Comparisons

Now that you have some baseline information for your course—a time par for each hole and a pace rating for the entire course—the fun begins! If your average round time for a day is consistently within 5% of the pace rating even on your busiest days, go out and celebrate...you deserve it. If it's not (and this will be true for most courses), then it's time to identify the locations on the course where problems exist and the causes for these problems. For most courses, round times are significantly higher than the pace rating, and the obvious question is why?

The answers can be found by looking again at the five factors that impact the pace of play. That's where the problems are and that's where the solutions lie. While hundreds of factors affect play, by grouping all of the possibilities into five easily identified categories and looking at these categories for problems and solutions, the task ahead is much more manageable. The five factors that impact the pace of play are: 1. **Management Policies**, 2. **Player Behavior**, 3. **Player Ability**, 4. **Course Maintenance**, 5. **Course Design**.



Example 17 shows the difference between the pace rating and average *actual playing time* for a hypothetical but very typical course. Looking at the actual time and remembering what we've learned about the five factors impacting the pace of play, we can speculate that most of the problem (the difference between "actual" and the "pace rating") is caused by overcrowding and course policies. But some of the differential may be due to maintenance and course setup, or it could be caused by the ability and the behavior of the players. And course design may play a role too.



As we take a closer look at what is happening on our “typical” course, we’ll be able to begin to examine the problems and discover the causes. The goal of this chapter is to use a case study to show you how to begin to systematically sort the causes of slow play into one of these five categories. The reason the lines on the graph for actual times and pace rating are different is that most or all of those five factors are in play—some more heavily than others. And keep in mind that each course most likely will be different. So, if you own or manage several courses you will most likely find different problems and apply different solutions at each course. What we want to do is give you the tools to analyze your own course and make your own diagnoses.

## Case Study: The First Four Holes

I’d like you to come with me on a journey. Let’s spend a moment on the first tee and then we’ll get in the cart and drive out on the course. Let’s see what things look like out on this high-end public course. The majority of players ride carts and on all but Par 3 holes the carts have access to the fairways.

### A Visual Tour Highlights Course Problems

First, we notice that the tee times are beginning to fall behind at about 8:30 or 9:00 in the morning. Groups aren’t teeing off when they’re supposed to. As we look out at the first hole—a straightaway Par 5 of 520 yards—we see four groups:

- one on the green,
- one on the fairway near the green,
- one walking from the tee to their second shot, and
- a group on the tee.

Continuing in the cart and passing the first green, we round the bend and come to the second tee. Hole #2 is a beautiful Par 3 of 170 yards with a carry over water. What we see here is a group putting on the green and two groups waiting on the tee. On our way up to the second green, we pass a course marshal heading the other way, who smiles and waves cheerfully as he continues on. When we get to the third hole, a Par 4 328-yard dogleg to the left, we see a group of four players looking deep in the woods for their balls. And finally we pause at the tee of the 420-yard Par 4 fourth hole, which calls for a tee shot over a lake. Here we see three players on the opposite bank using their favorite club...a ball retriever!

We’ve seen only four holes, but already we have a strong impression about the course and about the time it’s going to take to complete a round on this course. Our experience tells us that these groups we have observed, and all those who follow, are sentenced to rounds of at least five hours for the day.



### Time Pars Set the Bar for Course Analysis

Could this “typical course” be yours? Perhaps not, but certainly you’ve played one with a similar scenario. First let’s look at the time pars for each of the first four holes and take those, along with a stopwatch, out on to the course with us. The following table shows the details of the time par calculations. NOTE: See page 35 for a detailed description of time pars.

#### Example 18:Case Study Time Pars

Hole	Length Time	Obstacle Time	Green-to-Tee Distance Time	Total Time (Minutes)	Time Par
1	14.8	1.4	1.1	17.3	17
2	8.0	1.5	1.6	11.1	11
3	10.8	1.0	1.2	13.0	13
4	12.8	1.4	1.0	15.2	15

### Attacking the Problems

Now let’s see what’s really going on. Let me say right up front that any pace improvement program you institute on your course will be only as good as your personal involvement in that program. The only way to make a significant and lasting improvement on any course is to have the senior management team members go out on the course and make these observations, as we have done above. *Without exception, the most successful courses are the ones where the owner, general manager, director of golf, and golf professional staff members are analyzing problems and discovering for themselves where the problems are. They have to be out on the course to see it and understand it for themselves.*

Now let’s use what we know about the five factors impacting the pace of play to attack the problems we’ve identified. Again, looking at the time par for each hole and comparing it to the actual time for the hole gives us our “improvement opportunity.”

#### Hole #1 - The Scenario

On our way past the first tee the Starter stops us and says, “the groups are 15 to 20 minutes behind; we had some slow groups earlier and I’m getting the next groups out as fast as I can to catch up.”

And so he is! As we look at the Par 5 first hole we see four groups “playing” the hole. I ask about the starting interval for the course and the Director of Golf, who is riding along, says, “in order to maximize the number of rounds we get, we have an alternating 7 and 8-minute starting time policy.”



We pull off the cart path at a spot where we can see the entire hole and start our stopwatch when the first ball of the next group on the tee is struck. That group turns out to be average players with a couple in the fairway, one topped drive and one way right in the rough. We see them waiting to play their second shots, then again they have to wait for the green to clear before playing their third shots. Finally they place the flag back in the hole, walk to their carts and drive to the second tee. They arrive at the second tee 24 minutes after they teed off...seven minutes over the time par for the first hole which was 17 minutes. To add to their frustration, they also started playing nine minutes after the time they were supposed to tee off (the starting time they contracted for).

### **Hole #2 - The Scenario**

On to hole #2. The group we just watched play hole #1 is now watching the group ahead of them just teeing off this great Par 3 hole over a lake. Starting our stopwatch again, we want to determine the time it actually takes groups to *play* this hole. We do not want to include any waiting time in our calculation; we just want to document the time from when the first player in each group hits his or her tee shot until that group arrives at the third tee. Then we want to compare the average actual playing time for hole #2 to its time par of 11 minutes.

Actually, we sit there for quite a while, timing several groups as they play, because what we discover astonishes the Director of Golf. Common knowledge has led the management team to assume that the reason there is always a long backup on the second tee (and therefore the reason the first hole gets backed up) is that the Par 3 second hole over the lake is a monster. In fact, what we discover is that the average time for all the groups we observe playing this tough Par 3 is 9.7 minutes, well under the time par!

Even with a great number of balls in the water, the many second and third shots and the 3-putts, the players are actually playing faster than the time par allows. If that's the case, how can the tee get so backed up? And if this player performance is true for other holes, how is it that we can have round times over five hours when the sum of all the time pars is only 4 hours 11 minutes?

### **The First Two Holes - Analysis and Recommendations**

What we have seen on the first two holes is the result of overcrowding the golf course. Play was "slow" not because players were playing slowly but because they had to wait to play all of their shots. The waiting is a result of overcrowding. This problem is perhaps the most common, the most insidious, and the one whose cure strikes the most fear into the hearts of course owners and managers. Very few course designs can comfortably accommodate play starting every seven or eight minutes, or less. When we add to the mix a Par 5 starting hole followed by a Par 3 (a *Course Design* issue, by the way), the problem is only compounded. It's clear that of the five factors impacting the pace of play, it is **Management Policies** that will have to be changed to affect a solution to this problem.

Whether or not we want to admit it, a golf course has a finite capacity for optimum pace and flow of play. The starting interval between groups is the regulator of that flow and the determiner of where delays will occur on the course and how long they will be. In this case, we have proved by our study of players on hole #2 that the delays on both hole #1 and hole #2 are not caused by slow players. They are caused by too many groups on too little real estate.



In our case study, the Par 5 first hole can hold two or three “playing” (not waiting) groups. More groups can be squeezed on the hole if the starter “pushes” players off the first tee to get back on schedule, or if most of the players are short hitters. Unfortunately, the second hole, a Par 3, can only hold one “playing” group; other groups simply have to *wait* for their turn on the tee.

My recommendation to the Director of Golf is to determine the optimum starting interval for the course and effectively enforce that interval. **What owners and managers mistakenly fear is that by changing the starting interval to load the course properly the course will lose players and revenue. What actually happens is quite the opposite.** Now, how do you determine the optimum starting interval for the course? Basically there are two ways to do so:

- Select another interval, perhaps nine minutes, ten minutes, or even alternating eight and nine minutes, and over several busy weekends, experiment by using these intervals and document the effects they have on both delays on the course (such as at the second tee) and the total average round times for the day or weekend.
- Another option is to engage a consulting company that has the experience and the tools to help you select the proper interval based on objective data, and where the pace and flow of play on your course may be simulated on the computer.<sup>7</sup> By using these sophisticated techniques, the optimal starting interval can be easily determined without disrupting play over several weekends and gambling with the good will of your customers, your reputation and your revenue. Such consulting advice coupled with management and team building training will bring an understanding of the complex dynamics of pace of play, and a quantifiable improvement in the pace of play, to your operation.

Just as the selection and management of the starting interval falls under **Management Policies**, so does the incentive to overcrowd the course. When course management teams focus all their energies and attention on the number of rounds as their measure of performance and success, they are providing the incentive to all their staff to overload the course and generate long round times. Conversely, the most successful courses focus not on number of rounds but on revenue as their measure of performance. Focusing on revenue enables course management teams to feel free to optimize flow on their course, improve the quality of their product and the value of the golfing experience, and carve out a unique niche in their market. Maximizing revenue, by delivering a more valued product, and not focusing solely on the number of rounds, should be the ultimate goal.

<sup>7</sup> Pace Manager™ Systems computer simulation is a product of William Yates & Associates, listed in the resource section (Section Four) of this manual.



### Hole #3 - The Scenario, Analysis and Recommendation

As we move over to hole #3, the beautiful short dogleg left around another small lake, we find players in each group searching for their tee shots in the trees and underbrush beyond the dogleg. Our stopwatch tells us that the average time to play is 17.1 minutes, more than four minutes over the time par for hole #3.

In this situation, it is obvious why it is taking so long to play the hole; every group has players looking for lost balls in the woods through the dogleg. The question to ask is why are so many players hitting through the dogleg into the brush? The answer is that, like so many reasons for long round times, the attempt to make the hole easier has actually slowed down play.

Taking a closer look, in the past, players were hitting into the pond, having to drop out and play another shot. In an attempt to help players play over the pond, the tees were brought too far forward. Now average players are hitting through the dogleg into the woods. As we discussed in Chapter 2, common sense and a stopwatch will tell us that searching for balls in the woods and underbrush takes a lot longer than hitting into a pond or lake, dropping a ball, adding a penalty stroke to one's score and playing another shot.

The recommendation we make for hole #3 is that the tees be moved back to where they belong. Once this is done, the playing time for the hole will be just under the hole's time par. In this case, the **Course Maintenance** set-up practices were to blame for the problem on hole #3. We have also discovered that in order to make the hole play faster, sometimes we have to make the hole play harder (in this case, the way hole #3 was designed to be played)!

### Hole #4 - The Scenario, Analysis and Recommendation

Continuing to the Par 4 fourth hole we observe some players "fishing" balls out of the lake, which must be driven from the tee. Again, after watching several groups play this hole, it becomes obvious to us that most of the players are playing from the blue tees, as they want to play this well-known course "from the tips." What the players don't recognize is that on this particular course there are many forced carries from the tees. The architect designed the course to be played from the "correct tees" for each level of player ability.

To correct this problem, which is one of **Player Ability**, we have asked the starter to include in his welcome to the players, the suggestion that players with handicaps over 16 (those who typically hit their drives 160 to 200 yards) should play from the middle tees as they won't be able to clear many of the hazards from the blue tees. Marshals observing play on the course will also feel free to make the same recommendation, as well as to provide forecaddy assistance when necessary.





### **The Role of Marshals**

Finally, we notice that the course marshals are being cordial and trying their best on these first four holes but are ineffective in their efforts to speed up play. However well trained, no marshal can speed up play on an overcrowded course or one where other “built in” problems are impacting the pace of play. Particularly on an overcrowded course, once the course becomes saturated there is simply no place for the groups to go. Just as on an overcrowded highway, all the honking, prodding and yelling won’t do a thing to make the traffic move faster.

Course management teams must first find the optimum loading for their course and then train the marshals as well as the entire management team...pro shop, outside services, food and beverage, and starters...to effectively manage a smooth pace of play throughout the entire day. It isn’t easy, but using the guidelines established in this manual, and with some expert assistance and training, it *can* consistently be done.

## **Benefits of Finding and Using the Improvement Opportunity**

**T**he benefits of personally observing and analyzing what’s happening on your course, putting a name to the problems, and instituting measures to solve them, should be obvious to course owners and managers. This isn’t always the case, however. When senior management does not personally participate in these programs, others not in a position to make the necessary management decisions are left frustrated and lose motivation. Likewise, management loses the opportunity of hearing valuable improvement opportunities and recommendations from their “front line.”

The short-term benefit of looking at where you are vs. where you could be, analyzing why and taking steps to use your improvement opportunity is that you’ll be able to make improvement changes to fix the situation. Remember that these changes are all within your grasp as a course owner or manager.

The longer-term benefits for you, as course owner or manager, for your staff, for your golfing guests and for your operation as a whole are monumental. You will improve the flow and pace of play on your course, creating a more valuable golfing experience for every player. The bottom line is that you improve your product beyond your competition, increase demand for your course and can increase revenue as a result. Quite simply, people are willing to pay for a consistently delivered product of superior quality.

With better management of the first tee, you may actually get more players through than before. You will ensure that each guest who has paid for the opportunity to play on your course enjoys the same high-quality golfing experience, whether the tee time is 7:30 a.m. or 2:00 p.m. As guest comments become positive rather than negative, you will improve the morale of every member of your staff and create a sense of pride in a successful operation. Upselling other course cost centers becomes easier. The reputation of your course will improve, as will your market niche. Again, the bottom line for all these positive results will be increased revenue for your course, and your tee sheet will be full.



## Section Three - How to Design and Implement an Improvement Program



## Chapter 5: Taking the Steps to Success

### The Team Approach

You have learned about the new tools and a new way of looking at the pace of play problem. Now it is time to build a team of your management staff to design your own unique program, then take specific improvement steps to implement it.

In the last chapter we discussed the importance of having you, the owner or manager, out on the course to objectively look for problems. We said that you have to be the first to buy into the idea that these problems have solutions. It is equally important-in fact absolutely critical-that you also involve the rest of your staff in the process. You will see below that *every job* at your course impacts the flow of play...to the course and through the course. And because of that, every one of your employees needs to be part of the team. They, too, need to understand the problems and see how their jobs can be part of the solution. Finally, each team member must work to find improvement opportunities, implement those opportunities, and institutionalize them into his or her job.

### The View From 10,000 Feet

Distance yourself for a moment from the tees and fairways and greens of your course. Picture the course from an aerial view...the roads leading to the course, the parking lot, the pro shop, restaurant, snack bar on the course, and the 18 holes. Looking at your course from 10,000 feet you can watch the flow of movement on and around the course as it ebbs and flows. Can you see that everything we have discussed in this manual is about movement, the flow of players to your course and through your course? As a manager you have to maintain that aerial vantage point.

#### Management's Responsibilities

Management's role in improving and maintaining a smooth flow of play begins *at the time you take reservations*. The following list tells you what your management responsibilities are. We'll discuss how your staff helps you accomplish these responsibilities.

1. Make sure all players get to your course in plenty of time to check in, warm up, buy food, and perhaps make a purchase in the pro shop.
2. Make sure your players arrive at the first tee five minutes before their starting time.
3. Determine and maintain the optimum starting interval for your course.
4. "Start" players at their appointed starting times.
5. Manage players through the course.
6. Sit back and enjoy the smooth flow and the positive comments of your customers as they come off the course and head for the bar or the pro shop instead of the parking lot.



Previous chapters in this manual have shown how owners and managers determine optimum starting intervals, and how you use the five factors impacting the pace of play to manage players through the course. Now we'll look at the support you will need from your staff to accomplish these and your other management responsibilities.

### Staff's Responsibilities

Looking at this list, you can already see that every single member of your staff has a role to play in the smooth flow and pace of play. Let's get them involved!

- **The Reservations Process:** People need to know how to get to your course. The staff member responsible for making reservations should provide clear directions to the course, estimating travel time from central locations and faxing a map if necessary. At this time, players must be told about your firm starting time policies. Explain that the starting time is "the time the first ball is in the air," not the time they arrive at the course or meander over to the tee. And don't forget to include all this information on your course website, if you have one, and on your brochures and other course material provided to the golfing public.
- **Outside Services:** Once players are at the course, your outside services personnel, range personnel, pro shop staff, caddies, cart attendants and food service personnel are brought into the picture, understanding that they need to play their part in identifying players and their starting times so that they can serve them properly and help get them to the tee five minutes before their starting time.

As part of your pace improvement program, you'll study and fine tune each of these jobs, for two purposes. The first is for staffing reasons, to see if you're under staffed or over staffed. The second is for job analysis, to help you develop a job description for each position and plan the training that will be needed. The functions of each job need to be institutionalized, not only so that each team member clearly knows his or her job, but also so that when you get personnel turnover, it will be easier to bring new employees up to speed with what their jobs are and how they fit in. You may consider getting some professional consulting, and pace of play and teambuilding training assistance, to help you with this task.

- **The Starter:** The starter will greet each group, welcome them to the course, and provide critical information. This includes advising groups of any unique playing conditions for the day, the course's starting and pace of play policies, including the expected round time and any benchmark times throughout the course. Some courses even provide players with a 10<sup>th</sup> tee starting time. The starter will also advise groups that the marshals or rangers are there for assistance when they need it, to ensure a smooth round for all your players. And the starter's most important job is getting every group off precisely on time!
- **Marshals, Rangers and Caddies:** As owner or manager, you exercise your final control over the flow of play through the efforts of your course marshals and caddies. More than anyone else, these team members need training. They need to have a comprehensive understanding of the material contained in this manual, and the positive effects that each one of them can have on each group and on each round of golf—all day long.



### **Balancing The Equation**

In Section Four - "About the Author" you'll find listed a number of companies and products that for the most part focus on helping your marshals and your management team provide feedback and information to playing groups to help them keep the pace. Perhaps now you can see that the solution to the problem of "slow play" includes not only what I call these "hard technologies" which help you monitor a smooth pace of play, but also the "soft technologies," the information contained in this manual, which helps you *establish* that smooth pace of play on your course. Technology without understanding won't give you the results. This is an equation that needs to be balanced, and part of that balancing is putting together your in-house capabilities, the use of any professional consulting services you might need, and the addition of specific products to help you develop, monitor and maintain your pace improvement program.

The following chapter will illustrate how that equation is balanced as I take you through a sample pace improvement program on a course that makes use of all these elements.



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## Chapter 6: Making Use of All Your Resources

### Gaining the Edge

As a golf course owner or manager, you have a product to sell to your customers. Your product is a golfing experience that lets players know they have received value for the price they have paid. Surveys have shown that golfers rank pace of play among the very top features they look for when choosing a course to play. There is a high correlation between a player's perception of value and pace of play during the round. A player's memory of waiting before playing every shot will ruin the playing experience; it cheapens the "product" and destroys the player's perception of value.

When a course institutes a successful pace improvement program, the product not only matches but usually exceeds the expectations of the players. The total quality and value of the playing experience soar, giving your course the kind of reputation every course wants, and all the benefits that accompany that reputation. Just imagine being able to tell your customers with confidence that any available starting time at your course will provide their foursome with the same consistent, high quality experience!

#### The Improvement Program

Throughout the pages of this manual you have been introduced to a new way of thinking about pace of play. Together we've explored the myths about slow play and dissected the theories which govern the reasons behind long round times. We've seen how to group those reasons into five factors, and how to consider these five factors in developing effective solutions.

Now we're ready to take the final step together. We're going to roll up our sleeves, get out on the course, and put all the pieces together. Come along with me as I visit a course, and see how we combine all our resources—the in-house capabilities and insights of the course management team, the expertise and objectivity of the professional consultant, and the tools and technologies to support the improvement program. For the next few pages, we'll just chat informally together.

#### Day One

*When I work with a course, we try to schedule our time together over a busy weekend, the busier the better. I want to confront the issues head on, so that when we compare the "before and after" of our joint efforts, we can see the impressive results. I'll typically arrive on a Friday morning, "fresh" from an overnight flight from Los Angeles. I head straight for the course and spend time meeting with key members of the management team. Normally the General Manager, Director of Golf and Head Professional are available and anxious to share with me their concerns and their goals for the weekend. Together, we plan and schedule the activities that will take place during our three days together.*



*I begin to gather specific information on the basics of their operations, and pick up tee sheets for the weekend to find out if they are running straight tee times, starting from both nines, or have any group play or even shotgun tournaments scheduled. Then it's off to the course. I hop in a cart with the Director of Golf or the General Manager, and together we begin making observations of the course management practices, course setup and maintenance, and course design features. We also measure the distances from each green to the next tee as we drive the entire course.*

*The next step is to establish an unofficial pace rating for the course. Some courses already have an official USGA® pace rating, usually provided by their state or regional USGA® affiliated golf association, but many do not. In the absence of an official pace rating, I need to come up with a figure that we can use as a benchmark for identifying and analyzing problems.*

*While we're out on the course I take plenty of notes, which will become part of the afternoon's training...data about the general flow of play, where the rough should grow and where it should be cut, which holes might need to be sped up and which need to be slowed down, and the location and length of delays. And I spend plenty of time observing and talking with the course starters and marshals.*

*Members of the management team join me as I look at pro shop operations, on-course signage, food and beverage service, and every aspect of the flow of customers onto and around the course.*

*This is all before lunch. The afternoon of Day One is busier still. I'll set up my computer, do some calculations, make some notes on my observations and get ready for one of the most important elements of my visit, the management team training. I really enjoy giving the training. This is when I explain the Pace Rating System, outline the five factors that impact the pace of play and use data from the course to stimulate dialogue which helps us unravel the reasons for long round times, tee delays and other problems which may exist on the course.*

*As you might predict, everyone remotely connected to what happens out on the course is part of the training: the General Manager and Director of Golf, Head Professional, Food and Beverage Manager, Course Superintendent, Group Sales Manager, Starters, Rangers, Assistant Pros and anyone else on staff who needs to listen and learn. We often have the course owners sitting in too. I like plenty of interaction and discussion in my sessions and I'm seldom disappointed. Because I use my observations from the morning to "customize" the training, it's natural that the audience becomes vitally engaged in the process. I ask questions, encourage the front line staff to describe unique problems and begin to brainstorm solutions, and solicit war stories from the course. At the end of three hours, team members are tired but exhilarated, and usually stick around talking about what they've learned and about what's going to happen on Day Two. As a team-building exercise for a seasonal startup for new and returning staff, the training is a natural. And as a forum for giving course owners and senior management the chance to learn from their employees more about what's really happening out there, again the training is a natural.*



## Day Two

*Because our approach is to focus more on management than on players in addressing pace of play problems, the philosophies and practices fly in the face of everything the golf course personnel have been taught to believe. At first they usually think I'm crazy, but toward the end of the training session they begin to think differently. And the next two days-the two days we spend together out on the course observing play and changing the way we manage the course-are when the real learning takes place. This is where team members see it and understand it for themselves. And beginning on Day Two, because of their hands-on involvement in identifying problems, experimenting with changes and experiencing the improvements, they are more than ready to take over when I leave. In fact, they're chomping at the bit.*

*We (key members of the management team and I) start Day Two working together to observe and document conditions as they are, timing the play of various holes, observing the starting policy on the first tee, and calculating the actual time to play under their normal operating practices. With one or two senior staff I again scrutinize the course from every angle to pinpoint areas of management or physical features where even the simplest of adjustments can make a difference in how the play flows. It is at this time that the unique solutions for the course begin to come clear, as we study the course and together consider the five major factors that impact the pace of play. We identify and distill the most critical changes needed, and the ones we can do something about. Many of these changes we will address and implement on Day Three. Other changes will be left for further study by the management team, with a final written report I provide to document our findings and recommendations.*

*It is at this time that we look at the existing or potential hard technologies (from GPS systems to clocks, time cards, signage, etc.) to help manage Player Behavior, one of the five factors. These technologies monitor the pace of play through communication and feedback. Many of these technologies require knowing the "time to play" each hole. It is not appropriate to simply use the time par for the hole. We must add to the time par the additional time caused by having a full and properly balanced course. In this way, accurate and achievable "time to play" can be loaded into these tools. In many cases using this "time to play" enables the course managers to fully utilize the capability of some sophisticated technologies for the very first time.*

*During the evening of Day Two I program in all these unique features of the course and run computer simulations of the pace of play on the course under different starting interval situations, looking for the optimum balance for this course. These simulations will give us the precise tools to know what starting interval or combination of starting intervals we need to try the next day, under actual playing conditions. I can now accurately predict what will happen on this particular course, including what the average round time will be, where and how long the delays will be. When we put these predictions into practice, the entire team can see the improvements they have helped develop in action. Day Three is probably the most exciting day of the weekend.*





But while we're still on Day Two, let me mention that one real value any consultant brings, and that is objectivity. As an outsider to the course, I can make objective observations, I can ask the difficult questions, and I experience traveling the course like any first-time customer might. Believe me, like you, I've gotten lost many times. This is important because my experience enables me to identify those elements which conspire to confuse and delay the players and therefore which affect the smooth flow and pace of play. I recall a course where I couldn't locate the first tee. It turned out that many others had the same difficulty, and were consistently turning up late for their starting times!

**Because I bring a fresh view to conditions on a course, and because I have probably seen similar conditions on other courses I've worked with, it's not difficult to use the principles discussed in this manual to zero in on exactly what's causing the problems, and work with the course management team to find and implement solutions. Likewise, course owners themselves can use the information in this manual to significantly improve pace of play on their courses.**

### ***Day Three***

*Again we are out on the course, only this time we're making changes to the way the course is managed. Since sunup the staff and I have been making preparations to implement my recommendations in a variety of areas all around the course, including the course setup, food service, outside services and pro shop. The optimum starting interval is going to be used, the starters are primed and ready to roll, and the marshals are tuned in on exactly what to look for as evidence of honest-to-goodness slow play, and exactly how to correct it. Occasionally the Director of Golf and I will act as the starters, responsible for greeting our playing customers and starting each group properly. With each team member responsible for a piece of the action, the transformation is absolutely amazing.*

**For the first time, and under the most dramatic conditions, management team members and other staff begin to clearly understand how each job, each policy, and each course individual has an effect on the pace and flow of play on their course. Their enthusiasm is high and they are quick to embrace the recommendations. And when finally confronted with the shorter round times and smoother play they have achieved under the new management conditions on Day Three, as compared with those of the normal operations on Day Two, they can hardly believe it. Most importantly, their playing customers can hardly believe it either. Because the team is working with me out on the course, they not only see the results for themselves, they hear the comments of their customers. So one more course has won the battle against "slow play."**



### **Supporting and Maintaining the Improvement Program**

With a comprehensive, well-planned training approach to understanding and solving the problem of “slow play,” coupled with today’s technologies to manage the ongoing day-to-day maintenance of your improvement program, you can win the battle and the war. By “balancing the equation” and utilizing both soft technologies and hard technologies, your management team will improve and maintain the quality of your golfing product.

Section Four of the manual contains many, but by no means all, of the products and services that are available to you for designing your pace of play improvement program. Your tastes, traditions and budgets all will play a role in your selection of the tools to help you establish and then maintain your program. Many of you may select the latest GPS technology, while others may opt for a sound marshaling or caddy program to monitor and manage the flow of play on your course. Your insight and creativity in matters of course management and customer service should be fully utilized to set your course and your product apart from all the others. You have the tools available; now it’s up to you.



## Notes



# Summary



I hope that this *Pace of Play Manual* has accomplished one thing...to give owners and course managers hope that the age old, number one problem in the game of golf-slow play-can be managed. Your customers do not have to be sentenced to five-plus hour rounds and they don't have to play every round "behind the slowest group in the world." In fact, we can be sure that in the future your customers will begin to insist that courses deal with the problem.

Many courses have turned themselves around with positive results. They have improved the morale of their management team and other staff. And, most importantly, the impact of their work has had a strong positive effect on their playing customers.

Implementing and managing an improvement program isn't always easy for a course, and once the management team begins, they can't let it go. It takes commitment and constant vigilance to maintain the program. New policies and practices must be institutionalized to be quickly understood and implemented as staff turnover occurs. Your ultimate goal is to bring pleasure to all who love the game of golf and visit your course in search of the perfect round.

When all is said and done, your course is selling a golfing experience, and your customers take away only a memory. If your job is done correctly, that memory will lure the players back again and again and distance you from the competition.



## Section Four - About the Author



**Bill Yates**, author of this manual, is President of William Yates and Associates and creator of Pace Manager™ Systems, the training and consulting tool used to improve the pace of play and the golfing experience on many of America's most famous courses.

**Ad Graphix Inc.**

Detailed, accurate and high quality yardage books, websites and marketing materials produced using the graphic design technologies.

Contact: Bob Planidin  
2526 Battleford Ave. SW Suite 250  
Calgary, AB T3E 7J4 CANADA  
(888) 483-4378  
[www.adgraphix.com](http://www.adgraphix.com)

**ATAP for Golf**

ATAP for Golf is a program that provides a simple, accurate method of measuring and eliminating slow play-saving revenue for owners.

Contact: Joe Elliott  
P.O. Box 835851  
Richardson, TX 75083  
(972) 661-3947  
[www.atapforgolf.com](http://www.atapforgolf.com)

**Best Approach Publications**

Produces highly detailed and accurate yardage books. Also offers progressive graphics designs, measure and mark sprinkler heads, coordinate various signage programs and specializes in complete packages for new course openings.

Contact: Garry Mannies  
2627 West Birchwood Circle, Suite 2  
Mesa, AZ 85202  
(877) 235-9500  
(480) 731-3609 (fax)  
[www.bestapproach.com](http://www.bestapproach.com)

**Caddie Services Inc.**

Helps clients differentiate themselves with personal service and create a memorable experience by providing a forecaddie with every round as an alternative to GPS.

Contact: Michael Granuzzo  
P.O. Box 36  
Pinehurst, NC 28370  
(910) 255-0311  
(800) 391-9255  
(910) 255-0313 (fax)



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### **Caddie Master Enterprises**

Specializes in the installation and maintenance of caddie programs for the nation's high-end daily fee, resort and private facilities

Contact: Michael Granuzzo

P.O. Box 160  
Pinehurst, NC 28370  
(910) 255-0220  
(910) 255-0224 (fax)

### **GEO Associates**

Provides customized golf course publications, including the CADDY CARD golf scoring system, an "all-in-one" scorecard, course and yardage guide, and golfer game improvement tool.

Contact: Jerry Oljace

17277 Cameron Dr.  
Northville, MI 48167  
(248) 305-5930  
(248) 305-9033 (fax)

### **Golf Core Andac Corporation**

Featuring scorecards, yardage guides, pro shop forms, laser measuring, tee signs, and placemats.

Contact: Roy Perry

1327-C Industrial Drive, P.O. Box 98  
Itasca, IL 60143  
(800) 593-0099  
(630) 773-0599  
[www.golfcore.net](http://www.golfcore.net)

### **Inforetech Golf Technology 2000**

A portable full-featured golf management and information system, utilizing GPS/DGPS and radio frequency technology. The Inforemer 2000 is handheld, offering use to 100% of golfers on a course.

Contact: Brent Silzer

214-5500 152<sup>nd</sup> St.  
Surrey, BC V3S 8E7  
604-576-7442  
888-594-FORE  
604-576-7460 (fax)  
[www.inforetech.com](http://www.inforetech.com)

### **John Deere Golf Technology**

Golf course management, premier golfer amenities, and turf care applications provided through GPS global positioning systems to make golf more efficient and profitable.

Contact: Lyle Hartz

3159 Royal Drive Ste. 320  
Alpharetta, GA 30005  
877-298-8515  
770-238-5101 (fax)





### **Kirby Markers**

The Kirby Marker System speeds up play 30 minutes per round. Visible pop-up yardage markers eliminates time consuming searches, when placed at 25 yard intervals on both sides of the fairway.

Contact: Marsha Bellafaire  
2731 Loker Avenue West  
Carlsbad, CA 92008  
800-925-4729  
760-931-1753 (fax)  
[www.kirbymarkers.com](http://www.kirbymarkers.com)

### **Leisure Time Displays**

Offers golf care yardage books, website design and hosting, hand held yardage books and web-enabled digital printing.

Contact: Tom Miller  
1933 Premier Row  
Orlando, FL 32809  
(800) 394-1156  
(407) 438-8240  
[www.gcyb.com](http://www.gcyb.com)

### **Pace Manager Systems**

Golf course management and design consulting and PGA-approved training for management teams, for improved pace of play, customer service and experience, and course revenue.

Contact: Bill Yates  
4804 Elmdale Dr.  
Rolling Hills Estates, CA 90274  
(877) 722-3647  
(310) 791-7348 (fax)  
[www.pacemanager.com](http://www.pacemanager.com)

### **Parview**

Provides hole overviews, exact distancing, pro tips, scoring, a tournament live leaderboard, two-way communications, food and beverage ordering and back-office reporting options.

Contact: Kevin Carpenter, VP of Sales  
1856 Apex Road  
Sarasota, FL 34202  
941-379-5538  
888-PARVIEW  
941-379-5206 (fax)  
[www.parview.com](http://www.parview.com)



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### **Personal Ranger**

The Personal Ranger is the easiest and most effective pace management system available. With a simple glance at the Personal Ranger, golfers know exactly where they should be at all times based on your customized pace-of-play timeline. The Personal Ranger raises pace awareness, eliminates player/marshal conflict and improves the golfer experience through a better pace.

Contact: Scott Grundberg.  
621 W. Randolph, Suite 300  
Chicago, IL 60661  
(312) 258-1000  
(312) 258-1753 (fax)  
[www.personalranger.com](http://www.personalranger.com)

### **ProLink**

The leader in complete course information management - is a cart mounted electronic yardage book for the golfer and a multi-faceted tool for the course manager.

Contact: Steve McGrady  
7970 South Kyrene Road  
Tempe, AZ 85284  
480-961-8800  
800-483-5951  
480-961-8537 (fax)  
[www.goprolink.com](http://www.goprolink.com)

### **ProShot**

ProShot Golf, with 150 golf course installations worldwide, leads the distance measuring and golf course communications industry in offering a premier color product as well as affordable grayscale graphics on cart-mounted units. ProShot offers turnkey sales, financing options, installation and support services.

Contact: John Seymour  
333091 Calle Perfecto  
San Juan Capistrano, CA 92675  
800-3PROSHOT  
949-487-9835 (fax)  
[www.proshotgolf.com](http://www.proshotgolf.com)

### **Strokesaver U.S.**

Strokesaver is a global market leader in creating golf yardage distance guides for over 20 years with representation in 26 countries at over 700 courses.

Contact: Abigale Boylston  
P.O. Box 23287  
Hilton Head, SC 29925  
(843) 304-4653  
(843) 815-6495



### **The Holeview**

Provides yardage books which are entirely photographic and offers a large selection of styles and prices.

Contact: Terry Gamer  
50 Wintonbury Mall  
Bloomfield, CT 06002  
(800) 438-3661  
(860) 769-6045  
[www.holeview.com](http://www.holeview.com)

### **Touch Technology, LLC**

Offer the Golf Caddy GPS which is a special computer equipped with GPS and an 11 touch screen. Pace of play revenue system.

Contact: Sean Gatz  
11843 Cannon Blvd. Ste. C  
Newport News, VA 23606  
(757) 873-6938  
(757) 873-6724 (fax)  
[www.touchtech-llc.com](http://www.touchtech-llc.com)

### **Tour Golf**

3D yardage books, scorecards, granite signs, bronze and aluminum signs, sprinkler tags and yardage markers. Brochure design and marketing materials.

Contact: Tom Eubank  
1892-I Abbey Rd.  
West Palm Beach, FL 33415  
(800) 383-9737  
(561) 432-1764 (fax)

### **UPLINK**

UpLink provides a complete turnkey GPS-based golf course management system including precise distance measurement, a "Pin Spotter," food and beverage ordering, tournament management with on-cart scoring and leaderboard functions, position relevant tips, and two-way communications. The UpLink Tracker, a Windows-based clubhouse computer provides real time information on the pace of play of every cart on the course.

Contact: David Hollowell  
9508 Jollyville Rd. Suite 200  
Austin, TX 78759  
877-7UPLINK  
(512) 637-4801 (fax)  
[www.uplinkgolf.com](http://www.uplinkgolf.com)



### **XY Golf**

GPS based yardage and pace of play management systems. Product family includes handheld and cart-based GPS units combined with Windows-based course management application.

Contact: Cooper Yang

3750 Industrial Court Suite H

Suwanee, GA 30024

888- XYGOLF3

770-271-5584

[www.xygolf.com](http://www.xygolf.com)

### **Other Written Resources**

USGA “Fast Play Golf” and “Pace Rating System Manual”

- available from the USGA Order Department - 800-336-4446

- [www.usga.org](http://www.usga.org)

National Golf Foundation “Slow Play Fast Solutions”

- available from the NGF - 800-733-6006

- [www.ngf.org](http://www.ngf.org)



## Notes