## The Course Rating System Manual

Effective January 2020









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**Effective January 2020** 

#### THE BASIC RULES FOR COURSE RATING TEAMS

- 1. For each hole, the rating team must be composed of a minimum of three trained and experienced raters, with one rater designated as the team leader. The team leader must have attended a course rating seminar conducted by an Authorized Association.
- 2. To avoid bias, do not serve as a team leader when your home course is being rated.
- 3. Do not play the course while rating it.
- 4. View each hole from the teeing ground, the landing zones of scratch and bogey players, and the green.
- 5. Rate the obstacles in accordance with the guidelines established in the "Course Rating System Guide," not based on how you would play the hole.
- 6. Do not discuss obstacle values while evaluating a hole. Values should be discussed with the team leader after each team member has completed rating the hole. The Green Target rating may be agreed upon before rating the other obstacles.
- 7. Do not record final obstacle values on the rating form until the hole has been evaluated from all positions.
- 8. When rating the same set of tees, agree within one unit on the rating of each obstacle. The team leader has the responsibility of ensuring that the team members reach an agreement. The team leader's decision is final.
- 9. Do not discuss course rating results with a club. Ratings are subject to review by a Course Rating Review Committee before the ratings are official.

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#### SECTION 1 — INTRODUCTION

The purpose of "The Course Rating System Manual" is to offer a "textbook" on the Course Rating System.

The Course Rating System is designed to ensure that the rating of a course is in proper relation to the ratings of other courses. If this is not achieved, players at courses rated too low will be over-handicapped, and vice versa.

Accuracy and consistency are the keys to effective course rating. A course must first be accurately measured, and the measured length must be corrected for factors that affect the playing length, which are roll, changes in elevation, forced layups, doglegs, wind, and altitude. Obstacles that affect playing difficulty must then be evaluated in accordance with established standards. These standards reduce subjectivity in course rating.

A Course Rating is based on the expected performance of the scratch player as defined and described in Section 3. A Course Rating is based on measured length, effective playing length corrections, and 10 obstacle factors to the extent that they affect the scoring ability of a scratch player.

The Course Rating System provides procedures for determining a Bogey Rating based on the expected performance of the bogey player as defined in Section 3. This rating is used in conjunction with a Course Rating to calculate a Slope Rating.

Through the collection of extensive empirical data from players and golf holes, the factors that affect the difficulty of a golf hole have been evaluated and assigned numerical values that yield an accurate Course Rating and Slope Rating when applied to the entire course.

"The Course Rating System" describes the procedures for:

- Installing the Course Rating System in a region;
- Measuring golf courses;
- Evaluating obstacles and conditions that affect playing length;
- Computing a Course Rating and Slope Rating based on these measurements and evaluations;

In this manual, items and distances/measurements specifically for women are shown in [square brackets].

#### SECTION 2 — THE HISTORY OF COURSE RATING

- The first measure of course difficulty was termed 'Par'. In 1870, British golf writer A H Doleman asked two leading professionals, Davie Strath and Jamie Anderson, what score would be required to win the Open Championship Belt at Prestwick. Their response was that perfect play should produce a score of 49. A H Doleman called this 'Par' for, the then 12-hole, Prestwick course.
- In late 1890, Coventry Golf Club allocated a scratch value for each hole, which they termed the 'ground score'. This was a score that a fictitious low handicap player was expected to achieve on each hole, scoring 4 on long par 3's, 5 on long par 4's, but otherwise playing flawless golf. In May 1891, Mr Hugh Rotherham conceived the concept of each player playing a match against the ground score on each hole. Dr. Thomas Browne of Great Yarmouth later referred to the imaginary opponent as a 'regular bogey man, not easily caught' and the term 'bogey' was widely adopted. In 1892 when this format was adopted at the United Services Golf Club, a golfing facility for Army and Navy officers, Mr Bogey was granted the honorary rank of Colonel and the term Colonel Bogey was born.
- In 1893, the Ladies Golf Union (LGU) was formed led by honorary secretary Miss Issette Pearson. With the assistance of fellow Royal Wimbledon Golf Club member Dr Laidlaw Purves, the LGU established a uniform system of handicapping, based on the 'par of the green', a fixed score that a lady champion might achieve when playing her best. Robert Browning's History of Golf quoted that "within eight or ten years the LGU has done what the men had signally failed to do had established a system of handicapping that was reasonably reliable from club to club."
- 1905 Mr Leighton Calkins, who became the Chairman of the Metropolitan Golf Association, authored a pamphlet 'A System for Club Handicapping'. Par was the basis of this system, defined as perfect play without flukes, under normal weather conditions, allowing for 2 putts on each green. In addition to this standard to determine course difficulty, a player's handicap was determined by the average of their best three scores with an additional 'Calkins reduction table' adjustment relative to the par of the course.
- The USGA adopted its first Course Rating System in 1911, in which course ratings were based on the play of U.S. Amateur Champion, Jerome Travers. Determining course ratings based on the expected score of the national amateur champion became accepted and course rating in the USA was born.
- When The R&A assumed responsibility for running the Amateur Championship, they became acutely aware that something had to be done to establish uniformity within handicapping to ensure that all participants in the Amateur Championship were worthy of their place in the field. This objective led to the establishment of the British Golf Union's Joint Advisory Committee, who were assigned the task of establishing a uniform system of handicapping for golf in Britain. In 1925, this Committee released The Schemes for Standard Scratch Scores and Uniform Handicapping.

- 1930's In the early 1930's William Langford, a golf course architect from Chicago, developed a fractional par concept 'so that a hole has a par which more or less matches its difficulty'. After calculating 'fractional pars' for forty golf courses in the Chicago area it was concluded that the existing 18-hole pars would reduce by approximately a stroke and a half on these courses. Thomas McMahon, who devised the 'current ability' system of handicapping in 1938 (average of best 10 of last 15 scores) was another strong advocate of fractional par ratings.
- The USGA adopted the Massachusetts Golf Association's recommendations for men's course ratings in 1947, which was based on fractional par, conducted on a hole-by-hole basis in tenths of a stroke and modified where appropriate. The Chicago District Golf Association continued to endorse the fractional par rating method, which was dependent on individual hole yardage, the overall difficulty of the course and golfing 'experience', which required a knowledge of the performance of expert golfers in relation to the existing rating. Both course rating procedures were approved by the USGA.
- 1960 A new single approach was introduced that involved a 'preliminary yardage rating' for each hole, modified if necessary due to any significant course conditions, called rating factors. The Chicago District Golf Association continued to use fractional par ratings.
- In 1968, the USGA released its first truly uniform Handicap System for men and women, which included a Course Rating System combining the best features of the Massachusetts Golf Association and the Chicago District Golf Association's systems. Each hole was assigned a yardage rating, the total of which was then expressed in decimal fractions of a stroke. The rating of a golf course could then be adjusted if 'truly exceptional' features were present.
- 1971 William Wehnes of the Southern California Golf Association developed the first 'obstacle rating' which introduced plus or minus adjustments for a number of course 'obstacles' to the ratings of each 9-holes. Dr. Clyne Soley and Trygve Bogevold proposed a slope-like approach to handicapping.
- In 1977, Lt. Commander Dean Knuth of the Naval Post-Graduate School proposed a course rating system which involved the numerical rating of 10 characteristics for each hole. These ratings with their associated weighting factors for each of the 10 characteristics provided a basis on for adjusting the length rating for the course. The method included elements of decision theory, and was intended to be a systematic, quantitative approach to course rating.
- 1978 In 1978, Dr Richard Stroud, in writing to the Chair of the USGA Handicap Procedures Committee, stated "it should be emphasized that the proposed scheme for selecting course-difficulty parameters is based on length alone. There is a significant chance some more sophisticated methods will prove necessary i.e. the Knuth method for refining course ratings and a similar procedure for predicting slope."

- In 1979 the USGA formed a Handicap Research Team (HRT) which researched many aspects of the course rating system, from which the concepts of expert and bogey golfer ratings emerged. The HRT chaired by Frank Thomas, also included Trygve Bogevold, Dean Knuth, Dr. Lou Riccio, Dr. Fran Scheid, Lynn Smith, Dr, Clyne Soley and Dr. Richard Stroud.
- 1981 The concepts of expert and bogey ratings were incorporated into the course rating system which became a two-parameter procedure in 1981 and these have remained a key component of the Course Rating System ever since.
- 1982 In 1982, the Colorado Golf Association rated all of its courses using the new course rating procedure.
- In 1983, the Colorado Golf Association tested the Slope system with positive results. The following year, five other USGA States joined Colorado in the test. Other states in the US progressively adopted the system in the subsequent years.
- In 1987 the USGA Course Rating System, including Slope Rating, was officially implemented. It was widely adopted worldwide by National Associations and regarded as the standard methodology for determining the difficulty of a golf course. The Course Rating System has since been reviewed on a periodic basis, generally every four years, and has evolved to incorporate many of the obstacles and challenges that players face on golf courses of very different natures, worldwide.

Starting in 1989, the USGA organized and conducted national Course Rating Calibration Seminars for course raters from all over the U.S. and countries licensed to use the Course Rating System. In 2002, the USGA conducted the first international Course Rating Calibration Seminar in Frankfurt, Germany and subsequent Calibrations seminars have been conducted in Africa, Asia, Europe, and South America.

**2020** With the USGA Course Rating System being used extensively around the world, it was adopted in entirety under the World Handicap System umbrella, when launched in January 2020. An international Course Rating Committee continues to review and develop the Course Rating System.

#### **SECTION 3 — DEFINITIONS**

#### **BOGEY PLAYER**

Defined and described in Section 4.

#### **BOGEY RATING**

A Bogey Rating represents the scoring difficulty of a course for the bogey player. It is expressed as strokes taken to one decimal place.

#### **BOGEY LENGTH RATING**

A Bogey Length Rating is the evaluation of the playing difficulty of a course for the bogey player based only on length.

#### **CARRY SAFELY**

In order to carry an obstacle safely, a shot must be able to clear the obstacle by at least 10 yards. When recording a carry distance over an obstacle, the 10 yards should be added to the length of carry. If a player cannot carry an obstacle by 10 yards, it may result in a forced lay up or an alternative line of play.

#### **CHUTE**

A chute occurs when trees are positioned such that they can intervene on the flight path of a shot, and the ball must be hit through a narrow opening. Chutes are rated based on the width of the opening between the extending branches of the trees and how far that opening is from the teeing ground area.

#### **CLOSELY BORDERING**

An obstacle or condition is considered closely bordering a landing zone or green if it is within 10 yards in any direction of the outside perimeter of a landing zone or edge of the green.

#### **COURSE RATING**

Course Rating is defined as the WHS mark that indicates the evaluation of the playing difficulty of a course for scratch players under normal course and weather conditions. It is expressed as strokes taken to one decimal place, and is based on length and other obstacles to the extent that they affect the scoring difficulty of the scratch player.

#### **CROSSING OBSTACLES**

Crossing obstacles consist of penalty areas, extreme rough (including desert) and out of bounds when they must be carried to play the hole.

#### **DESERT**

Desert is extreme rough that contains vegetation (brush, cacti, bushes, etc.) with thorns, needles, or similar. Desert is rated as extreme rough or as a penalty area if so designated.

#### **EFFECTIVE PLAYING LENGTH**

Effective playing length of a course is the measured length for all holes making up a rating corrected for roll, changes in elevation, forced lay ups and doglegs, wind, and altitude above sea level.

#### **EXTREME ROUGH**

Extreme rough is cool season rough grass in excess of 6 inches in length {4 inches warm season}[5 inches {3 inches} for women], underbrush in trees, or other conditions such as sand dunes (not bunkers), iceplant, palmettos, tree roots, rocks, lava, desert, heather, gorse, etc., which make it likely the ball will be lost or advanced only with great difficulty. Extreme rough should be rated under Crossing Obstacles or Lateral Obstacles and may additionally be rated under Recoverabilty and Rough or Bunkers.

#### **GRASSES**

For rating purposes, grasses used for rough are divided into two categories:

- Cool season rough grasses include perennial ryegrass, bluegrass, meadow-grass and poa annua (but not bentgrasses for rating purposes only); and
- Warm season grasses include all types of bermuda, zoysia, St. Augustine and kikuyu, seashore paspalum, buffalograss, plus bentgrasses.

Warm season grasses do not need to be as deep as cool season grasses to cause the same recovery problems. Cool season grasses are assumed throughout this manual; equivalent warm season grasses are shown in {braces}.

#### **LANDING ZONE**

The landing zone is a fairway-wide area extending from where a shot hits the ground to where it comes to rest (i.e. it is generally a rectangle with dimensions equal to the width of the fairway by the length of the evaluated roll).

# 180 [130] 200 [150] 230 [190] 250 [210]

#### LATERAL OBSTACLES

Lateral Obstacles consist of penalty areas, extreme rough (including desert) and out of bounds when they come into play laterally on the hole.

#### LAY UP

Lay-ups are divided into two categories:

- A forced lay-up occurs when a severe obstacle, or a combination of severe obstacles, such as water, dense trees, deep bunkers, extreme rough, or severe topography crosses the fairway or reduces the fairway width in the normal landing zone of the scratch or bogey player to less than 15 yards [13 yards]. As a result, the player will hit less than a full shot (i.e. he [she] will lay up).
- Lay-up by choice occurs when a significant obstacle or a combination of obstacles near the normal landing zone results in a scratch or bogey player choosing to hit less than a full shot. A fairway landing zone that is less than 15 [13] yards wide but without severe obstacles may

be a reason for a lay-up by choice. The lay-up by choice would also be employed, primarily by scratch players, in their course management decisions. In order to qualify, the normal landing zone must be present an unpleasant situation (e.g. downhill stance/lie to an elevated green).

#### **LENGTH RATING**

Length Rating is the evaluation of the playing difficulty of a course based only on length. It is computed by applying the effective playing length to the Length Rating formula.

#### **LINE OF PLAY**

Line of play, as defined in the "Rules of Golf," is the direction that a player wishes his ball to take after a stroke, plus a reasonable distance on either side of the intended direction. The line of play is normally down the centre of the fairway. When a player is able to cut across a dogleg, the line of play may shift away from the centre, toward the inside of the dogleg.

#### **MIDSEASON**

Midseason includes all of the months of a year when a golf course is regularly maintained and scores are being submitted for handicap purposes.

#### **MOUNDS**

A mound has distinct sides/slopes that impact stance or lie. Mounds in the fairway are rated under Topography. Mounds in the rough or around the green are rated under Recoverability and Rough. When considering mounds, the rating team must evaluate stance and lies on sides of the mounds, rough height, and how the mounds will impact scoring. Hollows are essentially inverted mounds and should be rated using the same procedure.

#### **NEAR**

An obstacle or condition is considered near a landing zone or green if it is within 20 yards in any direction of the outside perimeter of the landing zone or edge of the green.

#### **OBSTACLE FACTORS**

Obstacle factors are features of a course that affect its playing difficulty.

#### **OBSTACLE SQUEEZE**

Obstacle squeeze occurs when lateral obstacles are present on both sides of a landing zone and a player cannot play away

from either side. Rating values in tables assume the existence of some obstacle squeeze. Upward adjustment of those table values is warranted when obstacle squeeze consists of lateral obstacles that are situated on both sides of a landing zone and are less than 40 yards apart. Bunkers on both sides of a landing zone that are less than 30 yards apart also qualify for an upward adjustment.

#### **OBSTACLE STROKE VALUE**

Obstacle stroke value is determined for scratch and bogey players by totaling the ratings for each obstacle factor, multiplying these totals by relative weighting factors, adding the resulting figures, and applying that sum to a stroke conversion formula. The Scratch and Bogey Obstacle Stroke Values are added to the Scratch and Bogey Length Ratings, respectively, to obtain the Course Rating and Bogey Rating.

#### **PENALTY AREA**

A penalty area is any body of water, (whether or not marked by the Committee), including a sea, lake, pond, river, ditch, surface drainage ditch or other open watercourse (even if not containing water) and any other part of the course the Committee defines as a penalty area.

#### **PUNITIVE**

An obstacle or situation that is unusually difficult, often requiring a demanding recovery shot or likely to cost the player a stroke.

#### **RATING TEAM**

A rating team is a group of at least three trained and experienced raters. Team members must have been trained in course rating procedures, certified and appointed by an Authorized Association to rate courses in accordance with procedures in the Course Rating System.

#### RISE AND DROP

Rise and drop occurs when ground closely bordering a significant portion of the green rises up and/or drops down thus causing a difficult recovery situation. The rise and/or drop must be greater than 5 feet to qualify for an adjustment. Rise and drop is rated using the Mounds adjustment in Recoverability and Rough.

#### **SCRATCH GOLFER**

Defined and described in Section 4.

#### **SIGNIFICANT**

A significant obstacle is one that is sufficiently important to be worthy of attention and impacts the difficulty in playing the hole (see Interpretations, for more information).

#### **SLOPE RATING**

Slope Rating is defined as the WHS mark that indicates the measurement of the relative difficulty of a course for players who are not scratch players compared to the Course Rating (i.e. compared to the difficulty of a course for scratch players). Slope Rating is computed from the difference between the Bogey Rating and the Course Rating. The lowest Slope Rating is 55 and the highest is 155. A golf course of standard relative playing difficulty has a Slope Rating of 113.

#### **STIMPMETER**

A Stimpmeter is a device that measures the speed of greens. The Stimpmeter is a three-foot long, slotted bar used to roll a golf ball onto the green at a constant, reproducible initial velocity.

#### **TIER**

A tier is a plateau. To be tiered, a green must have a minimum of two definite plateaus of surface area, separated by a two-foot or greater elevation difference. The elevation change area must include a significant portion of the green. Two plateaus

with one "ramp" equates to two tiers. Three plateaus with two "ramps" equates to three tiers. A ball will not normally remain at rest on a ramp between two tiers.

#### **TEAM LEADER**

An experienced member of each rating team must be designated by the Authorized Association as the team leader. The team leader must have attended a course rating seminar conducted by an Authorized Association.

#### **TOGGLE**

To "toggle" is to alternate rating values or the application of an adjustment when there are multiple instances that could be rated one point higher or lower, or an adjustment is marginal.

#### **TRANSITION ZONE**

Defined and described in Section 4.

#### **TWEENER**

A "tweener" is a value that falls between two table values. For example, if the table provides rating values of 4 and 6, but not 5, the rater may assign a rating of 5 if the obstacle is more significant than a 4, but less significant than a 6.

#### **WASTE AREA**

A waste area is an unmaintained area on the course that is natural to its surroundings. Generally, it has a sand base (or similar) and may have large rocks, stones or native vegetation that may qualify as extreme rough in it. A waste area may have poorly defined boundaries and the ground surface is not always maintained. The waste area may be prepared, similar to a bunker, and maintained by periodic edging and/or raking or levelling of the surface. Any vegetation in a prepared waste area does not generally qualify as extreme rough. Waste areas may be rated as R&R, Bunkers or extreme rough depending on the situation.

#### **SECTION 4 — PLAYER AND SHOT INFORMATION**

#### 1. **DEFINITIONS**

#### Scratch Player — Men

A "scratch player" is a player with a 0.0 Handicap index. A male scratch player, for rating purposes, can hit tee shots an average of 250 yards and can reach a 470-yard hole in two shots at sea level.

#### **Scratch Player** — Women

A "scratch player" is a player with a 0.0 Handicap Index. A female scratch player, for rating purposes, can hit tee shots an average of 210 yards and can reach a 400-yard hole in two shots at sea level.

#### **Bogey Player** — Men

A male bogey player is a player with a Handicap Index of approximately 20.0 Handicap Index. For rating purposes, he can hit tee shots an average of 200 yards and can reach a 370-yard hole in two shots at sea level.

#### **Bogey Player** — Women

A female bogey player is a player with a Handicap Index of approximately 24.0 Handicap Index. For rating purposes, she can hit tee shots an average of 150 yards and can reach a 280-yard

#### 2. SHOT LENGTH

hole in two shots.

The following table shows the average lengths of shots played by men and women scratch and bogey players, assuming a level landing area at sea level with average roll conditions. Uphill or downhill landing areas can affect roll, thereby increasing or decreasing overall shot lengths.

**Note:** Assume that scratch and bogey players generally hit straight shots. To rate obstacles higher because they are on a specific side of the hole is inappropriate. Course Rating is not a right-handed or left-handed rating procedure.

Also, it is understood that the scratch player utilizes course management in playing the golf course and can intentionally curve a shot to the left or right as necessary to position himself [herself] better for the next shot. However, for course rating purposes, assume the scratch and bogey players hit straight shots.

SHOT LENGTH TABLE — Men and [Women] (All Distances in Yards)										
FII C	Full Shots  Scratch Player Bogey Player									
Full 5	nots	Men	Women	Men	Women					
	Carry	230	[190]	180	[130]					
Tee Shot	Roll	Roll 20 [20]			[20]					
	Total	250	[210]	200	[150]					
Distance Af	ter 1 Shot	250	[210]	200	[150]					
_	Carry	200	[170]	150	[110]					
Subsequent Full Shots	Roll	20	[20]	20	[20]					
i un snots	Total	220	[190]	170	[130]					
Distance After 2 Shots		470	[400]	370	[280]					
Distance Aft	690	[590]	540	[410]						
Distance Aft	ter 4 Shots	910	[780]	710	[540]					

#### 3. TRANSITION ZONE

A Transition Zone is the area close to or on the green that is just beyond the average distance a scratch or bogey player can expect to hit with consistency. On a one-shot hole, the Transition Zone is 10 yards deep; on a two-shot (or more) hole, it is 20 yards deep.

To the right is a table showing the Transition Zones:

On a hole where a long shot can barely reach the centre of the green, the Green Target value is high (from 4 to 10, depending on green size). When a long shot cannot reach the green surface and a short pitch shot remains, the Green Target value is low (normally 2). When the hole length falls between these two extremes, rather than forcing a rating team to choose one or the other Green Target value, an intermediate value between the long and short Green Target ratings is determined, using the "Transition Zone" concept.

The recommended procedure for rating a hole that falls into the Transition Zone is to apply the average of the long shot Green Target rating and the short shot Green Target rating. This value is provided in the bottom row of the Green Target Rating Table.

TRANSITION ZONE TABLE* — Men and [Women]								
<b>a</b>	Di	Distance from Tee (in Yards)						
Shot in Transition	Scratch	n Player	Bogey	Player				
Hansidon	Men	[Women]	Men	[Women]				
Tee Shot	251-260	[211-220]	201-210	[151-160]				
2nd Shot	471-490	[401-420]	371-390	[281-300]				
3rd Shot	691-710	[591-610]	541-560	[411-430]				
4th Shot	911-930	911-930 [781-800] 711-730 [541-560						

<sup>\*</sup> When the altitude is 2,000 feet or higher, use table on page 19.

When the rating team determines that the centre of the green will be reached significantly more (or less) than half the time, the Transitioned Green Target value may be adjusted up (or down) one point. For example, if the centre of the green is close to the front of the Transition Zone, it may be appropriate to add one point to the 50/50 Transitioned Green Target chart value. Conversely, if the centre of the green is close to the back of the Transition Zone, the shot to the green will rarely reach the centre of the green and reducing the chart value by one point may be appropriate.

Because Recoverability and Rough (R&R) and Bunker ratings depend on the Green Target rating, applying the averaged Green Target rating to the R&R Rating Table or the Greenside Bunker Rating Table means that no further averaging is required for R&R and Bunkers.

Once the rater has determined the Green Target value, the following process is used to rate Topography, Fairway, Crossing Obstacles, Lateral Obstacles, and Trees:

• If the player reaches the centre of the green 50% or more of the time on the long shot, rate the hole using that shot for the approach shot information;

There are conditions under which the Transition Zone is not used even though the hole length falls within Transition Zone yardages. If the team consensus is that the player cannot reach the centre of the green because of an effective length correction factor (roll, elevation, dogleg, or forced lay-up) or an obstacle preventing the shot from reaching the green (e.g. bunker in front of green) then a Transition Zone rating should not be applied.

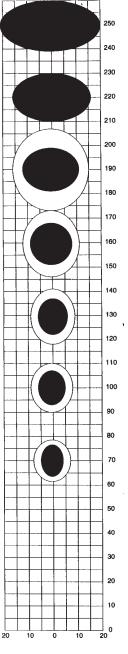
Similarly, if the team consensus is that the player can reach the centre of the green some of the time even though the hole length falls outside the Transition Zone, then the Transition Zone concept should be applied.

#### 4. ACCURACY PATTERN

The Accuracy Table gives the dimensions of the area into which a scratch or bogey player is expected to hit shots of various lengths 67 percent of the time. It is used to assist in evaluating the effect of obstacles around the target.

ACCURACY TABLE — Men and [Women] (Dimensions of Expected Landing Area 2/3 of the Time – in Yards)												
	9	Scratcl	<b>1</b> Playe	r		Bogey	Player	•				
Length of Shot	M	en	noW]	men]	M	en	[Woı	men]				
01 31100	Width	Depth	Width	Depth	Width	Depth	Width	Depth				
90	11	14	[12]	[15]	16	19	[17]	[22]				
110	12	15	[14]	[16]	17	21	[19]	[24]				
130	13	15	[17]	[17]	18	23	[21]	[27]				
150	15	16	[20]	[18]	20	25	[24]	[30]				
170	18	17	[26]	[20]	24	28	_	_				
190	23	18	[30]	[24]	29 34 -		29 34		29 34		_	_
210	29	19	[34]	[28]	-   -   -		_	_				
230	35	20	_	_	_	_						
250	41	21	_	_	_	_	_	_				

**MEN** 



Shot Length and Shot Pattern Width and Depth (yards) Each square =

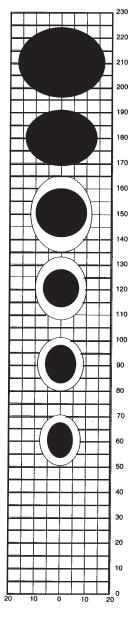
5 yards
Average Scratch
Player tee shot
is 250 [210]
yards

Average Bogey Player tee shot is 200 [150] yards

Scratch

Bogey

SHOT PATTERN WIDTH (YARDS) **WOMEN** 



**ALL SHOTS HIT FROM HERE** 

**ALL SHOTS HIT FROM HERE** 

#### 5. OBSTACLES "DO NOT EXIST"

Obstacle values normally decrease as obstacle distance from the target increases. If an obstacle is more than 50 yards to the left and right of the line of play and more than 50 yards beyond the centre of the green, generally it should not be considered a factor for either the scratch or the bogey player (i.e. it "does not exist" on the hole) and should be rated zero. Obstacles less than 50 yards from the centre of the fairway or the centre of the green "exist" on the hole and should be rated at least 1, even if not near a landing zone. This concept applies to Bunkers, Lateral Obstacles, Crossing Obstacles and Trees.

Penalty areas, extreme rough (including desert) and out of bounds are rated under Lateral Obstacles and/or Crossing Obstacles. If a Lateral or Crossing Obstacle "exists" on the hole, a minimum rating value of 1 should be recorded for Lateral Obstacles. A value of zero for Crossing Obstacles would be correct if there were no other Crossing Obstacles to be rated on the hole.

A safe carry over a Crossing Obstacle that is too short to earn a rating value from the Crossing Obstacle Rating Table should be rated zero. Although the area is not rated as a Crossing Obstacle, it "exists" on the hole and may be rated 1 for Lateral Obstacles if no other Lateral Obstacles are present on the hole.

Some examples of "Does Not Exist" for Crossing/Lateral:

- There are no areas that qualify as Lateral Obstacles "near" any landing zones for the player or within 50 yards of the centre of the green, so there is no table rating value for Lateral Obstacles. There is a penalty area just off the fairway 70 yards short of the first landing zone on the hole. There are no Crossing Obstacles on the hole. The correct rating would be 1 for Lateral Obstacles ("Obstacle Exists" concept for Lateral Obstacles).
- There is a short 25-yard crossing over a penalty area and no other areas of Lateral or Crossing Obstacles anywhere on the hole. The correct rating would be 1 for Lateral Obstacles.
- There is a short 25-yard crossing over a penalty area and a Lateral Obstacle (extreme rough) at the green that is 25 yards from the centre of the green. The correct rating would come from the Lateral Obstacle rating table based on the approach shot into the green for each player. The Crossing Obstacle would be zero. The "Does not Exist" concept does not apply because there is a table value for Lateral Obstacles for the extreme rough at the green. The rating value for Crossing Obstacles is zero.

#### 6. PLAYER CANNOT COMPLETE THE HOLE

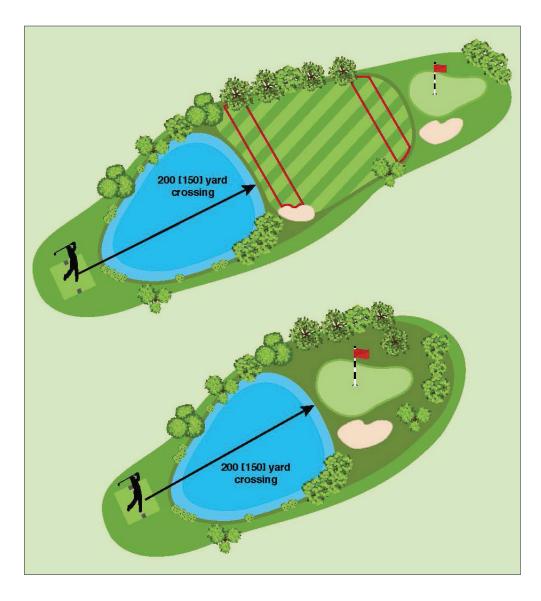
Sometimes the crossing obstacles on a hole make it impossible for the player to complete the hole. A long carry over a penalty area, extreme rough (including desert) or out of bounds where there is no bail-out area means that the player cannot complete the hole in accordance with the Rules of Golf. Although the player is unlikely to play from a set of tees that includes this situation, a Course/Bogey Rating is still required to obtain a Course Rating and Slope Rating.

When the bogey player cannot play the hole, the rating team must assign a safe landing area for the bogey player as if they were able to carry the obstacle safely (usually by 10 yards). Rate all the Lateral Obstacles, bunkers and trees from the safe landing area as if the area were the actual landing zone. For the Crossing Obstacle(s) use the highest crossing value from the rating table and apply all applicable adjustments. If the safe landing area is fairway, measure the width of the fairway at this point and use this table value. If the safe landing area is not fairway, use the scratch Fairway table value and add one point. Apply all applicable adjustments that relate to this area.

To determine the next bogey shot length, assume that the original Carry Obstacle does not exist. For example, on a 350 [250] yard hole, the second bogey shot length would normally be 150 [100] yards. Use this yardage as a guide to enter the tables for Green Target, Crossing and Lateral Obstacles, etc.

To determine the next bogey landing zone on a three-shot hole, assume that the original Carry Obstacle does not exist and rate from the mathematical landing zone.

This procedure only applies if there is no realistic place from which the bogey player can hit to and play the hole. If there is a bail-out area, rate the hole as if the bogey player hits to this area. If the only place a bogey player can complete the hole from is a forward tee, use the "Player Cannot Complete the Hole" procedure.



On a par-3 hole where the bogey player cannot reach the green and there is no bail-out area, use the scratch Green Target value and add two points.

When the scratch player cannot complete the hole see Interpretations Section 4.

#### **SECTION 5 — RATING GOLF COURSES**

#### 1. AUTHORIZED ASSOCIATION TO RATE COURSES

All courses must be rated in accordance with WHS-approved procedures by a course rating team representing an Authorized Association. Authorized Associations ensure that each member golf club is issued a Course Rating and Slope Rating for all tees that are reasonably expected to be played by either men or women.

A golf club cannot use the WHS Handicap System until it has been issued a Course Rating and Slope Rating by an Authorized Association. A club must accept and use the Course Rating and Slope Rating that the Authorized Association has assigned. If a club disagrees with its ratings, it may request that the Authorized Association review the ratings.

#### 2. AUTHORIZED ASSOCIATION TO RE-RATE COURSES

An Authorized Association must periodically review ratings of courses and revise them as necessary. Newly-constructed courses change rapidly in the first few years and must be re-rated within five years of the initial Effective Rating Date. Authorized Associations must subsequently re-rate courses in their jursidiction at a minimum of every 10 years thereafter. Any Course Rating, Bogey Rating, and Slope Rating is no longer valid if it is more than five years old from the initial Effective Rating Date or more than 10 years old from any subsequent Effective Rating Date. The WHS may grant an extension in exceptional cases.

#### 3. AUTHORIZED ASSOCIATION COURSE RATING PROGRAM

An experienced person should be in charge of the course rating program and be the Chair of the Course Rating Review Committee. That person should enlist course rating volunteers and establish the rating teams. An experienced member of each rating team must be designated as the team leader. The team leader must have attended a course rating seminar conducted by the Authorized Association. Each seminar includes an in-depth review of "The Course Rating System" and a rating exercise that provides raters with the opportunity to determine obstacle values while they are under supervision.

It is recommended that Authorized Associations establish orientation/training programs for those individuals who wish to become raters. When possible, this training should include an on-course rating exercise, and perhaps even a written examination. Annual refresher training and review sessions for experienced raters are also very helpful to ensure rating accuracy and consistency.

Once the rating teams have been formed and trained, the Chair should develop a schedule for rating the various courses. It is recommended that some courses of average difficulty be rated first to provide necessary experience. When all rating teams have rated about 10 courses, a calibration seminar, at which each rating team rates the same course, should be conducted, and obstacle ratings should be compared. If any rating team deviates sharply from the others, the Chair should correct the problem. If rating teams are assigned to specific geographical areas, it is important to have interaction between raters in different areas in order to maintain consistent ratings.

#### 4. COMPOSITION OF A COURSE RATING TEAM

For each hole that is rated, a rating team must be comprised of at least three trained and experienced raters. They must have been trained in course rating procedures and appointed by an Authorized Association to rate courses. One of the individuals must be designated as the team leader and they must have attended a course rating seminar conducted by an Authorized Association.

#### 5. MODIFICATION OF COURSES

#### **Temporary Changes**

When temporary tees and/or greens are used, the club must notify the Authorized Association. The Authorized Association will decide whether scores made under those conditions are to be accepted for handicap purposes, and whether the Course Rating and Slope Rating should be modified temporarily.

If temporary tees are being used or an alternate permanent green is being used, the Authorized Association should reference item f (i) in Appedix G of the *Rules of Handicapping*.

#### **Permanent Changes**

The club must notify the Authorized Association when permanent changes are made to the course. Permanent changes to the course require the Authorized Association to review the current Course Rating and Slope Rating and to determine whether a re-rating is necessary.

#### **SECTION 6 — MEASURING GOLF COURSES**

#### 1. GENERAL

Because length is the predominant factor in determining ratings, accurate measurement of each hole is essential. Scorecard length is not acceptable as a sole source of measurement and must be verified. Measurements are made to determine horizontal distance from the teeing ground to the centre of the green along the intended line of play. This means that line of sight for uphill or downhill measurements must be corrected to horizontal distances. For example, on a downhill hole the recorded distance is that from the teeing ground to a point in the air above the centre of the green, that point being level with the tee.

If two or more sets of tees are in common use, separate measurements and tee markers must be established. The movable tee markers used to designate the teeing area (see the "Rules of Golf," Definitions) need to be consistent in colour or design for each hole and distinguishable from other tee markers. The actual colour, design, or other method for identifying a particular set of tee markers is up to the Committee in charge of the course in consultation with the Handicap Committee. Course Handicap Tables, scorecards, and signage where scores are submitted should use the same terminology in referring to the various tees. This material should include the Course Rating and Slope Rating for each set of tees to make it easy for players to convert a Handicap Index to a Course Handicap before play and then to submit a score for handicap purposes, complete with Ratings, after play.

#### 2. APPROVED METHODS OF MEASURING GOLF COURSES

#### **Use of Electronic Equipment**

With just a few hours of training, a person can learn how to measure a course with an approved electronic measuring device (EMD). An 18-hole course can be measured in about three hours. The EMD must be accurate to within 6 inches for up to 250 yards when used for hole measurements.

#### **Use of the Global Positioning System**

This method can be used to measure golf courses if the Global Positioning System (GPS) is accurate to within 6 inches for up to 250 yards.

#### 3. MEASURING

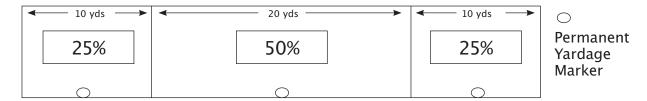
#### **Starting Point: Permanent Markers**

Accurate permanent marker placement is imperative in the rating process. Permanent markers are to reflect an average placement of the movable tee markers over time. Incorrectly placed markers will make it difficult for the golf course staff to keep the effective course difficulty constant and in line with the ratings issued when setting up the course each day.

Permanent marker placement is more likely to have a greater impact on ratings than green speed, rough height, and other course maintenance practices. Courses should pay attention to this issue and are encouraged to consult the Authorized Association in the area for assistance in determining accurate placement.

When a single tee pad is designated for one set of tees, placement of the permanent marker at the middle of the tee pad is appropriate. This maximizes the ability to use the entire tee pad and reflects an average of movable marker placement over time.

When more than one set of tee markers uses a single tee pad, consider the percentage of a course's existing or anticipated play from each set of tees when determining permanent marker placement. Allocate the percentage of play for each tee and place each permanent marker at the mid-point of each of the allocated areas. In the example below, a 40-yard teeing area is shared by three sets of tees. The club determined that 25 percent of play will be from the forward tees, 50 percent from the middle tees, and 25 percent from the back tees. Allocation would then have the front 10 yards of the teeing area dedicated to the forward tees, the middle 20 yards to the middle tees, and the back 10 yards to the back tees. The permanent marker should be at the mid-point of each of these three areas as the following diagram depicts:



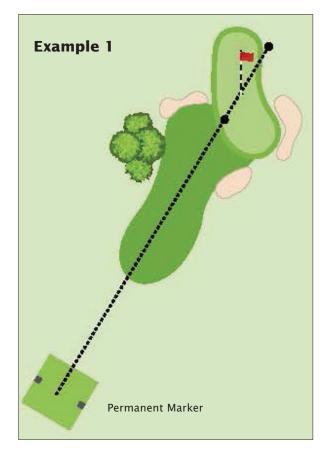
It is recommended to use percentages and mid-points to determine marker placement and stresses that at no time should a permanent marker be less than two yards from the front of a teeing area or less than four yards from the back of a teeing area.

On a nine hole course, if separate tees or tee markers are used for each nine of an 18-hole round, separate measurements and permanent markers must be established for each nine. The permanent markers (and their respective tee markers) for each nine should be uniquely identifiable.

#### **How to Measure**

Each hole must be measured horizontally (air line) to the nearest yard by surveying instruments, an EMD, or GPS from the permanent marker for every tee to the centre of the green. Distances on the scorecard should accurately reflect these measurements. Only trained individuals may perform course measurement, and the results are subject to review by the Authorized Association that issues the Ratings to the golf club. It is very helpful to have course staff available to answer any questions on course setup.

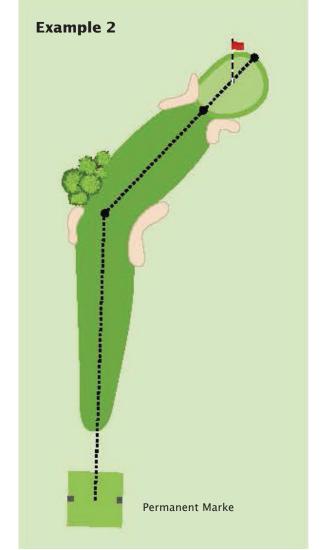
A hole with a dogleg must be measured on a straight line from each permanent marker to the centre of the fairway at the pivot point. If the pivot point is not easily discernable, select a pivot point that is approximately 250 [210] yards from the most commonly played tee for each gender. The measurement must continue from that point on a straight line to the centre of the green or the next pivot point, if applicable. If a dogleg causes a hole to play effectively shorter or longer for a scratch or bogey player, the rating team should make the appropriate adjustment under Dogleg/Forced Lay up in the Effective Playing Length Factors. The rating team should be aware how the hole was measured in order to reflect the dogleg adjustment properly in the rating process and if in doubt re-measure the hole to verify the information provided.



#### Par-3 Hole or Straight Par 4/5

In measuring a par-3 hole (see Example 1), the EMD (or GPS point) is set up at the back centre of the green and readings are taken to each permanent marker. The EMD (or GPS point) is then moved to the front centre of the green, and readings to each marker are taken. The two readings to each marker are then averaged to

determine the distance from each marker to the centre of the green. An alternative is to set the EMD (or GPS point) at the front centre of the green and measure to all markers, and measure to the back centre of the green, then add one-half the green depth to each tee reading. A straight par-4/5 hole is measured using the same procedure, but may require an additional measurement point(s) along the centre line of the hole.



#### Par-4 Hole

On a par-4 hole (see Example 2), the EMD generally should be set up in the fairway at the pivot point. A measurement should be taken from the setup point to each of the permanent markers. Then measurements should be taken to the front and back edges of the green; these measurements should be averaged to determine the distance from the setup point to the centre of the green. The distance from the setup point to the markers should then be added to the distance from the setup point to the centre of the green to determine the length of the hole from each tee.

In examples 1 and 2, note that the measuring device is set up on a centre line perpendicular to the front and back edges of the green.

#### Par-5 Hole

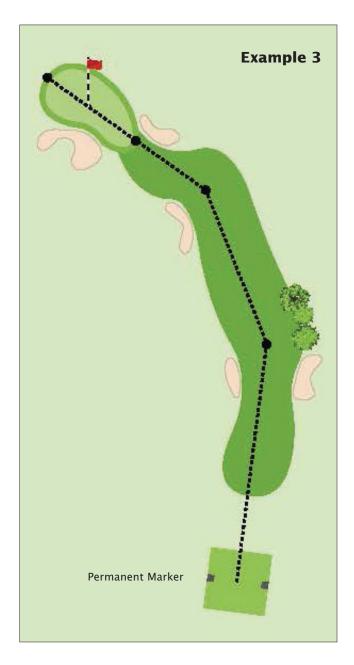
When measuring a par-5 hole (*see Example 3*), two setups are usually required. The first setup should be at the first pivot point, and the second setup should be at the second pivot point, if applicable.

Readings should be taken from the first setup point to the permanent markers and to the setup point of the second pivot point. The instrument should then be moved to the setup point at the second pivot point from which readings to the front and back edges of the green should be taken and then averaged. To determine the length of the hole, add the distances from (1) each marker to the first setup point, (2) the first setup point to the second setup point, and (3) the second setup point to the centre of the green.

#### 4. MEASUREMENTS FOR COURSE RATERS

In addition to measuring hole lengths from all tees, the measuring team can greatly assist the course raters who will follow by determining:

- Width and depth of each putting green;
- Widths of landing zones for scratch and bogey golfers for each hole;
   and
- Distances required to carry obstacles off the tee or from the various landing zones.



#### **SECTION 7 — FORMS**

#### 1. RATING COURSES 3,000 YARDS OR LONGER

Three forms are used in rating courses 3,000 yards or longer.

**Course Rating Form 1,** entitled "Effective Playing Length and Obstacle Evaluation," is a form used on the golf course to record information useful to the rating procedure (fairway widths, green dimensions, carry distances, etc.), the ratings for each obstacle, and the effective length corrections. The obstacle ratings and length corrections for each hole are entered in the appropriate boxes (holes 1–9 are on the front side of the form; holes 10–18 are on the back). The 10 obstacles are rated on a scale of 0 to 10. Scratch obstacle ratings are recorded for each hole in the left columns, and bogey ratings are recorded in the right (bold outlined) columns.

For example, if the scratch rating for an obstacle is 5 and the bogey rating is 7, the entry is written as:

5 7

or, if the scratch lay up is 30 yards and the bogey player does not lay up, the entry is written as:

30 0

Altitude of 2,000 feet or more should be recorded in the box provided in the lower left corner of the Form 1. Many Authorized Associations create their own custom forms for collecting course information. So while the Form 1 is listed within this section, we refer to any form used to collect rating information as just a rating form.

**Course Rating Form 2,** entitled "Obstacle Stroke Value Calculations," is used to convert obstacle ratings to obstacle stroke values. Obstacle rating totals from Form 1 are weighted, added, and applied to conversion formulas to yield obstacle stroke values for scratch and bogey golfers. Results are transferred to Form 3 [3W].

**Course Rating Form 3 [3W],** entitled "Course Rating and Slope Rating Calculations," is used to calculate the Effective Playing Lengths for scratch and bogey golfers, Yardage Ratings for scratch and bogey golfers, Course Rating, Bogey Rating, and Slope Rating.

An electronic course rating program is available to Authorized Associations. This program calculates the Course Rating and Slope Rating from all tees, calculates nine-hole ratings, and runs various reports.

## SECTION 8 — EVALUATION OF EFFECTIVE PLAYING LENGTH CORRECTIONS AND OBSTACLES

#### 1. GENERAL

A Length Rating is based on the effective playing length of the course, which may be substantially different from its measured length. Consideration is given to five effective playing length correction factors, outlined in Section 11.

Modification of a Length Rating is based on the extent to which 10 obstacle factors affect scoring ability of the scratch and bogey player. On each hole, all obstacle factors are evaluated on a scale of 0 to 10, following the guidelines in Section 12.

#### 2. OBSTACLE RATING SUMMARY TABLE

The two factors to be considered in evaluating an obstacle are:

- The likelihood of the obstacle coming into play; and
- The difficulty of recovering from the obstacle.

Each factor should be given equal weight.

The obstacle rating scale can be summarized as follows:

OBSTACLE RATING SUMMARY TABLE					
Rating	Evaluation				
0	Obstacle does not exist.				
1	Obstacle exists but is generally out of play.				
2	Obstacle is much less significant than average.				
3	Obstacle is less significant than average.				
4	Obstacle is of average significance.				
5	Obstacle is more significant than average.				
6	Obstacle is much more significant than average.				
7 to 10	Obstacle is of extreme significance.				

For example, if a par-4 hole with formidable bunkers in the landing zone requires a long approach shot to a small green surrounded by deep bunkers, the Bunkers rating value should be in the 7 to 10 range.

#### 3. RATINGS

Obstacles must be evaluated separately for both the scratch and the bogey player on the basis of them coming into play.

- For Roll and each of the 10 obstacle factors, begin by entering the rating table for the scratch player, then re-enter the table for the bogey player.
- Adjust the rating table values up or down for both the scratch and bogey players as prescribed in the adjustments section.
- Consider further adjustments for par-3 and par-5 holes, if appropriate.
- When a bogey player cannot reach a par-4 hole in two shots, rate the hole as a par-5 (three-shot) hole for the bogey player.
- When a bogey player cannot reach a par-3 hole in one shot, rate the hole as a par-4 (two-shot) hole, except there is no Fairway rating value. Use the par-3 obstacle weighting.

Rating values have been provided in the rating tables in Section 11 and Section 12; however, any number from 0 to 10 may be used. A "tweener" value, as defined in Section 3 may be used if appropriate.

Each adjustment has been accompanied by an alphabetical or numerical identifier. These identifiers should be useful to raters in scanning the page of the "Course Rating System Guide" to assure all adjustments are considered, in discussing how they arrived at their final obstacle ratings (e.g. "table value plus adjustments L and M"), and they may even be recorded on the rating form for the record. A table listing all the adjustment "alpha-numeric codes" is found in Section 8-6.

Some adjustments are accompanied by an asterisk, indicating that they apply to a specific shot and not to the overall rating of the hole. Shot-specific adjustments are listed ahead of generalized adjustments. **Adjustments are to be applied in the order they are listed.** Under Recoverability & Rough and Bunkers only, shot specific adjustments are cumulative (e.g. two lay-ups on a hole would result in two -1 adjustments, or a total adjustment of -2 for R&R).

- A rating of zero should be assigned when the obstacle "does not exist" on the hole (i.e. when it is more than 50 yards left and right of the line of play and more than 50 yards left, right, and beyond the centre of the green.)
- Obstacle ratings of 3, 4, and 5 would be expected about half of the time on an average golf course.
- A rating of 10 would normally be expected on less than one percent of the holes.

Even the easiest golf course has some obstacle values. In fact, some obstacles cannot be rated zero. They are:

- Fairway and Recoverability & Rough (minimum 1);
- Green Target (minimum 2); and
- Green Surface (minimum 3).

The obstacle factors with minimum values, such as Fairway, are rated 4 under average conditions. Other obstacle factors without minimum values, such as Topography and Bunkers, are rated 4 only when they present a significant problem.

Obstacles must be rated under the assumption that play is in accordance with the Rules of Golf.

When play is not permitted from a No Play Zone as defined in the "Rules of Golf," rate as follows:

- If free relief is given, ignore this area for rating purposes; or
- If there is a one-stroke penalty for relief from the area, rate the area as if it were a penalty area; or,
- If there is a stroke and distance penalty, rate the area as either a lateral obstacle with the K adjustment or a crossing obstacle.

The obstacle evaluations of two courses with very different characteristics can lead to the same result. For example, a course that is flat and has no trees but has narrow fairways and deep rough, might have an obstacle stroke value of 1.0 stroke over the Length Rating. Another course that has wide fairways and no rough but has significant trees and numerous deep bunkers might also have the same 1.0 obstacle stroke value.

#### 4. SYMBOLS USED IN RATING SYSTEM

#### **Symbols Used in Rating System**

Some symbols are used to save space and streamline the rating process. In all tables and text, the following symbols are used:

When two or more adjacent columns have "Greater Than" symbols, the table values are not cumulative (e.g. > 5' next to > 10' means "greater than 5 feet, up to and including 10 feet" in the left-hand column, and "greater than 10 feet" in the right-hand column).

	SYMBOLS USED IN RATING SYSTEM							
Symbol	Example							
"	Inches	6" is read as "six inches."						
1	Feet	3' is read as "three feet."						
π	Pi	= 3.14; may be used to determine green circumference						
<	Less Than	< ¼ is read as "less than one quarter"						
>	Greater Than	> 30 is read as "greater than 30"						
≤	Less Than or Equal to	≤ 21 is read as "less than or equal to 21"						
{ }	Warm Season Grass Height	, , , , , , , , , , , , , , , , , , ,						
[ ]	Women's Value	5 [6] is read as "five for men; six for women"						

#### 5. BOGEY RATINGS

Bogey values are recorded to the right of scratch values. For example, a scratch rating of 4 and a bogey rating of 5 are recorded as:

Bogey rating values may be different from scratch rating values for many reasons. Besides driving the ball much shorter (which leads to different landing zones for scratch and bogey golfers), the bogey player is much less successful than the scratch player at hitting fairways and greens. Around the green the bogey player is not nearly as effective in getting up and down from the rough or bunkers. The bogey player hits the ball into trouble more often and cannot recover as well as the scratch player can. Rating tables take into account many of these factors. Most tables are entered for the scratch player from the left and for the bogey player from the right. Often, bogey ratings for similar entry criteria are higher than for scratch. The System automatically compensates for the difference in ability in two other ways:

- The obstacles are weighted differently for the scratch and for the bogey player; and
- A different multiplier is used to convert obstacle ratings to a stroke value.

#### 6. ADJUSTMENT ALPHABETICAL/NUMERICAL IDENTIFIER CODES

Each adjustment has been accompanied by an alphabetical or numerical identifier. These identifiers should be useful to raters in scanning the page of the Course Rating System Guide or The Course Rating System Manual to assure all adjustments are considered, in discussing how they arrived at their final obstacle ratings (e.g. "table value plus adjustments L and M"), and they may even be recorded on the rating form for the record. On the previous page is a table listing all the adjustment "alphanumeric codes." Those adjustments that relate to a specific shot (e.g. tee shot, second shot, etc.) are identified by an asterisk. All other adjustments are general in nature and are made after the shot-specific adjustments are applied.

#### Section 8 EVALUATION OF EFFECTIVE PLAYING LENGTH CORRECTIONS AND OBSTACLES

	ADJUSTMENT ALPHA·NUMERIC CODES				F A	T A	R &	B U	C R	L A		S U	P S
KEY	X = Scratch and bogey adjustment  T = Scratch and bogey adjustment, in table format  B = Bogey adjustment only, in table format  Z = Transition Zone concept applies to obstacle  * Denotes shot-specific adjustment		L	P O	R W A Y	R G E T	R	N K E R S	O S S I N G	T E R A L	E	F	Y C H
Code	Code Name	Description											
Α		(Reserved for future use)								Ш			Щ
В	<b>B</b> ounce*	Conditions cause a ball to $\overline{\text{BOUNCE}}$ into or away from the obstacle, or obstacle is only behind the green.								х			
С	<b>C</b> arry*	Player must <b>CARRY</b> rough, bunker or Crossing Obstacle to reach the target.					В	Х	Х				
D	<b>D</b> epth	<b>DEPTH</b> of bunker is other than assumed <b>DEPTH</b> .						Т					
E	<b>E</b> xtreme*	Position or feature of obstacle or condition makes recovery <b>EXTREME</b> ly difficult.						Х					Т
F	<b>F</b> irm	Green or fairway is <b>FIRM</b> /soft.	Х			Х							
G		(Reserved for future use)											
Н	C <b>H</b> ute	Tee shot must be hit through a narrow <b>CHUTE</b> .									Х		
I	Inconsistent*	Conditions are <b>INCONSISTENT</b> relative to the table value.					Х						
J		(Reserved for future use)											
K	Stro <b>K</b> e and Distance*	A <b>STROKE</b> and distance penalty applies.							Х				
L	<b>L</b> ay up*	Player employs <b>LAY UP</b> (forced or by choice) on one or more shots.			Χ		Χ						
М	<b>M</b> ounds*	<b>MOUNDS</b> and/or hollows are present near the fairway/green.					Χ						
N	<b>N</b> o	<b>NO</b> fairway bunkers are within 20 yards of landing zone(s) or on a par 3.					Χ						
0	<b>O</b> bstructed*	Shot to green is <b>OBSTRUCTED</b> by trees or other obstacles.				Χ				Ш	Х		$\Box$
Р	<b>P</b> ercentage*	Appropriate PERCENTAGE of the table value is used.							Х	Х			
Q	S <b>Q</b> ueeze*	Obstacle <b>SQUEEZE</b> exists; player cannot play away.						Х		Х			
R		(Reserved for future use)											
S	<b>S</b> urrounded*	Green is closely <b>SURROUNDED</b> by CROSSING/LATERAL Obstacles.					Χ			Т			
Т	<b>T</b> iered	If green is <u>T</u> IERED.				Χ				Ш	$\dashv$	В	
U	<b>U</b> npleasant	<u>U</u> NPLEASANT lies or roll of putts caused by poor turf condition.			Χ		Χ			Ш	$\dashv$	Х	
V	<b>V</b> isibility*	Landing zone or green surface/flagstick is not <b>VISIBLE</b> .			Χ	Χ				Ш		$\Box$	
W	<b>W</b> idth*	Fairway <u><b>WIDTH</b></u> is adjusted by dogleg, contour, obstacles, etc.			Χ					Ш	$\dashv$	_	_
Х	E <b>X</b> traordinary	<b>EXTRAORDINARY</b> obstacle ratings generate high Psychological rating.										$\Box$	В
Y		(Reserved for future use)								$\square$	_		
Z	<b>Z</b> one	Transition <b>ZONE</b> concept is used.		Z	Z	Z	Z	-	_	Z	Z	$\perp$	
2	2 times	Obstacle is in play two (2) or more times.	Х				Χ	Χ	Х	Х	_	_	
3	Par <b>3</b>	Bogey golfer cannot reach green of a PAR $\underline{3}$ hole in one shot.					В						

#### 7. COMBINING AND WEIGHTING PRINCIPLES

#### **Combining and Weighting Principles**

In some situations, it may be judged that a certain obstacle has more impact on play than is normally recognized from its rating table. In this case, the obstacle may be eligible to be rated under a second category, usually by the application of an adjustment. To the right is a table listing these situations (they are also identified on the respective obstacle pages):

#### **Weighting & Percentage Adjustment**

Sometimes an obstacle, such as Topography, is not uniform throughout the landing zone (e.g. part of the fairway landing zone has only a minor stance problem while the rest is significantly awkward). In these situations, do not rate for the most severe condition. Instead, determine a weighted average of the varying conditions and apply that average to the rating table, or rate the various conditions and take a weighted

SITUATIONS RATED UNDER TWO OBSTACLE CATEGORIES						
Situation	Rated As	Also Rated As				
Lateral obstacles closely surround the green	Lateral Obstacles	R&R				
Trees overhanging the fairway	Trees	Fairway				
A tree overhanging or in front of a green	Trees	Green Target				
Prepared "waste areas"	Bunkers	R&R				
Lay-up	R&R	Fairway				
Tiered Green	Green Target	Green Surface (Bogey)				

average. For example, if \( \frac{3}{4} \) of the fairway landing zone has minor stance problems with the green 10 feet uphill (rated 2) and 1/4 of the fairway landing zone has significantly awkward stance problems with the green 20 feet uphill (rated 6), a rating of 3 would be appropriate.

Sometimes the length of a forced carry depends on the direction of play. Determine the average carry length or apply the **PERCENTAGE (P)**\* adjustment to the full carry. Generally, the **PERCENTAGE (P)**\* adjustment is used in 25% increments (25%, 50% or 75%).

Sometimes an obstacle near a landing zone is not uniform (e.g. extreme rough has areas where recovery is impossible and other areas where there is no problem recovering). In these situations, use the **PERCENTAGE (P)**\* adjustment. A rater may also determine an average condition or use a weighted average of the separate rating values.

#### 8. OBSTACLE RATING MEASUREMENTS

#### **Measuring Methods**

Fairway widths, green dimensions, and distances from targets or edges of greens to obstacles should be measured with electronic measurement devices. For short distances (less than 15 yards), pacing the distances is sufficiently accurate for rating purposes.

#### **Grass Heights**

Grass heights can be measured by placing a pencil down into the grass and noting the average length of the blades of grass. A ruler is printed along the outside edge of the back cover of the Guide. Types of grasses (cool season and warm season) are described in the Definitions section.

The rating team should not be misled by current conditions if the rating is done at some time other than midseason. The team should consult with the golf course staff to determine course conditions that exist when the majority of rounds are being played.

#### **Carry**

When a player must carry an obstacle such as a ravine filled with extreme rough, use the "carry" distance from the Shot Length Table in Section 4. To carry the obstacle safely, assume the shot clears the obstacle by 10 yards. If conditions are such that more distance is necessary to keep the ball from rolling back into the hazard, then such distance should be added to the carry. Note the average maximum carry distances for scratch and bogey golfers' first and subsequent shots in the table in Section 4. For example, a bogey player's second or third shots only carry 150 [110] yards (not the full 170 [130] yards, which includes roll).

#### Lay up

When a player is forced to lay up because of obstacles crossing the fairway, assume that player lays up 10 yards short of the trouble.

When a scratch player chooses to lay up, use the above procedure, or lay up the player to a spot that would still allow for a relatively easy shot to the green or next landing zone. This spot is often marked with numerous divots indicating a preferred distance for players to select. (*See Interpretation 11-3/1.*)

#### Roll

The roll rating values, when converted to effective length corrections, predict the impact on scoring that variations from normal roll will produce. Excessive roll shortens the effective playing length of the hole, but not to the extent that playing from a shorter set of tees does. The conversion factor per point of Roll rating is the result of regression analysis on scoring versus fairway conditions.

#### **Approach Shot**

To determine the approach shot length, start with the length of the hole and subtract the distance the player has covered to reach the approach shot landing zone. On a par 4 (2-shot hole), subtract the tee shot length; on a par 5 (3-shot hole), subtract the combined length of the first and second shots.

Take into account factors that change the tee shot and second shot lengths, such as lay-up, roll, etc. For example, if the fairway is firm and tee shots roll 10 yards more than normal, subtract 10 yards from the normal approach shot length. Conversely, if a player lays up (forced or by choice) to a position that is 30 yards short of where their full shot would have been, add 30 yards to the normal approach shot length. Adjustments are made based on the conditions that impacted the shots already played in reaching the approach shot landing zone. Do not adjust an approach shot because that shot is uphill or subject to some other effective length correction factor.

On a par-3 hole where the bogey player cannot reach the green in one shot, **rate the area short of the green under Recoverability and Rough and Topography.** Base the Green Target rating on the short approach shot or, if the Transition Zone concept is applicable, use the bottom row of the Green Target Rating Table (*see Section 4-3 and Interpretation 12-4/6*).

#### **Fairway**

The width of the fairway is measured perpendicular to a line along which the hole is designed to be played. Should the fairway need to be measured at a point where there is a bend in the line of play (i.e. a dogleg) the fairway width is measured along the line bisecting the angle formed by the bend in the line of play.

When the fairway has been "contour cut" (curved borders with the rough), use an average width in the landing zone. An average width should also be used when a punitive obstacle(s) (bunker, penalty area, etc.) is toward the end of a landing zone. Conversely, when the fairway width is reduced by a punitive obstacle(s) at the beginning of a landing zone, use that measurement exclusively as the fairway width of that landing zone.

When a swath of rough grass along the edge of the fairway has been cut to a height between fairway height and rough height, half of that **intermediate cut** will be considered fairway, the other half will be considered rough with height equal to the regular rough height. This has the effect of increasing the fairway width by the width of the intermediate cut on one side or the other.

#### **Bunkers**

The depth of a greenside bunker (**D**epth (D) adjustment) is measured from points where most recovery shots are made to a height that would get the ball onto the areas of the green where most holes are located. It may be necessary to use an average depth for tiered or large sloped greens. The fact that the Stimpmeter is 3 feet long may be helpful in estimating bunker depth.

When there are many bunkers of **various depths** in play, start with a rating for the deepest, but temper that rating by evaluating which bunkers come most into play and

how difficult they are to recover from, lowering the initial adjustment accordingly, if appropriate.

Bunkers that **closely border** a green are those effectively within 10 yards of the edge of the green. Consider the terrain between the green and the bunkers. For example, a bunker is 12 yards from the edge of the green but a ball the misses the green by 8 yards will most often bounce into the bunker. This bunker should be considered to closely border the green.

The fraction of the green **closely bordered** by bunkers can be determined by walking the circumference of the green and counting the number of paces where bunkers border the green (*see Interpretation 8-8/1*). Divide the number of paces where bunkers closely border the green by the circumference to find the ratio. The circumference of a traditionally shaped green (if not fully paced) can be determined as  $\pi$  (3.14) multiplied by the average diameter. For example, bunkers closely border 30 yards of a green's edge. The average diameter of the green is 27 yards and its circumference is 85 (3.14 x 27  $\approx$  85). The ratio of 30/85 is between ¼ and ½ of the green circumference.

When a bunker(s) must be **carried** to reach a green, the scratch rating value is adjusted upward only if the Green Target value is 5 or greater. For the bogey player, there is an upward adjustment for any Green Target value. Bunkers must be carried when they protect a significant portion of the green. To qualify for the adjustment, the bunker(s) must be closely bordering the green for the scratch player and anywhere along the line of play for the bogey player.

When a significant bunker(s) must be **carried** to reach a fairway landing zone, the bunker(s) must be near the start of the fairway landing zone for the scratch player to be adjusted upward. A significant bunker(s) anywhere along the line of play for the bogey player warrants an adjustment if it must be carried.

#### **Trees**

Trees create a condition on each hole that requires the rater to consider the overall difficulty that the trees present to the scratch and bogey player. Trees at the landing zones and green should be evaluated. Any trees along the line of play that could impact the ball in flight must also be considered. The length of the shot(s) to be played on the hole is also important, as the probability of getting into the trees goes up as shot length increases. Generally, the impact of trees in the tee shot landing zone will be the most important factor in determining the correct Trees rating for the hole.

Determining the correct difficulty factor for trees requires consideration of the following for each shot that is to be played on the hole, based on the scratch player's ability:

- Number, height, and density (at midseason) of trees at each landing area and on the line of play to the next target.
- Length of shot to the target landing zone or green —
  trees on a full tee shot are more likely to come into
  play than when a player lays up or hits less than a full
  shot.
- <u>Distance of the trees from the centre of the landing</u>
   zone Are trees likely to come into play, even on
   good shots? Do trees closely border a narrow fairway
   landing zone?
- Length of shot required to reach the next landing zone or the green — Is it a long iron/wood or a short iron?
   Recovery is typically easier with a shorter shot as there are more types of shots that can be played. Does a ball in the trees mean that the player will need an extra shot in order to reach the green?

- <u>Presence of low-hanging branches</u> that impact swing and obstruct recovery shots.
- Conditions under the trees that impact the <u>lie of the ball</u>.
- Proximity of trees to the ball when in flight.
- Conditions along the line of play from the trees that limit shot options due to intervening water, bunkers, or even additional trees (e.g. a water hazard between the trees and green limiting a low shot to avoid tree branches).

To evaluate the effect of a chute on a tee shot, consider the width of the narrowest portion of the chute and how far that portion of the chute is from the teeing area. Consider the density of the foliage (will a ball pass through the tree branches?), the area where a ball might drop if it strikes the trees, and how well the player can recover from that area. If the shot can easily be hit under or over the trees, decrease the adjustment by 1 or 2 units.

#### **Green Surface**

Measure the green speed on several holes with a **Stimpmeter**. The best procedure is to find a level area on the green and roll three golf balls in one direction, marking the starting and average ending points with a coin, tee, or pencil, then roll the balls in the opposite direction. If the average roll back is within 18 inches of the roll in the first direction, the average of these two lengths is a good measure of the green speed.

To help find a level area, lay the Stimpmeter flat on the green and place a ball in the V-shaped groove. The movement of the ball will indicate whether the area is reasonably level.

When there is no level area on the green, or when it is desirable to measure the speed of a sloped area, find an area

of uniform surface (a tilted flat area). Try to avoid concave or convex surfaces. Also avoid measuring crossways on a slope, as the ball will curl downhill. Roll the balls straight down the slope to get S(down), then roll them straight back up the slope to get S(up). To determine green speed, apply the measurements to the following formula:

## **GREEN SPEED CORRECTED FOR GREEN SLOPE**

 $S(level) = (2 \times S(down) \times S(up)) \div (S(down) + S(up))$ 

In other words, the level Stimpmeter reading is equal to twice the product of the up and down readings, divided by their sum.

When S(down) is two to three times S(up), the green is considered to be **moderately** sloped; when S(down) is more than three times S(up), the green is considered to be **steeply sloped.** 

#### 9. OBSTACLES BEHIND THE GREEN

Obstacles behind the green are generally less important than those of a similar nature to the side or in front of the green. The following points should be considered when rating obstacles behind the green:

- Statistically less than 10 percent of approach shots will finish over the green.
- On long shots, the ball lands short of the target bringing obstacles in front of the green more into play than those behind.
- When the green falls in the Transition Zone, the player normally cannot hit the ball far enough to reach obstacles behind the green.

Obstacles that exist only behind the green should be downgraded in the rating process by applying the -1 **BOUNCE (B)**\* adjustment and possibly the **PERCENTAGE (P)**\* adjustment.

## **SECTION 9 — PRE-RATING PREPARATION**

Before rating a course, the team leader should check the course measurement records and record the hole lengths on the rating form. If information on how the course, or a particular hole, was measured is available, it should be supplied to the rating team.

On the rating form, place an "X" in the Fairway row of the columns for par-3 holes. This helps separate par-3 ratings from par-4 and par-5 ratings when rating values are totaled across the columns for each nine holes.

The "Approach Shot Length" line on the rating form should be completed as follows:

- Determine the approach shot distance for the scratch player by subtracting 250 [210] yards from the length of a par-4 hole, and 470 [400] yards from the length of a par-5 hole; and
- Determine the approach shot distance for the bogey player by subtracting 200 [150] yards or 370 [280] yards from the length of a par-4 hole, and 370 [280] yards or 540 [410] yards from the length of a par-5 hole.

If it is determined that these distances must be increased or decreased because of Effective Length Correction Factors or Lay Up by Choice, the appropriate value should be written on the "adjusted approach" line on the rating form.

For a course at or above 2,000 feet elevation, fill in the Altitude box provided on the rating form. The approach shot distances must be adjusted because the ball travels farther at high altitudes. Write increased shot lengths in the boxes labeled "Scratch1," "Scratch2," "Bogey1," etc. Use the High Altitude Shot-Length Tables for men and women (scratch only) in Section 11.

The following preparatory information, if obtained in advance from the club or provided by the measuring team, should be recorded on the rating form:

- Approach shot lengths and landing zone distances from the green;
- The width and depth of each putting green;
- The fraction of the green closely bordered by bunkers;
- The widths of scratch and bogey landing zones for each hole;
- The distances required to carry obstacles off the tee or from the various landing zones;
- The types and heights of grasses on the course; and
- The effective length correction data (roll, elevation changes, etc.).

If this information has not previously been determined, it should be measured and recorded as the course is rated.

On the day a course is to be rated, the club should place the tee markers at the permanent yardage markers from which measurements were made and cut the holes in areas commonly used for maximum play. They must avoid the tendency to set up the course abnormally difficult.

## **SECTION 10 — RATING PROCEDURE**

## 1. CONDITIONS WHEN RATING

The rating team should not be misled by current conditions if the rating is done at some time other than midseason. The team should consult with the golf course staff to determine course conditions that exist when the majority of rounds are being played. If seasonal conditions drastically vary from midseason conditions, consider using a weighted average or the **PERCENTAGE (P)**\* adjustment to account for the differences in conditions. This should only be done for the seasonal conditions that exist during the active season when scores are being submitted for handicap purposes. If golf course staff are available, it may be beneficial to have them accompany the rating team for the first few holes to help evaluate the fairways, rough, foliage, and green speeds.

#### 2. MULTIPLE TEES

A Course Rating and Slope Rating from each set of permanent markers should be established. The rating team should conduct an on-course rating for the most commonly played tees along with any tees that are more than 25 yards longer or shorter than any other rated tees. Otherwise, the difference in the Course Rating and Bogey Rating between those tees and other tees equals the difference in the Length Rating. When rating a hole where there are multiple teeing grounds for a given set of tee markers (e.g. two or three separate teeing grounds for the middle tee markers), raters should average the various hole lengths and obstacle ratings.

Authorized Associations have the option to calculate a Course Rating and Slope Rating for tees 7,000 [6,000] yards or longer without doing an on-course rating. Use the obstacle ratings and effective playing length correction factors for both the scratch and bogey player from the nearest set of tees less than 7,000 [6,000] yards. Then, apply the Length Rating for both the scratch and bogey player using the actual measurements for each hole on the set of tees 7,000 [6,000]

yards or longer. The Authorized Association has the option to apply the same procedure for tees 4,800 [4,000] yards or shorter, assuming there is a set of rated tees above 4,800 [4,000] yards to use for the obstacle rating (see Interpretation 10/1).

The above procedure cannot be used on any set of tees under 3,000 yards.

#### 3. COMPOSITION OF RATING TEAM

For each hole that is rated, a rating team must be comprised of at least **three trained and experienced raters**. They must have been trained in course rating procedures and appointed by an Authorized Association to rate courses. One of the individuals must be designated as the team leader and they must have attended a course rating seminar conducted by an Authorized Association.

## 4. EQUIPMENT

Each member of a rating team must be equipped with "The Course Rating System Guide" and a rating form to record the rating values. The rating team members should be equipped with distance measuring devices. Altimeters or other devices used to determine elevation may be useful on courses with numerous elevation changes.

## 5. ON-COURSE PROCEDURES

On each hole, the team members should stand on the tee to determine the difficulty of the tee shot for bogey and scratch golfers. Evaluate any crossing of obstacles, obstacles that exist, landing zone visibility, and any tee-to-green elevation differences.

The team should then move to the landing zones of bogey and scratch golfers to evaluate the obstacles in those areas and discuss how the hole will be played. The team should measure the width of the fairway and the distance from the centre of the fairway to lateral obstacles. The firmness and tilt of the fairway should be evaluated, and any fairway bunkers should be noted. The approach shot to the green should be viewed and evaluated from the landing zones.

The team should then move to the green, evaluate the obstacles around the green and determine its effective diameter. The team should also evaluate the green from a putting standpoint by determining the green speed and evaluating the contour of the green. Finally, the team should move to the rear of the green and look back up the fairway to review the hole from that position, including a final review of the Trees rating. Elevation changes, if any, can also be estimated from there.

As the team members move from one position to another, they should discuss obstacle factors and share information on measurements. They should consider the likelihood of obstacles coming into play and the difficulty of recovery when necessary. They should be guided by what will probably happen, not by the extremes of what <u>could</u> happen. They should follow the evaluation guidelines for obstacles and effective length corrections discussed in *Section 4*.

The Green Target rating may be agreed upon by any raters who are assigned to the same set of tees, and then each member should evaluate the other obstacles independently. During the evaluation of a hole, team members should not discuss obstacles in terms of numerical ratings. They should not record rating values on the rating form until the entire hole has been evaluated from all positions. They should record widths, lengths, fractions, and other measurements in the boxes provided and note any adjustments that may apply. Raters should defer final judgment of rating values until they have seen all features of the hole.

After the hole has been reviewed from all positions, team members should independently enter rating values on the rating form. When this has been done, the team leader may state, or they may call on other members of the team to state scratch and bogey obstacle ratings (e.g. "Topography: 4 for scratch and 5 for bogey"). Other team members should then state their ratings. When evaluating the same tee, it is important that they agree within one unit of the rating of each obstacle. If any member disagrees by two or more units, they should state the reason for their conclusions. If there is disagreement, the team leader is responsible for the team's arrival at a consensus within one unit on each obstacle. The team leader's decision is final and will determine the rating values used by the Authorized Association to calculate the final Course Rating and Slope Rating.

As the team progresses, obstacle ratings on each hole should be compared to those assigned on earlier holes. An experienced, efficient rating team should take about four hours to rate an average 18-hole golf course.

As another option to save time, if there are enough raters available, an acceptable practice is to send a group of three to rate the front nine and another group of three to rate the back nine and compare values to ensure consistency.

After rating, it is highly recommended that the rating team play the course for greater insight. Playing a course while rating is not permitted. Playing the course after rating can be beneficial to further evaluate obstacles, especially ratings for Roll, Recoverability and Rough and Green Surface. Consideration should be given to how various factors affect play during the midseason. After playing the course, the rating team may decide to modify some of the obstacle ratings.

Some rating teams have found playing before rating to be more beneficial than playing afterward. They have found the team gains insight useful to the rating process. A disadvantage is that rating team members who play poorly might be inclined to inflate the rating, and those who play well might do the opposite. Rating teams may use either sequence.

Predictions of ratings must not be made by the rating team to the course because ratings must be reviewed and approved by the Authorized Association's Course Rating Review Committee.

## **SECTION 11 — EFFECTIVE PLAYING LENGTH FACTORS**

The effective playing length of a hole may be substantially different from its measured length. Determining the effective playing length results in greater accuracy in course rating.

There are five factors that must be considered in determining effective playing length.

- **Roll** is an evaluation of how far the full shots for scratch and bogey golfers roll, and the effect that roll has on the playing length of the course.
- **Elevation** is a measure of how changes in elevation from tee to green affect the playing length of the hole.
- **Dogleg/Forced Lay up** is a measure of how much longer or shorter a hole plays because it has a bend (allowing players to cut the corner or forcing them to lay up), or because it has obstacles, such as water or deep bunkers, crossing the fairway in the players' landing zones (which force the scratch or bogey player to hit less than a full shot).
- **Wind** is a measure of the effect of a consistent wind on plains, seaside, and/or other courses unprotected from the wind and the impact on overall playing length of the course.
- **Altitude** is an evaluation for courses at 2,000 feet or more above sea level that will play shorter than their measured length because shots fly farther in the thin air.

Each of these factors is discussed in the pages that follow.

Data that impacts playing length may be provided by the club in advance and then corrected if necessary during the rating process. Effective length correction is important when any of the five factors affect the playing length of the course.

## 1. ROLL

#### a. General

Adjustment for roll is evaluated on full tee shots and any subsequent full shots for both the scratch and bogey player.

Factors that affect roll include:

- Fairway slope or tilt (a ball hit to a downhill landing zone rolls farther than one hit into an upslope).
- Fairway firmness (soft fairways will result in less roll than firm fairways).
- Landing zones not cut to fairway height.

A scratch or bogey player's full tee shot or subsequent full shot to a flat area of average firmness will roll between 15 and 25 yards (20 yards average).

If the ball hits into an extreme upslope, the maximum table rating value for roll is +4 (this adds yardage to the effective playing length).

If the ball hits into an extreme downslope, the maximum table rating value for roll is -4 (this subtracts yardage from the effective playing length).

Each point of roll may change the approach shot by about 5 yards; consider adjusting landing zones and approach shot lengths accordingly.

#### **ONE-SHOT HOLES (PAR-3 HOLE)**

The Roll rating on par-3 holes is zero unless the bogey player cannot reach the centre of the green in one shot. In this case, Roll is evaluated for the bogey player only.

## TWO (OR MORE) SHOT HOLES

If subsequent full shots result in more (or less) roll than the assumed 15–25 yards per shot, apply the Two (2)\* adjustment.

#### **ROLL RATING TABLE**

To estimate the roll, determine whether the tee-shot landing zones are uphill, level, or downhill and whether the slope is minor, moderate, significant or extreme.

Determine the scratch rating value, then re-enter the table to determine the bogey rating value.

For example, if the scratch player hits a tee shot onto a level fairway while the bogey player hits into a significant downhill slope, the entry on the rating form would be:

0

-3

TEE-SHOT ROLL RATING TABLE (A full tee-shot to a level area of average firmness rolls between 15 and 25 yards)									
Downhill						ι	Jphill		
Extreme Slope	Significant Slope	Moderate Slope	Minor Slope	Level	Minor Slope	Moderate Slope	Significant Slope	Extreme Slope	
-4	-3	-2	-1	0	+1	+2	+3	+4	

- (F)\* +1 If **SOFT** fairway conditions result in excessive loss of roll on the tee shot or if the tee shot landing zone is not cut to fairway height and results in less roll than the assumed 15–25 yards per shot.
  - or -1 If **FIRM** fairway conditions result in excessive extra roll on the tee shot.
- (2)\* +1 If a subsequent full shot results in less roll than the assumed 15–25 yards per shot.
  - or -1 If a subsequent full shot results in more roll than the assumed 15-25 yards per shot.

## 2. DOGLEG/FORCED LAY-UP

#### **GENERAL**

A length correction is required if the effective length of a hole is different from the measured length because of a dogleg or forced lay-up. A dogleg correction is distinctly different from a forced lay-up. Both situations may add yardage and change the effective length of the hole, but a dogleg may also subtract yardage if the player is able to cut the corner of the dogleg. Length corrections are evaluated separately for the scratch and bogey player. No length correction is made for a lay-up by choice, but other adjustments may apply.

## LENGTH CORRECTIONS FOR DOGLEG, FORCED LAY-UP AND LAY-UP BY CHOICE

#### **DOGLEG**

The yardage adjustment for a dogleg will be a plus adjustment if it causes the scratch or bogey player to lay up or if a straight shot will pass the pivot point. It will be a minus adjustment if the player is able to cut the corner of a dogleg based on how the hole was measured. Dogleg holes are normally measured from the tee to the centre of the fairway at the pivot point and from that point to the green. If the pivot point is less than 250 [210] yards from the tee and the dogleg is close to a 90 degree angle, the hole will play longer for the scratch player than a straight hole of the same length because once a tee shot passes the pivot point, the ball will no longer be going directly toward the hole.

Such a condition will likely cause the scratch player to use less than a driver on the tee shot. When the pivot point is between 200 [150] and 250 [210] yards from the tee, the bogey player will not have a dogleg adjustment on the tee shot but may then still have to cut the corner of the dogleg to play toward the green on the second shot.

On holes with only a minor bend to the dogleg, it may be possible for the player to hit a shot past the pivot point and continue to gain some distance toward the green. Assuming a reasonable landing zone exists, the rater should look for divots in the area to help make a decision as to how a hole may be played. Once the appropriate adjusted landing zone is identified, the difference in length from the original landing zone can be determined.

If it is determined that, in most cases, the player will cut the dogleg, effectively making the hole shorter, the rater should again identify the reasonable target landing zone by looking for divot patterns and the location of obstacles. Looking back toward the tee to check that the line of the shot is reasonable is also helpful. Once the appropriate adjusted landing zone is identified, the difference in length from the original landing zone can be determined.

Record a value of zero if the dogleg correction is less than +/-10 yards (this minimum does not apply to forced lay-ups).

#### **FORCED LAY-UP**

Forced lay-up occurs when a severe obstacle, or a combination of severe obstacles, such as penalty areas, deep bunkers, extreme rough (including desert), or severe topography crosses the fairway or reduces the normal landing zone width to less than 15 [13] yards. As a result, the scratch or bogey player will hit less than a full shot (i.e. they will lay up). In this instance, a forced lay-up length correction must be made because the effective playing length of the hole has been increased.

When a player is forced to lay up because of obstacles crossing the fairway, generally assume they lay up 10 yards short of the obstacle. However, a downslope may make it necessary to lay up more than 10 yards short of the obstacle to stay safely short of the trouble.

#### **LAY-UP BY CHOICE**

Lay-up by choice occurs when a significant obstacle or a combination of obstacles near the normal landing zone results in a scratch or bogey player choosing to hit less than a full shot. A fairway landing zone that is less than 15 [13] yards wide but without severe obstacles may be sufficient reason for a player to lay up by choice. A lay-up by choice will normally be employed in course management decisions, often by scratch players. In order to qualify, the normal landing zone must present an unpleasant situation (e.g. downhill stance/lie to an elevated green). Because the player has a choice as to whether to lay up in this situation and could play a full shot, no yardage correction is made for a lay-up by choice.

NOTE: A Lay-up may be part forced and part by choice. For instance, when a player is forced to lay up 25 yards because of a penalty area that crosses the fairway, but the rating team decides that most players would choose to lay up an additional 10 yards to play from the fairway as opposed to the rough. In this case, the additional 10 yards is a lay-up by choice. The correct length correction is +25 yards forced lay-up and the approach shot would be adjusted by +35 yards.

### RECORDING A DOGLEG OR LAY-UP LENGTH CORRECTION

- To record a dogleg and/or forced lay-up length correction, enter the actual length by which the dogleg or forced lay-up situation makes the hole play longer (or shorter) than a straight, unobstructed hole of the same length. Length correction adjustments are not applied for a lay-up by choice.
- Record a minus value if the player normally cuts the dogleg to make the hole play effectively shorter than it measures.
- The maximum total length correction (dogleg and/or forced lay-up) allowed on any given hole is +/- 50 yards.

 Adjust the approach shot length under Green Target to include the actual length correction adjustments, even if more than 50 yards, resulting from a dogleg, a forced lay-up, or a lay-up by choice.

For example, if the scratch player lays up 40 yards and the bogey player does not lay up. The rater should record this information as follows:  $\begin{vmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{vmatrix}$ 

## OTHER ADJUSTMENTS THAT APPLY ANYTIME A PLAYER LAYS UP

Whenever a player hits less than a full shot because of a dogleg, forced lay-up or lay-up by choice, there are lay-up adjustments that apply under Fairway and/or Recoverability and Rough.

#### **FAIRWAY:**

- On a two-shot hole, apply the LAY-UP (L)\* -1 adjustment to the Fairway Rating Table value for the landing zone;
- On a three (or more) shot hole, the LAY-UP (L)\* -1 adjustment applies only to the Fairway Rating Table value for the landing zone where the lay-up occurred. If there is a narrow landing zone on a different shot on the same hole that, with adjustments, generates a higher Fairway rating, the LAY-UP (L)\* -1 adjustment cannot be applied to that higher value and is not used in the rating.

#### **RECOVERABILITY AND ROUGH:**

Always apply a LAY-UP (L)\* -1 adjustment; it is shot specific, meaning that if a player lays up off the tee and then has to lay up again in a subsequent landing zone, the rater would apply two LAY-UP (L)\* -1 adjustments for a total adjustment of -2.

#### 3. ELEVATION

#### **GENERAL**

Uphill holes play longer than level holes; downhill holes play shorter. A correction is required when the elevations of the teeing area and the green differ by 10 feet or more. Valleys or hills between tee and green should not be considered under the Elevation category; they may, however, affect roll, stance, or lie and should be evaluated under Roll and/or Topography.

Tee-to-Green elevation differences in feet for each hole may be provided by the club. Topographical charts or online tools may also be used to provide this information. Altimeters are also a good tool for a rating team that frequently rates courses with significant elevation changes. Alternatively, if the rating team must estimate the overall elevation change from tee to green, the procedure for estimating elevation differences is as follows:

- On a downhill hole, estimate the height of trees near the green and compare the trees with the height of the tee; or
- On an uphill hole, reverse the process

To estimate tree height, envision people or flagsticks stacked one on another from the ground to the top of the tree. Heights can also be estimated from nearby buildings (one story of a building is normally about 10 feet).

#### **ELEVATION RATINGS**

Elevation is the same for scratch and bogey from the same tee and only needs to be recorded once. Elevation changes of 10 feet or more from tee to green must be recorded for rating purposes. Record the actual or estimated elevation difference in feet (rounded to the nearest 10 feet) from tee to green in the Elevation section of the rating form. Enter a plus value if the hole is uphill and a minus value if it is downhill.

## Examples:

- If the hole is 25 feet uphill from tee to green, record +30 (adding effective playing length).
- If the hole is approximately 15 feet downhill from tee to green, record -20 (subtracting effective playing length).
- If the hole is 8 feet uphill from tee to green, record a zero (elevation change must be at least 10 feet to qualify).

#### **PAR-3 HOLES**

The maximum elevation value that may be assigned on a par-3 hole is +/- 40 feet, regardless of whether the bogey player can reach the green in one shot.

## 4. WIND

### **GENERAL**

A length correction for wind should be made based on average daytime wind speed during the midseason. Landing zones and approach shot lengths are not adjusted for Wind.

Although there are no specific adjustments for Wind, if Wind is generally a factor when playing a hole and an obstacle could be rated at a particular value or one higher, consider using the higher rating value.

Local weather services or websites can provide information on wind speed. Many local airports also publish weather data that can provide daily average wind speed as well as sustained wind speed that is appropriate for this procedure. In addition, check with golf course staff for this information and attempt to validate by consulting multiple information sources.

#### WIND RATING TABLE

Use the Wind Rating Table below to determine the correction value for Wind. For an 18-hole rating, the Wind correction is based on the sum of the two 9-hole wind values.

WIND RATING TABLE							
Wind Speed (Miles Per Hour)	9–Hole Adjustment						
< 5	0						
5–6	18						
7–8	27						
9–10	36						
11-12	54						
13-14	72						
15–16	90						
17-18	126						
19-20	162						
>20	198						

## 5. ALTITUDE

#### **GENERAL**

At courses 2,000 feet or more above sea level, corrections must be made to the effective playing length of the course, to the location of landing zones, and to the length of approach shots, because golf shots travel farther in the thin air.

Corrections to course length are made only on par-4 and par-5 holes where full tee shots are played. On holes where there is a dogleg or forced lay-up that forces the scratch player to hit less than a full tee shot, no altitude correction is made. If the lay-up is by choice, an altitude correction is made. There is no separate effective length calculation needed for bogey players; the scratch effective length correction applies to the bogey male player. For bogey women, no altitude correction is made.

The correction reduces the effective playing length of a course by:

## Section 11 EFFECTIVE PLAYING LENGTH FACTORS

- The length of a scratch player's tee shot (250 [210] yards), times
- The number of par 4/5 holes where full tee shots are required (generally 14), times
- Seven percent (0.07), multiplied by
- The course altitude (in feet) divided by 5,000 (feet).

## HIGH ALTITUDE SHOT LENGTH TABLE

Use the table on the following page to determine landing zones, Transition Zones and approach shot lengths when scratch and bogey players hit full tee shots on courses at high altitude.

**Note:** If rating a course at 2,000 feet or above and determining whether a player can carry an obstacle safely, it is assumed that the carry distance for a player is 20 yards less than the total altitude-adjusted shot length. For example, at 5,000 feet above sea level, a scratch male player is assumed to carry the ball 248 yards (268 – 20) on the tee shot. Accordingly, the bottom row used for determining if a forced lay up is required would need to be adjusted to reflect this concept in the table under Crossing Obstacles.

	HIGH ALTITUDE SHOT LENGTH TABLE (All Shot Lengths Are in Yards From the Tee)													
	I	Male Scra	<b>tch</b> Play	/er	<b>Male Bogey</b> Player						Female Scratch Golfer			
Altitude	D	rive	Two	Shots	D	rive	Two	Shots	Three	e Shots	D	rive	Two	Shots
	Length	Transition	Length	Transition	Length	Transition	Length	Transition	Length	Transition	Length	Transition	Length	Transition
< 2,000 Ft.	250	251-260	470	471-490	200	201–210	370	371-390	540	541-560	210	211-220	400	401-420
2,000 Ft.	257	258-267	483	484-503	206	207-216	380	381-400	555	556-575	216	217-226	411	412-431
2,500 Ft.	259	260-269	486	487-506	207	208-217	383	384-403	559	560-579	218	219-228	414	415-434
3,000 Ft.	261	262-271	490	491-510	208	209-218	386	387-406	563	564-583	219	220-229	417	418-437
3,500 Ft.	262	263-272	493	494-513	210	211–220	388	389-408	566	567-586	220	221–230	420	421-440
4,000 Ft.	264	265-274	496	497-516	211	212-221	391	392-411	570	571-590	222	223-232	422	423-442
4,500 Ft.	266	267-276	500	501-520	213	214-223	393	394-413	574	575-594	223	224-233	425	426-445
5,000 Ft.	268	269-278	503	504-523	214	215-224	396	397-416	578	579-598	225	226-235	428	429-448
5,500 Ft.	269	270-279	506	507-526	215	216-225	398	399-418	582	583-602	226	227–236	431	432-451
6,000 Ft.	271	272-281	509	510-529	217	218-227	401	402-421	585	586-605	228	229-238	434	435-454
6,500 Ft.	273	274-283	513	514-533	218	219-228	404	405-424	589	590-609	229	230-239	436	437-456
7,000 Ft.	275	276-285	516	517-536	220	221–230	406	407-426	593	594-613	231	232-241	439	440-459
7,500 Ft.	276	277-286	519	520-539	221	222-231	409	410-429	597	598-617	232	233-242	442	443-462
8,000 Ft.	278	279-288	523	524-543	222	223-232	411	412-431	600	601-620	234	235-244	445	446-465
8,500 Ft.	280	281-290	526	527-546	224	225-234	414	415-434	604	605-624	235	236-245	448	449-468
9,000 Ft.	281	282-291	529	530-549	225	226-235	417	418-437	608	609-628	236	237–246	450	451-470

## **SECTION 12 — OBSTACLE FACTORS**

The 10 obstacle factors are detailed in this section. The men's and women's rating procedures are similar, but yardages and rating values are sometimes different. In these cases, women's variations from the men's values are in [brackets]. On each page there is a general statement, a rating table, factors that warrant adjustment to the rating table, and instructions for par-3 and par-5 holes, when pertinent.

To rate each obstacle:

- Begin with the rating table (enter the table for the scratch player; re-enter the table for the bogey player);
- Adjust these table ratings up or down for both the scratch and bogey golfers as prescribed in the adjustments section (shot-specific (indicated with an asterisk) adjustments first, then general); and
- Consider further adjustments for par-3 or par-5 holes, if appropriate.

When a bogey player cannot reach a par-4 hole in two shots, rate the hole as a par-5 (three-shot) hole for the bogey player. When a bogey player cannot reach a par-3 hole in one shot, rate the hole as a par-4 (two-shot) hole for the bogey player, except there is no Fairway rating value.

Obviously, each unique situation cannot be covered, so good judgment is required. It has been noted before, but is worth repeating, that the rating team members should look at probable conditions, not extremes, and they should be guided by what will probably happen, not by what could happen.

The following is an example of the normal rating procedure:

- A par-3 hole is being evaluated for bunkers;
- The rating team has decided upon a scratch Green Target rating of 4 and a bogey Green Target rating of 6; and
- Forty percent of the green is closely bordered by 3-foot to 5-foot deep bunkers, situated primarily across the front of the green (an evaluation of the various bunkers resulted in a bunker depth of 4 feet).

#### 1. TOPOGRAPHY

#### **GENERAL**

Topography is an evaluation of the impact of terrain on play. Topography is a factor only if:

- Slopes and mounds in the fairway landing zones affect stance and/or lie; or
- The shot to the green is uphill or downhill.

<u>NOTE:</u> Slopes, hills, mounds, or stance problems in the rough bordering the landing zones and around the green are taken into account by the Recoverability and Rough rating, not Topography.

### **ONE-SHOT HOLES (PAR-3)**

Use the Par-3 Hole column and rate Topography based on the elevation difference between the tee and the green. For holes where the bogey player cannot reach the green in one shot, rate Topography as a two-shot hole.

#### **TWO-SHOT HOLES**

Rate the approach shot to the green based on the stance or lie in the landing zone and the elevation change from the landing zone to the green.

## **THREE (OR MORE) SHOT HOLES**

For shots from landing zone to landing zone, use the top "Almost Level with Fairway" row and rate Topography based on stance or lie difficulty only.

Rate the approach shot to the green based on the stance or lie in that landing zone and the elevation change from that landing zone to the green.

Rate each of the individual landing zones and use the highest rating.

## **TOPOGRAPHY RATING TABLE**

The table provides ratings for both scratch and bogey players. The same table is used for both genders. Determine the scratch rating value, then re-enter the table to determine the bogey rating value.

Minimum rating for par-4 and par-5 holes is 1.

Evaluate both scratch and bogey landing zones.

- Consider lay-ups when determining the landing zone locations.
- Use the "Almost Level with Fairway" row unless the change in elevation from approach shot landing zone to green is at least 10 feet. Elevation changes of more than 10 feet should be rounded to the nearest 10-foot increment.

Follow these guidelines when evaluating stance and/or lie:

- Use the "Minor Problem" column even if the fairway is level.
- Use the other four columns if the fairway terrain makes stance or lie increasingly more difficult.
- Consider the nature of the shot being played (e.g. an uphill lie to an elevated target is much easier than a downhill lie to the same target).

	TOPOGRAPHY RATING TABLE									
from Appr	evation (feet) roach Shot ne to Green		Stance or Lie in Landing Zone							
Uphill	Downhill	Par-3 Hole	Minor Minor to Moderately Significantly Extreme Problem Moderate Awkward Awkward Awkward							
	Almost Level with Fairway  Less than 10'		1	2	3	4	5			
+10 10 through 14	-10 -10 through -14	1	2	3	4	5	6			
+20 15 through 24	−20 −15 through −24	2	3	4	5	6	7			
+30 25 through 34	-30 -25 through -34	3	4	5	6	7	8			
+40 More than 35	-40 More than -35	4	5	6	7	8	9			

#### 2. FAIRWAY

#### **GENERAL**

Fairway is an evaluation of the difficulty of keeping the ball in the fairway from tee to green.

Fairway ratings are based on:

- Fairway width in all landing zones;
- Hole length; and
- Nearby trees, obstacles, and punitive rough.

When a player cannot reach the fairway from the tee and the area short of the fairway presents a significant problem (e.g. penalty area, extreme rough, etc.), see "Player Cannot Complete the Hole" in Section 4.

#### **MEASURING FAIRWAYS**

Measure the fairway width perpendicular to the line along which a hole is designed to be played. At a dogleg, measure fairway width along the line bisecting the angle formed by the bend in the line of play (see Interpretation Section 12–2). When the fairway has been "contour cut" (curved borders with the rough), use an average width in the landing zone. An average width should also be used when a punitive obstacle(s) (bunker, penalty area, etc.) is toward the end of a landing zone. Conversely, when the fairway width is reduced by a punitive obstacle(s) at the beginning of a landing zone, use that measurement exclusively as the fairway width of that landing zone.

When an area of rough grass along the edge of the fairway has been cut to a height between fairway height and rough height, half of that **intermediate cut** will be considered fairway, the other half will be considered rough with height equal to the general rough height. Usually this has the effect of increasing the fairway width by the width of the intermediate cut on one side of the fairway or the other.

#### **PAR-3 HOLES**

Fairway ratings are not applicable.

<u>NOTE:</u> For the bogey player, on holes where the bogey player cannot reach the centre of the green in one shot, areas short of the green are taken into account by the Par-3 adjustment under Recoverability and Rough, not Fairway.

#### **FAIRWAY RATING TABLE**

The table provides ratings for both scratch and bogey players. The same table is used for both genders; enter the table from the left for men and from the right for women.

Values are based on fairways that are generally level and in good condition.

Measure the average fairway width at each scratch and bogey landing zone and use this to determine the table value(s) and then apply appropriate adjustments. Rate each of the individual landing zones (table value plus adjustments) and use the highest rating.

**Minimum rating** for par-4 and par-5 holes is 1.

	FAIRWAY RATING TABLE								
Men	ranway watii (iii raras)								
Hole Length (in Yards)	> 45	35-45	30-34	25-29	20-24	< 20	Hole Length (in Yards)		
< 340	1	1	2	3	4	5	< 270		
340-379	1	2	3	3	5	6	270-309		
380-425	2	3	4	4	6	7	310-365		
> 425	2	3	4	5	7	8	> 365		
	NOTE: If fa	irway is less th	nan 20 yards w	vide, a W+ adju	istment canno	be applied.			

# ADJUSTMENTS (Scratch and Bogey Ratings) Apply in order listed.

- (L)\* -1 If the player **LAYS UP** (forced or by choice) or hits less than a full shot due to a dogleg.
- $(V)^*$  +1 If none of the landing zone is **VISIBLE** and it is difficult to determine the line of play.
- (W)\* +1 If the fairway **WIDTH** is effectively reduced by:
  - a dogleg;
  - overhanging tree branches in the landing zone;
  - contour or tilt so that the shot must be played to one side; or
  - severe obstacles (dense trees, penalty area, OB, etc.) closely border the fairway landing zone.
  - +2 If the fairway **<u>W</u>IDTH** is effectively reduced when a majority of the fairway landing zone is tilted and balls are likely to end up in the rough.

- or -1 If **WIDTH** is effectively increased by hillsides or mounding closely bordering the fairway and balls will bounce back into the fairway.
  - -1 If there is a narrow landing zone **<u>W</u>IDTH** (causing a high table value) where shots can be hit from the rough on one side as easily as those from the fairway.
  - -2 If there is a narrow landing zone **<u>W</u>IDTH** (causing a high table value) where shots can be hit from the rough on both sides of the fairway as easily as those from the fairway.
- (U)\* +1 If **UNPLEASANT** lies are caused by poor turf conditions. Do not use if preferred lies are in effect during the midseason.

#### 3. GREEN TARGET

#### **GENERAL**

Green Target is an evaluation of the difficulty of hitting the green with the approach shot.

Ratings are based on:

- Green size:
- Approach shot length; and
- Green surface visibility and firmness.

To determine the calculated approach shot length, subtract the distance the player would cover after playing all full shots to landing zones from the length of the hole.

Consider Effective Playing Length corrections that may change the approach shot length:

- Roll;
- Dogleg, forced lay-up or lay-up by choice;
- Elevation; and
- Altitude

If the approach shot falls in the Transition Zone, use the bottom row of the Green Target Rating Table (Transition). This table value may be adjusted up or down one point when the centre of the green is close to the front or back of the Transition Zone.

#### **PAR-3 HOLES**

A long par-3 hole may be a two-shot hole for the bogey player.

On a par-3 hole where the bogey player cannot reach the centre of the green in one shot, base the Green Target rating on the short approach shot or, if the Transition Zone concept is applicable, use the bottom row of the Green Target Rating Table.

If the bogey player cannot complete the hole, use the scratch Green Target value and add two points (see "Player Cannot Complete the Hole" in Section 4).

#### **GREEN TARGET RATING TABLE**

Table values are based on greens that are generally circular or oval and of average firmness.

To determine the effective diameter, use the following guidelines:

- Most greens can best be measured by first measuring the longest diameter on the green, regardless of the line of play. Next, measure the crossing diameter that is perpendicular to the first measurement. It may be necessary to use an average of two or more measurements for the second measurement if the green dimensions are irregular (under Oddly Shaped Greens, Section 13).
- For an extended oval green (where one dimension is more than twice the other), take a weighted average of the width and depth (under Oddly Shaped Greens, Section 13);
- For guidance on measuring greens see Oddly Shaped Greens, Section 13.
- Consider truncating or rounding when the average is not an integer (i.e. a 20 x 25 green can either be 22 or 23) and results in a different column (see Interpretation Section 12–3).

WOMEN	WOMEN GREEN TARGET RATING TABLE								
Scratch		Effective	Diamete	r of Gree	n (in Yard	ds)	Bogey		
Shot Length (Yards)	(6) > 32	(5) 27–31	(4) 22–26	(3) 17-21	(2) 12-16	(1) < 12	Shot Length (Yards)		
< 30	2	2	2	2	2	2	≤ 20		
30-49	2	2	3	3	3	3	21-34		
50-69	2	3	3	4	4	4	35-49		
70-89	2	3	4	4	4	5	50-64		
90-109	3	4	4	4	5	6	65-79		
110-129	3	4	4	5	6	7	80-94		
130-149	3	4	5	6	7	7	95-104		
150-169	4	5	5	6	7	8	105-114		
170-184	4	5	6	7	8	9	115-124		
185-200	5	6	7	8	8	9	125-140		
> 200	5	6	7	8	9	10	> 140		
50/50 Transition Zone	4	4	5	5	6	6	50/50 Transition Zone		

50-50 Transition Zone Rating Value may be adjusted +/-1 point when the centre of the green is near the front or back of the Transition Zone

MEN	MEN GREEN TARGET RATING TABLE								
<b>Scratch</b> Shot	E	ffective [	Diameter	of Green	(in Yard	s)	<b>Bogey</b> Shot		
Length (Yards)	(6) > 32	(5) 27–31	(4) 22-26	(3) 17-21	(2) 12-16	(1) < 12	Length (Yards)		
< 60	2	2	2	2	2	2	< 30		
60-79	2	2	3	3	3	3	30-44		
80-99	2	3	3	4	4	4	45-59		
100-119	2	3	4	4	4	5	60-74		
120-139	3	4	4	4	5	6	75-89		
140-159	3	4	4	5	6	7	90-109		
160-179	3	4	5	6	7	7	110-129		
180-199	4	5	5	6	7	8	130-149		
200-219	4	5	6	7	8	9	150-164		
220-240	5	6	7	8	8	9	165-180		
> 240	5	6	7	8	9	10	> 180		
50/50 Transition Zone	4	4	5	5	6	6	50/50 Transition Zone		

50-50 Transition Zone Rating Value may be adjusted +/-1 point when the centre of the green is near the front or back of the Transition Zone

Some greens may have false fronts and/or sloping edges. When determining green dimensions do not include any areas where a ball, if placed there, will roll off the green. Only include the area where a ball will remain at rest on the green.

The tables are gender specific and provide ratings for both the scratch and bogey players. Enter the table from the left to determine scratch ratings. Re-enter the table from the right to determine bogey ratings.

**Minimum rating** for Green Target is 2.

## ADJUSTMENTS (Scratch and Bogey Ratings) Apply in order listed.

- (V)\* +1 If less than half of the green surface is VISIBLE.
  - or +2 If the green is blind (i.e. the flagstick is not **VISIBLE**).
- (O)\* +1 If the approach to the green is **OBSTRUCTED** by a tree in front of, or overhanging the green.
- **(T)** +1 If the green is **TIERED** (see definition on page 3).
- (F) +1 If the green is unusually **FIRM** (e.g. a well-struck shot by scratch players will frequently bounce over the green).
  - or -1 If the green is unusually **SOFT** (e.g. shots to the green leave deep pitch marks or even plug).

#### 4. RECOVERABILITY AND ROUGH

#### **GENERAL**

Recoverability and Rough (R&R) is an evaluation of the probability of missing the fairway landing zones and the green, and the difficulty of recovering if any are missed. To rate R&R, use the average height of the rough adjacent to the fairway and green, excluding any narrow intermediate cut that may exist.

R&R ratings are based on:

- The Green Target rating values;
- Type and height of rough grasses;
- Rise and drop around the green;
- Mounding adjacent to fairway landing zones or at the green;
- Other rough conditions such as sand dunes, waste areas (not bunkers), brush, iceplant, palmettos, hardpan, tree roots, swales, rocks, lava, desert, heather and gorse; and
- Difference (if any) of rough in a specific landing zone compared to the average rough height of the hole.

NOTE 1: Cool season rough over 6" [5"] long {4" [3"] warm season}, underbrush in trees, or other factors listed above, which make it likely a ball will be lost or advanced only with great difficulty, should be rated as Extreme Rough as well as R&R.

NOTE 2: Prepared waste areas are rated as Bunkers as well as R&R. See definition of waste area in Section 3.

#### **MEASURING GRASS HEIGHTS**

Grass heights can be measured by placing a pencil into the grass and noting the average height. A ruler is printed along the outside edge of the back cover of this Guide. Types of grasses (cool season and warm season) are described in the Definitions section.

The rating team should not be misled by current conditions if the rating is done at some time other than midseason. The team should consult with the golf course staff to determine course conditions that exist when the majority of rounds are played.

### **PAR-3 HOLES**

A long par-3 hole may be a two-shot hole for the bogey player. If the bogey player cannot reach the centre of the green in one shot, rate the area short of the green under R&R by using the **PAR-3** (3) adjustment. Also, use the **PAR-3** (3) adjustment if the bogey player lays up.

### TWO (OR MORE) SHOT HOLES

Some adjustments are shot-specific and may be applied in both the landing zone(s) and at the green. Under R&R, adjustments marked with an asterisk are cumulative and are added to the rating table value. This would apply to **LAY-UP (L)**\* adjustments (e.g. two lay ups would be -2), MOUNDS (M)\* adjustments, INCONSISTENT (I)\* adjustments, as well as CARRY (C)\* adjustments for bogey player. All other adjustments apply to the hole in general.

#### RECOVERABILITY AND ROUGH RATING TABLE

Rating table values are based on the Green Target rating and average rough height of the hole.

The tables are gender specific and provide ratings for both the scratch and bogey players. Enter the table from the left with the scratch Green Target rating to determine the scratch R&R rating. Re-enter the table from the right with the bogey Green Target rating to determine bogey R&R rating.

**Minimum rating** for Recoverability and Rough is 1

## ADJUSTMENTS (Scratch and Bogey Ratings) Apply in order listed

- (L)\* If the player **LAYS UP** (forced or by choice) -1 or hits less than a full shot on a dogleg hole.
- **(I)**\* If the Rough is **INCONSISTENT** due to:
  - the rough near a landing zone or closely +1bordering the green is much more severe than the rough height of the hole (e.g. 2" {1"} longer).
  - or -1 the rough near a landing zone or closely bordering the green is much less severe than the rough height of the hole (e.g. 2" {1"} shorter).
    - a significant portion of the green is closely +1bordered by sloping ground cut to a height that results in shots just missing the green ending up much farther from the green, making recovery more difficult.

RECOVERABILITY AND ROUGH RATING TABLE (Assumes a 5' or Less Rise and/or Drop Around the Green)								
<b>Scratch</b> Green	l		gh Height of Ho s (Warm Seasor			<b>Bogey</b> Green		
Target Rating	< 2" {< 1"}	2" to 3" {1" to 2"}	> 3" to 4" {> 2" to 3"}	> 4" to 6" {> 3" to 4"}	> 6" {> 4"}	Target Rating		
2 or 3	1	3	4	6	7	2		
4	2	4	5	7	8	3		
5 or 6	3	5	6	8	9	4 or 5		
7 or 8	4	6	7	9	10	6 or 7		
9 or 10	5	7	8	10	10	8 to 10		

	RECOVERABILITY AND ROUGH RATING TABLE (Assumes a 5' or Less Rise and/or Drop Around the Green)								
<b>Scratch</b> Green	Coo		gh Height of Ho s (Warm Season		ces})	<b>Bogey</b> Green			
Target Rating	< 2" {< 1"}		> 2½" to 3½" {> 1½" to 2"}		> 5" {> 3"}	Target Rating			
2 or 3	1	3	4	6	7	2			
4	2	4	5	7	8	3			
5 or 6	3	5	6	8	9	4 or 5			
7 or 8	4	6	7	9	10	6 or 7			
9 or 10	5	7	8	10	10	8 to 10			

- (M)\* +1 If grass MOUNDS or hollows are present near the fairway landing zone consider their severity, number and location.
  - +1 If a significant portion of the green is closely bordered by grass **MOUNDS** or hollows and/or rise and drop of greater than 5'. Do not factor in any area that is closely bordered by bunkers.
  - or +2 ... severe grass **MOUNDS** or hollows and/or rise and drop of greater than 10'. Do not factor in any area that is closely bordered by bunkers.
- (S) +1 If a **SURROUNDED** adjustment of +2 has been applied to Lateral Obstacles.
- (U) +1 If extensive areas of hardpan near the green create **UNPLEASANT** recovery issues.
- (2) +1 If the rough closely bordering two (2) or more landing zones on a par-5 (three-shot) hole is at least 4" {3"} for men or 3½" {2"} for women.

## (Bogey Ratings Only)

- (3) +1 If the bogey player cannot reach the centre of the green of a PAR-3 hole in one shot or lays up and the area short of the green is at least 20 yards wide and is cut to fairway height.
  - or +2 ... and the area short of the green is less than 20 yards wide and is cut to fairway height, or no such area exists.

### (Bogey Ratings Only)

(C)\* +1 to +4 If **CARRY** over rough (not Crossing Obstacles or desert) is required to reach the target — see the table below:

BOGEY	BOGEY CARRY ADJUSTMENT TABLE								
Carry to Target (yards)	Average Rough Height (Inches) Cool Season Grass (Warm Season in {Braces})								
MEN	2" to 3" > 3" to 4" > 4" to 6" {1" to 2"} {> 2" to 3"} {> 3" to 4"}								
100 to 160	0	0 +1							
> 160	+1	+3	+4						
WOMEN	2" to 2½" {1" to 1½"}	> 2½" to 3½" {> 1½" to 2"}	> 3½" to 5" {> 2" to 3"}						
70 to 120	0	+1	+2						
> 120	+1	+3	+4						

#### 5. BUNKERS

#### **GENERAL**

Evaluate how bunkers come into play and how difficult they are to recover from. Bunker ratings are based on:

- The Green Target rating values;
- Fraction of the green closely bordered by bunkers; and
- Difficulty of recovery from the bunker(s) bunker size and depth, bunker lip, sand condition, etc.

<u>NOTE:</u> Grass hollows, even if they were bunkers at one time, are rated only under Recoverability and Rough. Prepared "waste areas" are rated as Bunkers, as well as R&R.

The table assumes a fairway bunker(s) exists near a fairway landing zone for the scratch player and anywhere along the line of play for the bogey player. Bunkers within 20 yards of the edge of the landing zone in any direction are considered to be "near" the landing zone. Appropriate adjustments, (**EXTREME**, etc.), for fairway bunkers may be applied only for those bunkers that are "near" the landing zone for the scratch or bogey player.

#### **BUNKER FRACTION**

Bunkers that closely border a green are those effectively within 10 yards of the edge of the green. The fraction of the green closely bordered by bunkers can be determined by walking the circumference of the green and counting the number of paces where bunkers closely border the green. Divide the perimeter closely bordered by bunkers by the green circumference to find the ratio. The circumference of a traditionally shaped green (if not fully paced) can be determined as  $\pi$  (3.14) multiplied by the average diameter. For example, bunkers closely border 30 yards of a green's edge. The average diameter of the green is 27 yards and its circumference is 85 (3.14 x 27  $\approx$  85). The ratio of 30/85 is between  $\frac{1}{4}$  and  $\frac{1}{2}$ 0 of the green circumference.

#### **BUNKER DEPTH**

The depth of a greenside bunker (**DEPTH (D)** adjustment) is measured from points where most recovery shots are made to a height that would get the ball onto the areas of the green where most holes are located. It may be necessary to use an averaged depth for tiered or large sloped greens.

When there are many bunkers of various depths in play, start with a rating for the deepest, but temper it by evaluating which bunkers come most into play and how difficult they are to recover from, lowering the initial adjustment if appropriate.

#### **PAR-3 HOLES**

On a reachable Par-3 hole, reduce the table value by one (i.e. use the **NO (N)** adjustment as there are no assumed fairway bunkers. If the bogey player cannot reach the centre of the green in one shot, greenside bunkers may qualify as "fairway" bunkers, even though there is no "fairway" on a par-3 hole.

## TWO (OR MORE) SHOT HOLES

Some adjustments are shot-specific and may be applied in both the landing zone(s) and at the green. Under Bunkers, adjustments marked with an asterisk are cumulative and are added to the rating table value. This would apply to **SQUEEZE (Q)**\* adjustments, **CARRY (C)**\* adjustments (e.g. two carries would be +2), **EXTREME (E)**\* adjustments. All other adjustments apply to the hole in general.

On three (or more) shot holes, the two (2) adjustment is not shot specific and can only be used once.

#### **GREENSIDE BUNKER RATING TABLE**

This table provides ratings for greenside bunkers of average difficulty (i.e. a depth of 3 [2] feet or less) closely bordering the green. The table provides ratings for both scratch and bogey players. The same table is used for both genders; enter the table from the left for scratch and from the right for bogey.

If there are no greenside bunkers, there is no Greenside Bunker Rating Table value. Any Bunker rating for the hole would then be based only on fairway bunkers, as follows:

- If Bunkers "do not exist" on the hole (no bunkers within 50 yards of the line of play or the centre of the green), rate bunkers zero for the hole;
- If a Fairway Bunker "exists" (anywhere within 50 yards of the line of play or the centre of the green), the minimum rating for both Scratch and Bogey is 1;
- Adjustments may only be applied for fairway bunkers that are near a landing zone for the scratch or bogey player.

GREENSIDE BUNKER RATING TABLE (Assumes There Are Bunker(s) Near a Fairway Landing Zone)									
Scratch Green	Scratch Green Fraction of Green Closely Bordered by Bunkers								
Target Rating	> 0 to 1/4	> 1/4 to 1/2	> ½ to ¾	> 3/4	Target Rating				
2	1	2	2	3	_				
3	2	2	3	4	2				
4	2	3	4	5	3				
5 or 6	3	4	5	6	4 or 5				
7 or 8	4	5	6	7	6 or 7				
9 or 10	5	6	7	8	8 to 10				

## ADJUSTMENTS (Scratch and Bogey Ratings) Apply in order listed below

- (Q)\* +1 If obstacle **SQUEEZE** occurs because the distance between bunkers that border both sides of the fairway landing zone is less than 30 yards.
  - +2 If obstacle **SQUEEZE** occurs because the distance between bunkers that border both sides of the fairway landing zone is less than 20 yards.
- (C)\* +1 If the player must **CARRY** a significant bunker(s) to reach a fairway landing zone. For the scratch player, the bunker(s) must be near the start of the fairway landing zone. For the bogey player, the bunker(s) may be anywhere along the line of play.
  - or +1 If the player must **CARRY** a bunker(s) that protects a significant portion of the green. For the scratch player, the bunker(s) must closely border the green and Green Target rating must be 5 or greater. For the bogey player, the bunker(s) may be anywhere along the line of play with no minimum Green Target rating.
- (E)\* +1 If punitive bunker features make recovery from fairway or greenside bunkers **EXTREMELY** difficult (e.g. pot bunkers, stacked sod bunker faces, extreme rough interferes with swing, very large bunker or series of bunkers causing long carries over sand, etc.) To qualify, a bunker must be closely bordering the green or near the fairway landing zone.
  - +2 If features listed above impact a fairway bunker and restrict options to playing out sideways or backwards causing substantial loss of distance on the shot.
- (**D**) +1 to +4 If the **DEPTH** of greenside bunkers is more than 3 [2] feet. Consider their number, location, and the difficulty of recovery see the following table:
- (N) -1 Reduce the table value by one on a one-shot hole because there is no fairway bunker.
  - or -1 Reduce the table value by one on a two (or more) shot hole if there are **NO** fairway bunkers near a landing zone for the scratch player or anywhere along the line of play for the bogey player. Greenside bunkers do not count as fairway bunkers unless the player has a landing zone just short of the green and the greenside bunkers are near that landing zone.
- (2) +1 If there are fairway bunkers near two (2) or more landing zones on a three (or more) shot hole.

GREENSIDE BUNKER <u>D</u> EPTH ADJUSTMENT TABLE							
Bunker Depth (Feet)							
MEN	MEN > 3' > 6' > 10' > 15'						
Adjustment	+1	+2	+3	+4			
WOMEN	> 2'	> 5'	> 8'	> 12'			

#### 6. CROSSING OBSTACLES

#### **GENERAL**

Crossing Obstacles consists of penalty areas, extreme rough (including desert) and out of bounds which are carried to play the hole. Multiple crossings on a hole are evaluated separately for each shot.

Ratings are based on the length of shot that is required to "safely carry" the Crossing Obstacle, which is 10 yards beyond the far margin of the obstacle.

Short carries over obstacles can result in a zero Crossing Obstacle value. When a Crossing Obstacle exists and there is no Lateral Obstacle table rating value, a value of 1 is recorded under Lateral Obstacles to satisfy the "exists" concept. If a Lateral Obstacle value does exist on the hole, no additional value is applied (see "Obstacles Do Not Exist" in Section 4).

#### **CROSSING OBSTACLE RATING TABLE**

These tables are gender specific and provide ratings for the scratch and bogey player for crossing penalty areas, extreme rough (including desert) and out of bounds, taking into consideration the length of the shot to carry the obstacle safely. Enter the table from the left to determine scratch ratings. Enter the table from the right to determine bogey ratings.

## ADJUSTMENTS (Scratch and Bogey Ratings) Apply in order listed below

<b>(C)</b> *	+1	If the <b>CARRY</b> over a Crossing Obstacle
		closely borders the front of the green.

(P)*	%	If a Crossing Obstacle is narrow, only
		partial or can be played from some of
		the time, consider using an appropriate

**CROSSING OBSTACLE RATING TABLE** (All Distances in Yards) **Scratch** Player Scratch Bogey **Bogey** Player Crossing Shot Length Shot Length Crossing to Carry Safely Value to Carry Safely Value 100-124 2 50-74 125-149 2 3 75-99 150 - 174100-124 3 4 175-199 125-149 5\* 6\* 200-230 150-180 **Forced** Forced >230 >180 Lay-up<sup>†</sup> Lay-up<sup>†</sup>

#### **CROSSING OBSTACLE RATING TABLE** (All Distances in Yards) **Scratch** Player **Bogey Bogey** Player Scratch Shot Length Shot Length Crossing Crossing to Carry Safely to Carry Safely Value Value 75-99 1 2 30-49 100-124 2 3 50-69 125-149 3 70-89 4 150-174 4 5 90-109 175-190 5\* 7\* 110-130 Forced Forced >130 >190 Lay-up<sup>†</sup> Lay-up<sup>†</sup>

**PERCENTAGE** of the table value to determine the shot rating value (25%, 50% or 75%).

(2)\* +1 or +2 If a Crossing Obstacle comes into play on two (2) or more shots; each rating must be 5 or greater (table value plus adjustments). Adjustment is made to the highest of the separate shot evaluations. Add all values of 5 or greater; if they total 11 or less, +1; if they total 12 or more, +2.

\* This may be a forced lay-up if not on the full tee shot due to shorter carry lengths on subsequent shots.

† If rating a course at 2,000 feet or above and determining whether a player can carry an obstacle safely, it is assumed that the carry distance for a player is 20 yards less than the total altitude-adjusted shot length.

#### 7. LATERAL OBSTACLES

#### **GENERAL**

**Lateral Obstacles** consist of **penalty areas, extreme rough (including desert) and out of bounds** when they come into play laterally on the hole. Evaluate how Lateral Obstacles come into play for each shot. Lateral Obstacle ratings are based on:

- Shot length required to reach the landing zone (fairway or green); and
- Distance of the lateral obstacle from the centre of the landing zone (fairway or green).

Factors to consider when making adjustments are:

- Location, size, and conditions in the lateral obstacle;
- Conditions in the area adjacent to the lateral obstacle;
- Number of times a lateral obstacle comes into play;
- Fraction of the green closely surrounded by lateral obstacles. Consider conditions that can decrease or increase the likelihood of the lateral obstacles closely bordering the green coming into play when determining distance (e.g. a downslope can increase the likelihood; an intervening bunker can decrease the likelihood); and
- In determining a **SURROUNDED** (S) adjustment, ignore any area where a **PERCENTAGE** (P) adjustment has been used to reduce the value by more than 50%.

If an area being rated is not treated as a lateral penalty area and a stroke and distance penalty applies (e.g. OB or where a ball is likely to be lost in extreme rough), apply the **STROKE** and distance **(K)**\* adjustment.

When a Crossing Obstacle "exists" but the Crossing Obstacle table value is zero, a value of at least 1 is recorded under Lateral Obstacles to satisfy the "exists" concept. If a Lateral Obstacle also "exists" on the hole, no additional rating value for the Crossing Obstacle that "exists" is applied (see "Does Not Exist" in Section 4).

## LATERAL OBSTACLE RATING TABLE

The tables are gender specific and provide ratings for both the scratch and bogey players, taking into consideration the length of the shot and the distance of the obstacle from the centre of the landing zone.

Enter the table from the left for scratch ratings and the right for bogey ratings.

LATERAL OBSTACLE RATING TABLE For Penalty Areas or OB/ER (All Distances in Yards)						
<b>Scratch</b> Shot Length	Distance of Penalty Area or OB/ER from Centre of Target Landing Zone					<b>Bogey</b> Shot Length
(to Target)	40-50	30-39	20-29	15-19	< 15	(to Target)
< 90	1	1	2	2	3	< 50
90-129	1	1	2	3	4	50-79
130-159	1	2	3	4	4	80-109
160-189	1	2	3	4	5	110-139
190-209	1	2	4	5	5	140-159
210-230	2	3	4	5	6	160-180
> 230	2	3	5	6	7	> 180

LATERAL OBSTACLE RATING TABLE For Penalty Areas or OB/ER (All Distances in Yards)						
<b>Scratch</b> Shot Length	Dista from	<b>Bogey</b> Shot Length				
(to Target)	40-50	30-39	20-29	15-19	< 15	(to Target)
< 70	1	1	2	2	3	< 40
70-99	1	1	2	3	4	40-69
100-124	1 2 3 4 4		4	70-84		
125-149	1	2	3	4	5	85-99
150-174	1	2	4	5	5	100-114
175-190	2	3	4	5	6	115-130
> 190	2	3	5	6	7	> 130

## ADJUSTMENTS (Scratch and Bogey Ratings) Apply in order listed below

- (B)\* +1 If conditions (such as a cart path or sloping ground) increase the likelihood that a ball will **BOUNCE** into the obstacle. Do not use if the distance from the centre of the target landing zone is less than 15 yards.
  - or -1 If conditions (such as a tree, fence or other obstacle) decrease the likelihood that a ball will **BOUNCE** or fly into the obstacle or the obstacle only comes into play behind the green.
- (K)\* +1 If the area is not treated as a lateral penalty area and a **STROKE** and distance penalty applies, such as OB or where a ball is likely to be lost in extreme rough. Do not use if the rating value is 1 (table value plus/minus **BOUNCE** adjustment).
- (P)\* % If the obstacle is narrow, only borders part of the landing zone, can be played from some of the time, and/or a significant barrier (tall net, steep slope, etc.) minimizes the chance that a shot would reach the lateral obstacle, consider using an appropriate PERCENTAGE of the table value plus above adjustments to determine the rating value. Generally, this adjustment is in increments of 25% (25%, 50% or 75%).
- (Q)\* +1 If obstacle **SQUEEZE** occurs because the distance between Lateral Obstacles that border both sides of the fairway landing zone is less than 40 yards.
  - +2 If obstacle **SQUEEZE** occurs because the distance between Lateral Obstacles that border both sides of the fairway landing zone is less than 30 yards.
- **(S)**\* +1 or +2 If the green is closely **SURROUNDED** by crossing and/or lateral obstacles. Green Target rating value must be 5 or greater for the scratch player but may be any value for the bogey player. See the table below:
- (2) +1 or +2 If a lateral obstacle comes into play on two (2) or more shots each rating must be 5 or greater (table value plus adjustments). Adjustment is made to the highest of the separate shot evaluations. Add all values of 5 or greater; if they total 11 or less, +1; if they total 12 or more, +2.

GREEN SURROUNDED BY CROSSING/LATERAL OBSTACLES ADJUSTMENT TABLE					
Fraction of Green Surrounded	Proximity of Penalty Area/OB/ER to the Edge of the Green (in Yards)				
Surrounded	5 to 10	< 5			
½ to ½ <b>0</b> +1					
> ½ 1 +2 <sup>†</sup>					
†Also apply the Surrounded (S) adjustment under R&R					

#### 8. TREES

#### **GENERAL**

Trees must be rated by evaluating the overall impact of the trees on the play of the hole. Once the entire hole has been evaluated for trees, a rating value must be assigned based on whether the trees are a minor problem, moderate problem, significant problem, or extreme problem. Generally, the impact of trees in the tee-shot landing zone will be the most important factor in determining the Trees rating for the hole.

Determine the difficulty factor for trees by considering the following for each shot that is to be played on the hole, based on the scratch player's ability to recover from the trees:

- Number, height, and density (at midseason) of trees at each landing area and on the line of play to the next target;
- Distance of the trees from the centre of the landing zone (e.g. trees closely border a narrow fairway landing zone);
- <u>Length of shot</u> required to reach the next landing zone or green. Recovery is typically easier with a shorter shot since more types of shots can be played. A ball in the trees may require the player to hit an extra shot to reach the green;
- Presence of <a href="low-hanging branches">low-hanging branches</a> that impact swing and obstruct recovery shots;
- Conditions under the trees that impact the lie of the ball;
- Proximity of trees to the ball when in flight that may result in significant loss of distance; and
- <u>Conditions along the line of play</u> from the trees that limit shot options due to intervening obstacles (e.g. a crossing obstacle on the shot from the trees to the green requiring a low shot to avoid tree branches and carry the obstacle).

<u>NOTE:</u> Trees overhanging or otherwise reducing the effective width of the fairway may also be recognized with a <u>**WIDTH (W)**\*</u> adjustment under Fairway. A tree or overhanging branches that block the shot to a green may also be recognized with an **OBSTRUCTED (O)**\* adjustment under Green Target.

#### TREES RATING TABLE

The table provides ratings for scratch and bogey players. The same table is used for both genders. Determine the scratch rating value, then re-enter the table to determine the bogey rating value.

Assign a zero value if trees do not exist on the hole (see "Obstacles Do Not Exist" in Section 3).

Assign a rating value of 1 or more if trees exist on the hole.

TREES RATING TABLE						
Hole Length	Minor Problem	Moderate Problem	Significant Problem	Extreme Problem		
One Shot Hole	1	2	3	4		
Two or More Shot Hole	2	4	6	8		
All values may be adjusted +/- 1 point						

## ADJUSTMENTS (Scratch and Bogey Ratings) Apply in order listed below

- (O)\* +1 If trees **OBSTRUCT** the shot to the target (landing zone or green). Do not apply if the trees that obstruct the tee shot are used to determine a **CHUTE** (H) adjustment.
- (H) +1 to +4 If the tee shot must be hit through a narrow **CHUTE**. The amount of adjustment depends on the width and length of the chute see the table to the right.

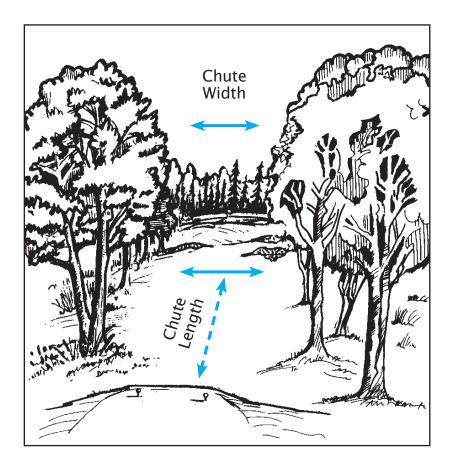
### **CHUTE**

If using the **CHUTE (H)** adjustment on the following page, the example below depicts the two values used to determine the adjustment. The width is the distance between extending tree branches at the narrowest portion of the chute. The length represents how far it is from the teeing area to pass the point where the chute exists. For guidance on measuring a Chute, see Interpretation Section 12–8.

The table below prescribes the evaluation of a "chute." The width defines the distance between extending tree branches at the narrowest portion of the chute. The length represents how far it is from the teeing area to pass the point where the chute exists. The rating adjustment is reflected at the bottom of the table. If the shot can easily be hit over or under the trees, decrease the adjustment by one or two points.

NOTE: Chutes on subsequent shots are rated only using the **OBSTRUCT (O)** adjustment

TEE SHOT CHUTE TABLE						
Width (in yards)	Length to clear the chute (in yards)					
8 or less	40-55	56-71	72-87	>87		
9–10	50-69	70-89	90-109	>109		
11-12	60-83	84-107	108-131	>131		
13-14	70-97	98-125	126-153	>153		
15-16	80-111	112-143	144-175	>175		
17-18	90-125	126-161	162-197	>197		
19-20	100-139	140-179	180-219	>219		
21-22	110-153	154-197	>197			
23-24	120-167	>167				
25-26	130-181	>181				
27-28	≥140					
29-30	≥150					
Rating Adjustment	+1	+2	+3	+4		



#### 9. GREEN SURFACE

#### **GENERAL**

Green Surface is an evaluation of the difficulty of chipping and putting on each hole.

Green Surface ratings are based on:

- Green speed as measured by the Stimpmeter; and
- Green surface contouring and slope or tilt.

Rating teams should consult with the golf course staff before rating a course to determine midseason conditions. Consider when the greens were last mowed and seasonal variations. The rating team should verify green speeds with a Stimpmeter.

#### **MEASURING GREEN SPEED**

The best procedure is to find a level area on the green and roll three golf balls in one direction, marking the starting and average ending points, then roll the balls in the opposite direction. If the average roll back is within 18 inches of the roll in the first direction, the average of these two lengths is a good measure of the green speed.

To help find a level area, lay the Stimpmeter flat on the green and place a ball in the V-shaped groove. The movement of the ball will indicate whether the area is reasonably level.

When it is not possible to find a flat area of the green to measure, it may be necessary to measure a sloped area of the green. To measure the speed of a sloped area, find the most uniform area of surface (a tilted flat area). Roll the balls straight down the slope to get S(down), then roll them straight back up the slope to get S(up) and use following formula to determine the green speed

## **GREEN SPEED CORRECTED FOR GREEN SLOPE**

 $S(level) = (2 \times S(down) \times S(up)) \div (S(down) + S(up))$ 

### **GREEN CONTOURING AND SLOPE**

Contouring of the green should be evaluated as follows:

- A green with a <u>relatively flat</u> surface is one with few knolls and swales that may cause few subtle breaks.
- A green with a moderately contoured surface is one with prominent knolls and swales that may create many breaks.
- A green with a <u>highly contoured</u> surface is one with large knolls or deep swales or numerous shelves designed for hole locations.

Gently, moderately, and steeply sloped greens are defined in the table based on the amount of roll downhill vs. uphill from the Stimpmeter. When the speed downhill on a significant portion of the green is two to three times the speed uphill, the green is considered to be **moderately sloped**; when the speed downhill is more than three times the speed uphill, the green is considered to be **steeply sloped**. See bottom rows of Green Surface Rating Table.

#### **TIERED GREENS**

A tier is a plateau. To be tiered, a green must have a minimum of two distinct plateaus of surface area, each with multiple available hole locations, separated by a two-foot or greater elevation difference. The elevation change area must include a significant portion of the green. Two plateaus with one "ramp" equates to two tiers. Three plateaus with two "ramps" equates to three tiers. A ball will not normally remain at rest on a ramp between two tiers.

NOTE: A tiered green requires a **TIERED** (T) adjustment be applied to both scratch and bogey ratings under Green Target.

#### **GREEN SURFACE RATING TABLE**

The table provides ratings for both scratch and bogey players. The same table is used for both genders. It provides rating values for various Stimpmeter readings and green surface characteristics.

Use a Stimpmeter to determine the green speed and then evaluate surface characteristics. Enter the table to determine the scratch rating. Values in parentheses are bogey rating values. **Minimum rating** for Green Surface is 3.

GREEN SURFACE RATING TABLE					
	Contour of Green Surface				
Green Speed	Relatively Flat or Gently Sloped	Moderately Contoured or Moderately Sloped	Highly Contoured or Steeply Sloped		
6'11" or Less	3	4	5		
7' to 8'5"	4	5	6		
8'6" to 9'11"	5	6	7 (8)		
10' to 10'11"	6	7 (8)	8 (9)		
11' to 11'11"	7	8 (9)	9 (10)		
12' or More	8	9 (10)	10		
Amount of Roll Downhill for Each Foot	< 2'	2' to 3'	> 3'		
of Roll Uphill	i.e. <b>&lt; 2:1</b>	i.e. <b>2:1 to 3:1</b>	i.e. > <b>3:1</b>		

**NOTE 1:** Table values in parentheses are bogey ratings.

**NOTE 2:** A tiered green is considered at least moderately contoured.

**NOTE 3:** A green divided into three or more circles due to surface contours or tiers is considered highly contoured.

#### ADJUSTMENTS (Scratch and Bogey Ratings)

- (U) +1 If <u>UNPLEASANT</u> turf conditions on the putting green cause well struck putts to routinely miss the hole (such conditions must prevail throughout the midseason).
  - or +1 If the circle concept has been applied to determine the effective green diameter because a player cannot putt from one part of the green to another.

#### (Bogey Ratings Only)

(T) +1 If the green is **TIERED** (see definition in Section 3).

#### 10. PSYCHOLOGICAL

#### **GENERAL**

Psychological is an evaluation of the cumulative effect of obstacles on a player's score.

The location of many punitive obstacles close to a target area creates uneasiness in the mind of the player and affects scoring.

• Assign a rating of zero unless there are at least 3 obstacles rated 5 or greater, the ratings of which total 20 or more points.

#### **PSYCHOLOGICAL RATING TABLE**

The table provides ratings for both scratch and bogey players. The same table is used for both genders. It is based on the number and sum of obstacle ratings of 5 or higher in all the other categories on each hole.

After rating the hole for the other nine obstacles:

- Count the number of scratch obstacles rated 5 or greater;
- Total the scratch obstacles rated 5 or greater; and
- Then apply this count and this sum to the table.
- Repeat the procedure for bogey obstacle ratings.

There are two adjustments available under Psychological and both involve minimum rating values. The **EXTREME**(E) adjustment is used for all players and applies when the rating of one or more obstacle(s) on a hole is 10. The **EXTRAORDINARY** (X) adjustment is used only for the bogey woman player and applies when the ratings for Crossing Obstacles and/or Lateral Obstacles are 5 or higher.

<u>NOTE:</u> The bogey Psychological rating can be less than the scratch if there are lower bogey obstacle ratings (e.g. a Psychological rating of 4 for scratch and 0 for bogey is possible).

The entry on the rating form would be:

4 0

	PSYCHOLOGICAL RATING TABLE								
Number of Obstacles Rated 5 or Greater	Sum of Obstacle Values Rated 5 or Greater								
3	20-21	22-23	24-25	26-27	_	28	_	29	> 29
4	20-21	22-24	25-27	28-30	31-33	34-36	_	37	> 37
5	25-26	27-28	29-30	31-33	34-36	37-39	40-42	43-45	> 45
6	_	30-31	32-33	34-36	37-39	40-42	43-45	46-48	> 48
7	_	_	35-36	37-39	40-42	43-45	46-48	49-51	> 51
8	_	_	40-41	42-43	44-45	46-48	49-51	52-54	> 54
9	_	_	_	45-46	47-48	49-51	52-54	55-57	> 57
Psychological Rating	2	3	4	5	6	7	8	9	10

#### **ADJUSTMENTS (Scratch and Bogey Ratings)**

**(E) EXTREME** If any other obstacle(s) have an EXTREME rating of 10 – see the following table:

EXTREME PSYCHOLOGICAL RATING ADJUSTMENT TABLE						
Number of Obstacles Rated 10	<i>Minimum</i> Psychological Rating					
1	5					
2 or More	9					

#### (Bogey Women's Ratings Only)

(X) **EXTRAORDINARY**The minimum Psychological rating for women bogey players is dependent on the bogey women's Crossing Obstacle or Lateral Obstacle rating – see the following table for additional **EXTRAORDINARY** adjustment:

BOGEY CROSSING OR LATERAL EXTRAORDINARY PSYCHOLOGICAL RATING ADJUSTMENT TABLE					
Crossing/Lateral Ratings	<i>Minimum</i> Bogey Psychological Rating				
5	3				
6	6				
7 or more	10				

#### **SECTION 13 — ODDLY SHAPED GREENS**

#### 9. ODDLY SHAPED GREENS

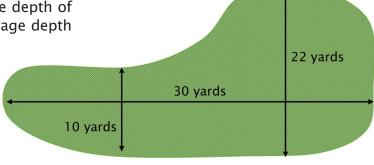
Effective diameters of "oddly shaped" greens may not be equal to the average of the width and depth. In some cases one dimension is weighted more than the other. In other cases, the "circle concept" is applied. A green where a single measurement for one or more dimensions is not consistent, using an average (or weighted average) would be appropriate as in example A. A long, narrow green is evaluated as in examples B and C. If using the circle concept, do not reduce the effective green diameter of any circles used in the calculation, even if they meet the >2:1 or >3:1 concept (see examples B and C) since the overall effective green diameter will be reduced by the circle concept itself (see example D).

The "circle concept" involves overlaying circles (or ovals) of various sizes on unusually-shaped greens, then determining a weighted average of the circles' (or ovals') diameters to get an effective green diameter (EGD). The circle concept should be used when a player cannot putt from one part of the green to another (see example D). Consideration must be given to commonly used hole locations and the assumption that hole locations are at least four yards from the edge of the green.

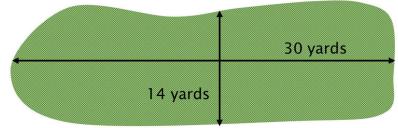
When in doubt, do not use the "circle concept."

A. If one dimension is not a consistent value, an average (or weighted average) should be used to better reflect that dimension. The depth of the green varies between 10 and 22, so using 16 as the average depth would be appropriate.

$$EGD = (30 + (10 + 22/2)/2) = (30 + 16)/2 = 23$$

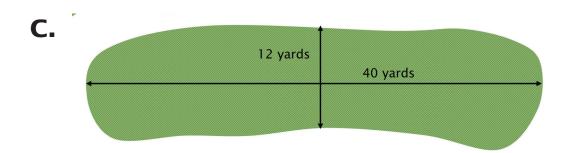


В.



If one dimension is more than two times (but less than or equal to three times) the other dimension, add two short dimensions and one long dimension, then divide by three.

A green is 14 yards deep and 30 yards wide. EGD=(14+14+30)/3=19



If one dimension is more than three times the other dimension, add three short and one long, then divide by four.

A green is 12 yards deep and 40 yards wide. EGD=(12+12+12+40)/4=19

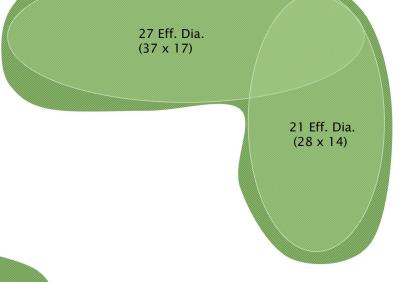
#### D.

This oddly shaped green has a smaller portion that is used only about 33% of the time.

Therefore, the larger portion is weighted at 67%.

EGD = (27+27+21)/3 = 25 average

### E.



This tiered green is best described by an average diameter (not by two circles) and applying the **TIERED**  $(\underline{T})$  adjustment.

The **TIERED** (<u>T</u>) adjustment may be applied to a green diameter that has been reduced due to the 2:1, 3:1 or circle measurement concept.

#### **SECTION 14 — POST RATING PROCEDURES**

#### 1. REVIEW

The rating team's results must be submitted to a Course Rating Review Committee for final evaluation and approval. This Committee should be composed of association staff members and the most experienced team leaders. The Committee should check all calculations for accuracy and compare the results with those of other courses. The Authorized Association should inform the club as to the Course Ratings and Slope Ratings only after approval by the Course Rating Review Committee.

Authorized Associations may not arbitrarily alter ratings that they believe are out of line. If they believe a rating is incorrect, the course must be re-rated. The Course Rating Review Committee may increase or decrease the Course Rating recommended by a rating team by 0.4 strokes (0.6 strokes for Bogey Ratings) for 18 holes and 0.2 strokes (0.3 strokes for Bogey Ratings) for nine holes if such action is considered to be warranted. The Course Rating Review Committee should be aware that changing a Course Rating may change the Slope Rating.

Alternatively, the Committee may reject the rating of a rating team, in which case another team should re-rate the course. The Committee should also review requests for new ratings and review existing ratings periodically.

#### 2. AUTHORIZED ASSOCIATION RECORDS

A complete file of each rating must be kept by the Authorized Association for future reference. The file should include a scorecard, the names of the persons rating the course, copies of the rating forms, information regarding the weather and other conditions on the day of rating, types of grasses, height of rough, official measurements of the holes, names of persons who measured the golf course, and whether permanent yardage markers have been installed.

When all courses in an area have been rated, the Course Rating Review Committee must compile a list of the Course Rating and Slope Rating for all tees on each course that is rated. The list should include total length, Scratch and Bogey Length Ratings, Scratch Obstacle Stroke Value, and Bogey Obstacle Stroke Value for each course in its jurisdiction that has been rated. The Committee should review these lists, particularly the differences between the Length Rating and Course Rating, to make sure that all courses are rated at their proper levels.

A listing of the Course Ratings and Slope Ratings for all tees from each course in an area should be made available to each club/course to help facilitate submitting scores made away from home. Course Ratings must be maintained by the Authorized Association to ensure all published ratings are current..

# SECTION 15 — THE EFFECT OF COURSE MANAGEMENT AND MAINTENANCE ON COURSE RATING

A golf course is rated based on its effective playing length and its playing difficulty under normal conditions. If the length or playing difficulty changes materially, handicaps can be distorted. Placement of tees and holes must be balanced each day and maintenance practices (watering, cutting, etc.) must be consistent from day-to-day and month-to-month so that the Course Rating and Slope Rating will remain accurate. Following are some examples of the impact that improper course management and changes in course maintenance can have on the Course Rating and Slope Rating.

#### 1. CHANGE IN EFFECTIVE PLAYING LENGTH

Increasing the effective playing length of the course by 22 yards [18 yards] adds one-tenth (0.1) of a stroke to the Course Rating; reducing the length lowers the rating by the same amount. Increasing effective playing length also raises the Slope Rating: adding 93 yards [85 yards] increases the Slope Rating by 1. Shortening the course reduces the Slope Rating similarly.

#### a. Tee Placement

The most obvious way to increase or decrease effective playing length is to move all the tee markers behind or ahead of the permanent yardage markers. Placing tee markers 10 yards per hole behind the permanent markers adds 180 yards to effective playing length which in turn increases the Course Rating by 0.8 [1.0] of a stroke, and increases the Slope Rating by 2.

#### b. Roll

Softening fairways increases effective playing length; hardening fairways decreases effective playing length. If overnight watering is increased so that fairway condition changes from firm to average, or from average to soft, the Course Rating goes up almost 0.5 [0.6] of a stroke, and the Slope Rating increases by 1.

#### 2. CHANGES IN OBSTACLES

Generally speaking, changing obstacles has less effect on the Course Rating and Slope Rating than changing effective playing length. Increasing an obstacle rating value by 1 (e.g. from a "4" to a "5") has negligible effect because the rating points are first weighted then multiplied and converted to scratch obstacle strokes or bogey strokes. Assuming a weighting of 10 percent (0.10), a "4" to "5" change in obstacle difficulty results in a Course Rating increase of only 11 one-thousandths (0.011) of a stroke (or a Bogey Rating increase of 0.026 of a stroke). To achieve an increase of 0.1 of a stroke in Course Rating, obstacles must be rated a total of 9 points higher. Adding 22 yards [18 yards] to the effective playing length achieves the same result.

Some examples of changes in obstacles that can produce an increase in Course Rating of at least 0.1 of a stroke are listed below.

#### a. Fairway

Change mowing pattern to decrease fairway width from 30 yards to 20 yards on all par-4 and par-5 holes adds over 0.3 of a stroke to the Course Rating and increases the Slope Rating by approximately 1.5 points.

#### b. Recoverability and Rough

Increasing the rough height from 2  $\frac{1}{2}$ " to 3  $\frac{1}{2}$ " to 2  $\frac{1}{2}$ " on all 18 holes adds nearly 0.7 of a stroke to the Course Rating and increases Slope Rating by approximately 5.

#### c. Green Target

Decrease watering the greens to change them from "unusually soft" to "average firmness" or from "average" to "unusually firm." Changing the holding properties of the greens on all 18 holes adds about 0.2 of a stroke to the Course Rating, and increases the Slope Rating by 1.

#### d. Green Surface

Speeding up all 18 greens by 1 to 1½ feet adds just over 0.2 of a stroke to the Course Rating and almost 1 to the Slope Rating.

#### **SECTION 16 — INTERPRETATIONS**

This section includes Interpretations for greater explanation or guidance in the rating procedure. They are listed by the section of the Manual where the Interpretation is designed to address.

# SECTION 3 DEFINITIONS

#### **3/1 Significant Definition**

- Q. What is meant by the definition of Significant and how it is applied when referenced?
- **A.** As described in the definition, it is something that is "worthy of attention and impacts the difficulty in playing the hole." Significant is used a number of times throughout the Guide and Manual, mainly within the adjustments as to whether they should be applied. In some cases, it is used to replace a specific qualifier such as 50% of the green, but it is also used in determining whether to apply a lay-up or the degree of difficulty or impact on play (e.g. a significant loss of distance).

Following are explanations of how "significant" would apply in different situations:

- The qualification required for a Carry (C)\* adjustment to be applied to a fairway bunker or a greenside bunker now includes the word "significant". For the fairway bunker, it must be a significant bunker, as judged by its difficulty factors (size, depth placement, length of carry required, etc.), in order for the Carry (C)\* adjustment to apply. Greenside bunkers must protect a significant portion of the green. This means that a bunker that is in the front middle of the green but protects less than 50% of the green may qualify for the Carry (C)\* adjustment. The rating team should consider evidence of hole locations in determining if the bunker protects a significant portion of the green. If there are several instances where it is not obvious that a Carry (C)\* adjustment should be applied, it is recommended that the "toggle" concept be used.
- The qualification for applying a Lay-Up by Choice requires that a "significant" obstacle or combination of obstacles near the player's normal landing zone exists. If the fairway width is 18 yards and there is benign rough on both sides of the fairway, no Lay-Up by Choice should be applied. If the 18-yard wide fairway is closely bordered by deep bunkers and/or lateral obstacles, it would be appropriate for the rating team to apply the Lay-Up by Choice process.
- Other obstacles, including Topography and Trees, use "Significant" in the rating tables in determining difficulty values. The progression of difficulty factors is minor, moderate, significant and extreme. It may be helpful keep in mind that, throughout the course rating system, "significant" refers to obstacle difficulty that falls between moderate and extreme.

#### 3/2 Tweeners and "Toggling"

- Q. Is it appropriate to use a tweener, or "toggle" rating values or adjustments when the rating team cannot clearly determine the best value to use for a rating?
- **A.** Usage of tweeners or the toggling concept are not required in the rating process but may provide a better rating value when the table value is close to a breakpoint or if an adjustment is debatable. A tweener is typically used when there is a two-point gap between the potential rating values.

#### Tweener example:

• A bogey player has a full tee shot with penalty area about 29 yards from the centre of the fairway landing zone. Based on the lateral distance of 29, the value from the Lateral Obstacles Rating Table is 5, but the rating team discusses that if the penalty area was 30 yards away (a change of only 1 yard), the table value would be 3. Assuming there are no conditions that make the penalty area more or less likely to come into play, the rating team decides that a tweener value of 4 best represents this rating value.

Toggling is typically used when the potential rating values are only one point apart. When this situation arises it would be appropriate to move back and forth or "toggle," between columns or rows of a table, or alternate the use of a particular adjustment.

#### Toggling examples:

- The first two greens of a golf course could both be classified as either relatively flat or moderately contoured. In an effort to reflect average obstacle difficulty, the rating team agreed to identify the first green as relatively flat and the second green as moderately contoured.
- A golf course has moderate mounding bordering many of its greens. On the first of these holes, the rating team could not reach a consensus on whether to apply the Mounds adjustment. Ultimately, the team agreed to apply the adjustment in this case, but not to apply it on the next similar situation and continue to use this same concept throughout the rating.
- On the first hole, bunkers border about ½ the circumference of the green and the rating team uses the third column (>½ to ¾) of the Greenside Bunker Rating table. On the second hole, bunkers border about ¼ the circumference of the green. Since the rating team used the higher value on the first hole, they should consider using the lower value (<¼) on the second hole.

Note: If there are multiple teams on a rating it is important for them to calibrate these applications to ensure consistency is applied throughout the rating process.

# SECTION 4 THE SCRATCH & BOGEY PLAYER

#### 4-3/1 Transition Zone

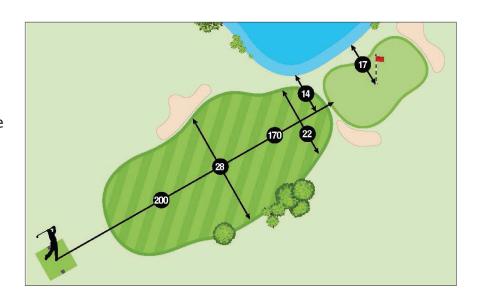
- Q. What is the correct process for deciding whether a hole should be rated in Transition? What is the best way to use the Transition concept when rating a hole?
- **A.** The first step in rating a hole that may be in transition is to apply any effective length corrections such as Roll, Dogleg or Lay-up, Elevation or Altitude to determine the effective playing length (EPL) of the hole. The EPL for the hole should be the basis in determining whether the hole should be transitioned. This means, for example, that a flat hole with no EPLs for the bogey player that measures 365[275] yards would not be transitioned but a hole of the same length that is 30 feet uphill on the tee shot would likely need to be transitioned because of the EPL corrections created by the uphill nature of the hole.

For a hole that meets the guidelines for Transition, the rating team must next decide whether the hole will be played with a long approach shot that reaches the centre of the green at least 50% of the time or a short approach shot will be required more than 50% of the time. This decision should be based on the length of the transition, the effective length corrections that may apply, and the nature of the obstacles that protect the front of the green which may affect the chance of reaching the centre of the green. Once this decision is made, rate the hole as follows:

- 1. Determine the Green Target rating for the hole, starting with the value from the bottom row of the Green Target Rating Table. In most cases, this Rating Table value is used, however the note at the bottom of the table allows an adjustment of +/- 1 to the Transition Zone Rating value when the centre of the green is close to the front or the back of the Transition Zone.
- 2. Use the Green Target rating value from step 1 to determine the rating value for both R&R and Bunkers and apply any necessary adjustments.
- 3. The process for rating the remaining obstacles will depend on whether the hole will be successfully played with a long approach shot that reaches the centre of the green at least 50% of the time or a short approach shot will be required more than 50% of the time.
  - a. If the player reaches the centre of the green with the long shot at least 50% of the time, rate the remaining obstacles using the long shot for the approach shot information.
  - b. If the player will not reach the centre of the green at least 50% of the time on the long approach shot, rate the remaining obstacles for the hole by assigning an additional landing zone 10 yards short of the front of the green and assume the player will have a short approach shot from there to the green.

c. Note that the decision about whether the player will most often have a long or a short approach shot may also impact the adjustments applied when rating R&R and Bunkers. Making this decision BEFORE rating Green Target, R&R and Bunkers will allow the rater to apply the adjustments correctly.

In the image listed, the hole is 380 [290] yards in length and there are no effective length corrections. Rough height is  $2\frac{1}{4}$ " cool season grass. The dimensions of the green are 22 yards wide by 28 yards deep. Bunkers closely border > $\frac{1}{4}$  to  $\frac{1}{2}$  of the green circumference. Trees are a minor problem in the tee shot landing zone and there are no other trees on the hole.



#### For Male Bogey Golfer (380-yard hole):

If it is determined that the player will reach the centre of the green at least 50% of the time, rate the hole as a two-shot hole, as follows:

Green Target	5	Green effective diameter is 25 Use the 50/50 Transition Zone Rating line at the bottom of the table
R&R	5	From R&R Table; no adjustments
Bunkers	4	From Bunker Table; no adjustments

#### Other Obstacles:

Topography	1	Minor problem, level approach shot
Fairway	4	28-yard fairway on a 380-yard hole
Crossing Obs.	0	Does not exist on the hole
Lateral Obs.	5	180-yard shot to green with penalty area 17 yards to the left
Trees	2	Trees are a minor problem

If it is determined that the player will not reach the centre of the green at least 50% of time, and will have an additional landing zone, rate the hole as a three-shot hole as follows:

Green Target	5	Green effective diameter is 25 Use the 50/50 Transition Zone Rating line at the bottom of the table
R&R	5	From R&R Table; no adjustments
Bunkers	5	4 from Bunkers Table, +1 (2) adjustment

#### Other Obstacles:

Topography	1	Minor problem in both landing zones, level approach shot
Fairway	6	28-yard fairway= 4, 22-yard fairway = 6
Crossing Obs.	0	Does not exist on the hole
Lateral Obs.	5	170-yard shot to 2nd LZ with penalty area 14 yards to the left = 5; 24-yard approach shot (10 yards short plus half the depth of the green = 24) with penalty area 17 yards to the left =2
Trees	2	Trees are a minor problem, even with additional landing zone

#### For Female Bogey Golfer (290-yard hole):

If it is determined that the player will reach the centre of the green at least 50% of the time, rate the hole as a two-shot hole, as follows:

Green Target	5	Green effective diameter is 25 Use the 50/50 Transition Zone Rating line at the bottom of the table
R&R	5	From R&R Table; no adjustments
Bunkers	4	From Bunker Table; no adjustments

#### Other Obstacles:

Topography	1	Minor problem, level approach shot
Fairway	3	28-yard fairway on a 290-yard hole
Crossing Obs.	0	Does not exist on the hole
Lateral Obs.	6	140-yard shot to green with penalty area 17 yards to the left
Trees	2	Trees are a minor problem

If it is determined that the player will not reach the centre of the green at least 50% of time, and will have an additional landing zone, rate the hole as a three-shot hole as follows:

Green Target	5	Green effective diameter is 25 Use the 50/50 Transition Zone Rating line at the bottom of the table
R&R	5	From R&R Table; no adjustments
Bunkers	5	4 from Bunkers Table, +1 (2) adjustment

#### Other Obstacles:

Topography	1	Minor problem both landing zones, level approach shot
Fairway	6	28-yard fairway = 4, 22-yard fairway= 6
Crossing Obs.	0	Does not exist on the hole
Lateral Obs.	6	130-yard shot to 2nd LZ with penalty area 14 yards to the left = 6;
		24-yard approach shot (10 yards short plus half the depth of the green = 24) with penalty area 17 yards to the left =2.
Trees	2	Trees are a minor problem, even with additional landing zone

For a par-3 (1-shot hole), the transition zone is 10 yards deep. The process is the same with the decision being whether the hole will be successfully played with a long approach shot that reaches the centre of the green at least 50% of the time or a short approach shot will be required more than 50% of the time.

#### 4-3/2 Effect of Transition Zone on Course Rating

Q: What effect does the Transition Zone concept have on course rating?

**A:** The Transition Zone (TZ) concept is needed to generate ratings that make sense when rating holes that can barely be reached with a long shot by scratch and bogey golfers, or are just out of range of being reached with a long shot. Without the TZ concept, raters would be forced to decide if the player can always or never reach the centre of the green. If the player can, the Green Target, Recoverability and Rough (R&R), and Bunker ratings are high; if the player cannot, these ratings are relatively low.

For example, consider a hole where the middle tees are 10 yards closer to the green than the back tees and the centre of the green can be reached from the middle tees but not from the back tees. Without the TZ concept, the obstacle rating from the middle tees may well be higher than the obstacle rating from the back tees. Using the TZ concept, the two obstacle ratings will be very similar.

Following is an example that illustrates this situation when rating for bogey men on a hole that measures from 350 to 400 yards from various tees. An analysis for women bogey golfers, or for men or women scratch golfers could have been performed just as easily with similar results.

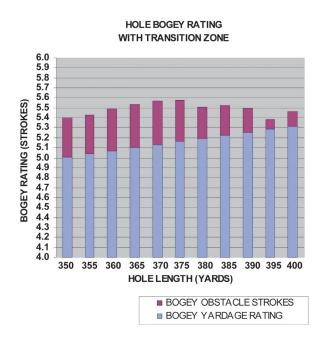
Consider a par-4 hole with 11 teeing grounds, each five yards apart, so that the hole measures from 350 to 400 yards in length. Rate the hole for a male bogey player, with and without using the TZ concept.

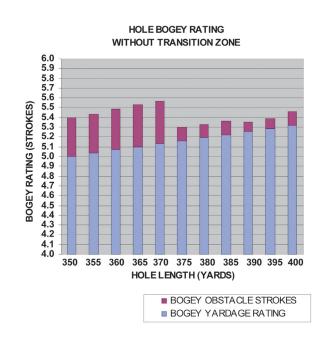
#### Assume the following:

- Topography minor problem, level hole.
- Fairway 35 yards wide tee to green.
- Green Target 24-yard diameter (column (4)) without any special features.
- Recoverability and Rough 2" to 3" cool season grass.
- Bunkers closely bordering >  $\frac{1}{4}$  to  $\frac{1}{2}$  of the green circumference; also some along the fairway.
- Penalty Area 30-39 yards from the centre of the fairway landing zone; 20-29 yards from the centre of the green (on the left).
- Trees minor to moderate recovery problem.
- Green Surface relatively flat, 9' on the Stimpmeter.
- Psychological from the table.

Graphs of the tee-by-tee bogey hole ratings (below) show a relatively smooth transition when the TZ concept is used for holes over 370 yards in length. When the TZ concept is not used, there is a large dip in the Bogey Obstacle Strokes between 370 and 375 yards. Note that the vertical scale shown only runs from 4.0 to 6.0, rather than from 0.0 to 6.0 in order to show the changes in overall hole ratings better as the length of the hole is increased.

Although the hole ratings dip when the bogey player no longer has a chance to reach the green with the long shot, the dip is nowhere near as pronounced when the TZ concept is employed.





#### 4-5/1 Line of Play

- Q. Please clarify the phrase "line of play" in Section 4, "Obstacles Do Not Exist."
- **A.** First, it is important to understand that even though a rater may physically see an obstacle on a hole, that obstacle (for course rating purposes) "may not exist." In the above-mentioned section it clearly states: "If an obstacle is more than 50 yards to the left and right of the line of play, and more than 50 yards to the left, right, and beyond the centre of the green, generally it should not be considered a factor for either the scratch or bogey player (i.e. it "does not exist" on the hole and should be rated zero). It is important to note the word "generally" in the above sentence. There may be a circumstance where obstacles are outside of this yardage requirement and still may "exist."

Line of play, as defined in the "Rules of Golf," is the line where the player intends their ball to go after a stroke, including the area on that line that is a reasonable distance up above the ground and on either side of that line. The line of play is normally down the centre of the fairway. When a player is able to cut across a dogleg, the line of play may move away from the centre of the fairway toward the inside of the dogleg.

In the illustration to the right, on the line of play for the bogey player, the penalty area exists, as it is within 50 yards of the centre of the fairway on their line of play. However, since the scratch player is taking a line of play farther from the penalty area, the obstacle does not exist.



#### 4-6/1 Scratch Player Cannot Complete the Hole

- Q. How do we rate a hole where the Scratch Player cannot complete the hole due to a forced carry beyond their safe carry distance?
- A. The rating guide describes the situation where it is impossible for the bogey player to complete the play of a hole because they are unable to carry a crossing obstacle and there is no reasonable lay-up or bail-out area available. The rating system allows for the replication of ratings for courses that are longer than 7000 [6000] yards (as described in Section 10-2, Multiple Tees), so the situation where the scratch player cannot play the hole is rare. In the situation where the scratch player cannot play the hole and that hole must be book-rated because it does not qualify for replication, the following process is applied:
  - When the scratch player cannot safely carry an obstacle and there is no realistic lay-up or bail-out area, the rating team should use the obstacle values for both scratch and bogey players that were determined for the nearest set of tees that can be played by the scratch player. This is essentially applying the individual tee replication procedure that is used when a tee is within 25 yards of another tee that is being rated. Extending beyond the 25-yard replication limit is permitted when determining rating values for a hole that cannot be played by the scratch player as described in this question.

# SECTION 5 RATING GOLF COURSES

#### 5/1 Slope Ratings Equal at Two or More Sets of Tees

- **Q.** At a golf course, the men's Course Rating for the forward tees is 69.4 and the men's Course Rating for the back tees is 71.1. The Slope Rating for both tees is 113. Is this possible?
- **A.** Yes. The difference in the Course Rating from the forward tees to the back tees indicates that the scratch player will score 1.7 shots higher on average from the back tees. The Slope Rating of 113 for each set of tees indicates that bogey players will score the same relative to the scoring ability of the scratch player for both sets of tees. In other words, the difference between the Course Rating and the Bogey Rating from both sets of tees is the same (in this case 21 strokes for men). Thus the bogey player will also score 1.7 strokes higher on average from the back tees than he will from the forward tees.

Normally, the higher the Course Rating, the higher the Slope Rating (longer yardage results in a higher Yardage Rating and higher Obstacle Stroke Values). When Slope Rating remains constant from the middle to the back tees, it is usually the result of the location of the obstacles relative to the bogey player's shot patterns from the back tees. This is most evident on courses with many long par-4 holes. The bogey player's tee shots land well short of the trouble when playing

from the back tees. Bogey then hits over the trouble to generous landing areas short of the greens and is left with easy approach shots to the greens. The result is that the increase in Bogey Length Rating is offset by a decrease in Bogey Obstacle Stroke Value, and the Slope Rating remains the same.

When such a situation occurs, or especially when an "inversion" occurs (i.e. when a Slope Rating for a longer set of tees is lower than it is for a shorter set), the Course Rating Review Committee should consider adjusting either the Course Rating or the Bogey Rating within permitted limits to eliminate the possible perception issue. Changing one or the other rating by a few tenths will change the Slope Rating by one or more units.

#### 5/2 Minimum Yardage

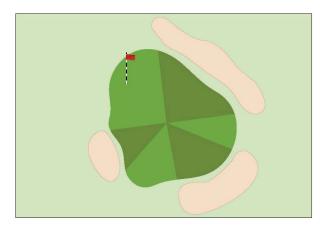
- Q. What is the minimum yardage of a course for a Course Rating and Slope Rating?
- **A.** In order to qualify for a Course Rating and Slope Rating, courses 3,000 yards or longer for 18 holes (1,500 yards for nine holes) must have one or more "long" holes as follows:
  - For any combination up to nine holes, there must be a least one hole that would require a scratch player to hit a full shot (i.e. a hole that would require a scratch player to hit a shot greater than or equal to 250 [210] yards).
  - For any combination greater than nine holes, there must be at least two holes that would require a scratch player to hit a full shot (i.e. two holes that would require a scratch player to hit a shot greater than or equal to 250 [210] yards).

The Authorized Association is responsible for implementing this procedure in a specific area and must be responsible for determining if the golf course meets these requirements. When courses are shorter than this length, the basic assumptions in the Course Rating System no longer hold true. The formula for converting effective playing length into strokes fails — players are not required to hit enough full tee shots (if any) on such a short course. Scoring ability on a short course depends much more on pitching, chipping, and putting, and not on overcoming distance, as it does on a "regulation" course.

# SECTION 8 EVALUATION OF OBSTACLES AND CORRECTIONS TO EFFECTIVE PLAYING LENGTH

#### 8-8/1 Measuring Fraction of Green Closely Bordered by Bunkers

- **Q.** When measuring the fraction of the green closely bordered by bunkers, where should measuring begin and end?
- **A.** In the example, step off the circumference of the green along the shaded areas. Notice that the shaded areas incorporate lines drawn from the centre of the green to the edges of the bunkers.
  - It might be helpful to imagine such a line when stepping off the portion of the green closely bordered by bunkers. In determining the edges of the bunkers, include any sloping ground where, if a ball were to land, it would bounce into the sand. The total shaded portion of the green's circumference divided by the whole circumference gives the percentage of the green closely bordered by bunkers. The circumference can be paced in its entirety or approximated by multiplying the effective diameter by  $\pi$  (3.14).



## SECTION 10 RATING PROCEDURE

### 10/1 Calculating a Course Rating and Slope Rating for tees 7,000 [6,000] yards and longer or 4,800 [4,000] yards and shorter

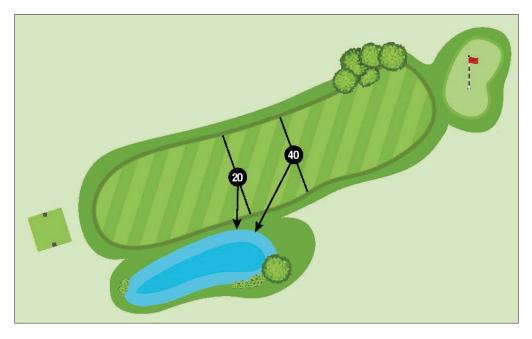
- **Q.** The option exists for an Authorized Association to calculate Ratings for extremely long or extremely short tees for both men and women by using the obstacle ratings and effective playing length factors from a shorter (or longer) set of tees and adjusting for the difference in yardage. How and why is this done?
- **A.** For tees 7,000 yards or longer for men or 6,000 yards or longer for women, Ratings can be calculated by applying the same obstacle ratings and effective playing length factors from the nearest set of tees under 7,000 [6,000] yards that has been evaluated by the rating team. The Length Rating will be calculated based on the actual length of each hole. The same procedure can be used to calculate ratings for tees 4,800 yards or shorter for men and 4,000 yards or shorter for women, assuming there is at least one set of rated tees over 4,800 [4,000] yards.

This procedure will result in a Course Rating and Slope Rating that is consistent with a linear based expected score model. With extremely long tees it is difficult to rate many of the holes for a bogey player as very few, if any, bogey

golfers will play from such a length. The same holds true for the scratch player from extremely short tees.

#### 10/2 Measuring to Obstacles From the Centre of the Fairway

- Q. If the border or edge of an obstacle factor is not adjacent to the edge of a fairway landing zone, what should be recorded as the distance to the obstacle from the centre of the landing zone?
- A. Sometimes an obstacle might be near a landing zone but the distance from the start of the landing zone to the obstacle might be significantly different than the distance from the end of the landing zone to the obstacle. In this case, the two distances should be averaged. In the example (with the assumed 20



yards of roll), the distance to the penalty area would be the average of the distance from the start of the landing zone to the penalty area and the distance from the end of the landing zone to the penalty area. In this example, the average would be (20+40)/2 or 30 yards. Thus, the distance from the centre of the landing zone to the penalty area would be recorded as 30 yards. Alternatively, the rater could just measure lateral distances from the centre of the landing zone.

#### **SECTION 11** EFFECTIVE PLAYING LENGTH FACTORS

#### 11/1 Lay Up for Scratch and Bogey Player

- **Q.** Is it true that only the scratch player lays up?
- A. No. Lay up by choice is employed primarily by scratch players in course management decisions; however, that does not exclude a bogey player from laying up by choice.

# SECTION 12 OBSTACLE FACTORS

#### 12-2/1 Split Fairways

- Q. How is a hole evaluated when it has two fairways?
- **A.** The first step is to find out how frequently each side of the fairway is played. This information can be ascertained from the golf course staff. Rate the hole as if only one side of the fairway is played. Then rate the hole as if only the other side of the fairway is played. Calculate a weighted average of the two ratings based on how often each side of the fairway is played. For example, suppose that on a hole with a split fairway, one side of the hole is played 25% of the time. When the hole is rated, the side played 25% of the time yields a Fairway rating of 2. The other side of the hole yields a Fairway rating of 6. The rating recorded on a Form 1 for Fairway would be 5 (2+6+6+6=20; 20/4=5). If the percentages were reversed (i.e. the easy side was played 75% of the time), the Fairway rating would be 3 (2+2+2+6=12; 12/4=3).

#### 12-2/2 Fairway Landing Zone is Rough

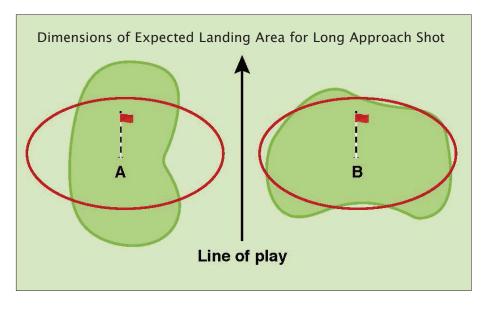
- Q. How do you rate a "landing zone" when there is no area cut to fairway height?
- A. If the rough where the ball lands results in less than normal roll for that shot, a soFt (F) adjustment should apply in addition to any table value for Roll if it is a tee shot. If the rough results in difficult lies, it should be accounted for under Topography by using the appropriate column for difficulty with the lie. For the Fairway rating, using the <20 yard wide column would be appropriate, since a fairway does not exist. However, the rater should consider using the Width (-1 or -2) adjustment if the rough is benign and the ball can be played easily from the rough. For the R&R rating, a bogey Carry (C)\* adjustment is applied if the rough height and length of carry qualify for an adjustment. For the other obstacles in the landing zone, the rater should determine a reasonable centre of the landing zone to make all lateral measurements. This spot will often be obvious by looking forward to where the fairway does exist and using a similar line of play to determine the centre of the landing zone.

#### 12-3/1 Measuring Greens

- **Q.** Explain the proper procedure for measuring the size of a green.
- **A.** For purposes of rating the Green Target, raters must know the effective diameter of the green. The effective diameter is typically the width of the green plus the depth of the green divided by two. Width and depth are determined regardless of the line of play. In other words, the direction of approach shots to the centre of the green has no bearing on either the actual width or depth of the green. Usually, this is a straightforward procedure, however, some green shapes make determining the green depth or width difficult. Using good judgment, course raters should determine what is the

best representation of the green width and depth. Sometimes it is necessary to average the measurements of the green width or depth at more than one location on the green (see "Oddly Shaped Greens"). The team leader should make the final decision as to which measurements best represent the width and depth of the green. The team must be consistent in its procedure for measuring greens.

In the sketch to the right, examples A and B represent two greens of identical size and shape but placed at different angles to the line of play. The effective diameters of both greens are the same, however, as the red line marking the dimension of the expected landing areas reveals, a long approach shot will hit green A less often than green B. When the position of the green in



relation to the line of play is such that the dimensions of the expected landing area significantly exceed the shape of the green, consider decreasing the effective diameter (moving one column to the right in the Green Target Table) or increasing the Green Target value by one. This procedure should not apply on 2:1 or 3:1 greens because the effective green diameter has already been reduced (see "Oddly Shaped Greens," Green Target Obstacle).

#### 12-3/2 Measuring Approach Shot Lengths

- Q. Explain the proper procedure for measuring approach shot lengths.
- A. Before rating, raters should calculate the mathematical approach shot lengths for all par-4 and par-5 holes. This is done by subtracting from the length of the hole the distance the player covers to reach the approach shot landing zone. Once on the golf course, raters might adjust a landing zone closer to or farther from the centre of the green. This would depend on such factors as roll, dogleg, forced lay up, lay up by choice, and elevation. If any of these factors affect the distance the player can advance the ball from the tee to a distance where the player is able to reach the green (transition zone included), then such an effect should be recorded under "adjusted approach shot" and used as the approach shot distance.

#### 12-4/1 Prepared Waste Areas

- Q. How should prepared "waste areas" be rated?
- A. A prepared waste area may be rated as R&R and/or Bunkers. As with a waste area, a prepared waste area that replaces the rough grass and is adjacent to the landing zone is rated under R&R by determining a comparable rating difficulty

from the R&R Rating Table (i.e., a prepared waste area bordering the fairway that plays similarly to 1" warm season rough would require an R&R rating from the 2nd column). Additionally, a prepared waste area is also rated as a bunker if it meets the location requirements as established for fairway and/or greenside bunkers (e.g., a prepared waste area that is near a fairway landing zone is rated as a fairway bunker for the scratch player).

#### 12-4/2 Rough Height Not Matching Difficulty

- **Q.** How do you account for rough that is particularly dense or thin and does not match the normal recoverability of similar height from the rough height category in R&R?
- **A.** In general, there is enough range within each category that rough will usually be properly rated by using the actual average height. However, if the rough height is close to a breakpoint and it is obvious that it plays easier or tougher than other rough of similar height, a rating team can move into the next category if warranted. For example, if a course has cool season rough that averages 2 ¾" [2 ¼]" but it is very thick and dense due to regular irrigation and fertilizer application, moving into the 3-4" [2 ½ 3 ½]" column would be allowable (see also Interpretation 3-1 on averaging values).

#### 12-4/3 Determining a Mounds Adjustment

- Q. Explain the Mounds (M) adjustment under the Recoverability & Rough obstacle category.
- A. Mounds should be considered in the rough near the fairway landing zone(s) and/or closely bordering the green. Mounds in the fairway landing zone are rated under Topography (they affect stance and/or lie). Areas of rise and drop greater than 5' can also qualify for the Mounds adjustment or be used in conjunction with mounds/hollows to qualify for the adjustment. However, a combination of mounds and rise and drop may warrant an adjustment when independently they may not. Consider the impact the mounds have on scoring. If the mounded areas were flat, could the scratch player hit the green (mounds near the fairway) or get up and down (greenside mounds)? With the mounds present, how much more difficult is it to hit the green or get up and down? If it is not more difficult, there is no adjustment. Consider the downhill, sidehill, and uphill lies on the various sides of the mounds in this evaluation.

#### 12-4/4 Rough on Hillside Between Terraced Holes

**Q.** A golf course built on a hillside features adjoining parallel holes. The holes are terraced such that one hole is fifteen feet above the other, separated by a slope of rough extending the length of the holes. Recovery from the sloping area of rough seems more difficult than if the rough was level, yet no adjustment under Recoverability and Rough specifically covers this condition. How should raters account for such a situation?

#### 12-4/5 Mounds and Bunkers Closely Bordering the Green

- **Q.** What does the statement "Do not factor in any area that is closely bordered by bunkers" mean under the Mounds adjustment?
- A. When evaluating the area around the green for the Mounds adjustment, any part of the green that is closely bordered by bunkers is already being accounted for under the Bunker rating, including possible adjustments for Depth or Extreme. So when determining if a significant portion of the green closely bordered by mounds, hollows and/or rise and drop, the areas that are closely bordered by bunkers should not be included as part of the significant portion, even if mounds or rise and drop are part of the bunker complex. For example, a green that has bunkers closely bordering 2/3 of the green, the remaining 1/3 would need severe mounds or a steep rise and drop to be able to qualify as a "significant portion," since 2/3 of the green has already been accounted for under Bunkers.

#### 12-4/6 Par-3 Landing Zone

- Q. How is a par-3 landing zone rated under Recoverability and Rough (R&R)?
- **A.** On a par-3 hole where the bogey player cannot reach the green, the rating team will have to determine an appropriate landing zone. Even though there may not be a fairway cut at this landing area (remember Fairway does not get a value on a par 3), the rating team should apply the Par-3 (3) adjustment and look at other factors that may contribute to an adjustment. Also, if the bogey player hits less than a full tee shot to avoid trouble near the edge of the green, a Lay-up (L)\* adjustment may apply.

In addition, the rating team should make some corrections for the bogey player because bogey is essentially playing a two-shot hole. In this case, the rating team may disregard the None (N) adjustment for Bunkers on a par-3 hole. In other words, rate the hole as a two-shot hole as you would a par-4 two-shot hole, except that Fairway still gets no value. Rate other bogey obstacle values as you would for any other two-shot hole.

#### 12-5/1 Closely Bordering Bunkers

Q. The Guide and Manual state that normally bunkers within 10 yards of the edge of the green qualify as "closely bordering." There are some bunkers that, although not within 10 yards of the edge of the green, will collect a shot that just misses a green. Do these bunkers also qualify as "closely bordering?"

**A.** If the bunker is not within 10 yards of the edge of the green but conditions exist which indicate that a shot missing the green by just under 10 yards will obviously be collected by the bunker, consider such areas of the green as closely bordered by bunkers. Such conditions would include, but are not limited to, sloping ground, very closely mown grass, and hard pan.

#### 12-7/2 Crossing Obstacles Different Depending on Line of Play

- **Q.** What is the carry distance when an obstacle runs at an angle to the line of play so that the carry on one side is greater than the other?
- **A.** If the crossing obstacle cuts through the fairway, average the carry distance on both sides of the fairway with the carry at the centre of the fairway. If the crossing obstacle does not cut through the fairway, measure the carry along the line of play and consider using the Percentage (P)\* adjustment based on the average carry distance. Be sure that the carry distance includes the distance to carry the crossing obstacle safely (usually by 10 yards).

#### 12-7/3 Different Conditions Short of a Penalty Area

- Q. A tee shot must be hit 170 [120] yards to carry a penalty area safely. Consider three scenarios. In the first scenario, the player must hit over a lake that begins in front of the teeing ground and extends to 160 [110] yards from the tee. In the second situation, the player must hit over a small creek that crosses the fairway 160 [110] yards from the tee. Between the teeing ground and the creek consists of both minor rough and fairway. Should the Crossing Obstacles value be identical for all of these situations?
- **A.** In the situation where minor rough and fairway lead up to the penalty area, the combination of the missed shot and a small creek will likely not be as punitive to the player as a poorly played ball where the player has to carry a penalty area that extends most of the entire shot distance. The obstacle value in this case is derived by reducing the Crossing Obstacle table value with a Percentage (P)\* adjustment. The nature of the penalty area will determine the applicability and/or extent of the adjustment.

#### 12-8/1 Explanation of Trees Rating Procedure

Trees are similar to lateral obstacles in that shot lengths and the proximity to the obstacle from the centre of a landing zone or green is the primary consideration. The key difference between trees and lateral obstacles is measuring recovery, and doing so based on the scratch players ability to recover, even when evaluating Trees for the bogey player. Trees can affect shots in the air anywhere along the line of play, not just in the landing area, and no two tree situations are the same. As a result, approaching trees as a "condition," much like Topography or Green Surface, is a more consistent way to evaluate their overall difficulty on the hole. Based on the factors that a rating team must consider on each shot, the "condition" of trees

on a hole is assigned to one of four categories: minor, moderate, significant, or an extreme problem. Below are common tree problems that a course rater must consider when determining their impact on scoring and the overall Trees rating for a hole:

- 1. A long par-4 hole has trees that tightly line the fairway. A tee shot that is hit offline by 15 yards right or left and strikes an overhanging branch may end up well short of the normal landing zone, which already requires a long approach shot. Any reduction in distance could require an extra shot to reach the green.
- 2. From the tee on a dogleg hole, hitting the fairway on one side of the dogleg may result in trees partially obstructing the next shot from that side of the fairway. However, it is a par-5 (three-shot) hole, and these trees would likely not prevent a player from still reaching the green in three shots. However, if this was a two-shot hole the recovery problems would be more significant, since the player may not reach the green from the trees.
- 3. Most of the trees on a hole are within extreme rough and they are not near a landing zone. However there is a large tree in the middle of the fairway that affects the landing zones from a number of tees. The tree cannot be played over, but can be played around on both sides. Recovery from the area around the tree is minor; however the tree may obstruct shots to the landing zone or green depending on the player and tee being evaluated.

Instead of using strict measurement guidelines, the rating team evaluates the tree problems in reaching each landing area and green and then decides on the overall impact of trees on the hole. "Tweener" usage is encouraged as warranted. The only adjustments to consider are Obstructed or possibly a CHute adjustment. A rating team will find that looking back down the hole from the green toward the tee is a great way to validate the final rating values for trees.

#### 12-8/2 Explanation of using only the Scratch Player's Ability to Recover from Trees

- Q. The bogey player is not as skilled as the scratch player in recovering from the trees, yet we rate recovery for the bogey player based on the scratch player's ability to recover from trees. Is this a fair way to rate Trees for the bogey player?
- **A.** There is both a practical reason and a technical reason why recovery for both golfers is based on the scratch player's ability. From a practical standpoint, it is difficult to consistently predict a bogey player's ability to play the wide variety of recovery shots that trees can present. It is easier to visualize how a scratch player is able to recover from the trees, which enables rating teams to be more consistent in the rating process.

From a technical standpoint, the final rating values for Trees are subject to a weighting factor for both the Trees obstacle and the overall obstacle stroke value. The weighting factor for Trees and the overall weighting of obstacles is much higher for the bogey player, which ensures that the impact of the Trees rating is higher for the bogey player, even if the rating value for Trees is the same as the scratch player. This process is designed to provide consistent, accurate, and fair ratings for both golfers.

#### 12-8/3 Impact of Underbrush on Recovery From Trees

- Q. Thick underbrush is treated as extreme rough when the underbrush makes it likely the ball will be lost, unplayable, or advanced with great difficulty. How is the recovery from trees affected by underbrush?
- **A.** Underbrush forces the scratch player to hit a different recovery shot from the trees (e.g. to use a highly lofted club rather than a long iron to hit a low, rolling punch shot). Thus the underbrush must be considered when evaluating the probability of recovery from trees. For example, consider trees with no underbrush located 25 yards from the centre of the tee shot landing zone. Assume recovery is a minor-moderate problem, based on the scratch player's opportunity to hit a low fade or hook, or a rolling shot to recover. The rating for this example would normally be 3 (tweener value). By adding underbrush to this example, the player's recovery problems will most likely increase. If the tree limbs are high and the shot necessary to get out of the underbrush also gets out of the trees, the recovery problems might increase only slightly, say to moderate problem, which would yield a value of 4. If the tree limbs are low and thick with foliage, the recovery problems might increase to a significant problem, which would yield a value of 6. It would not be an accurate evaluation of the impact on the player's scoring ability to evaluate the trees without considering the underbrush.

If the underbrush likely leads to a lost ball, this area has to be treated as extreme rough, and Trees should be disregarded or severely downgraded. High ratings in both categories would overstate the impact on scoring for both the scratch and bogey players.

#### 12-8/4 Explanation of Probability of Recovery From Trees

- Q. A tee shot landing area is bordered by trees that are 25 yards from the centre of the fairway. On a two-shot hole, it is judged that the scratch player could rarely get on or near the green from the trees and the rater determines the trees to be a significant problem. Based on the tee shot, the rater assigns a rating value of 6 for Trees on the hole. Consider a second scenario where the same trees border a short, three-shot hole. The scratch player can advance the ball less than half the distance to his normal second landing zone but is still able to reach the green with his third shot by hitting a longer club. Should the recovery problems be significant as well?
- A. In determining recovery from the trees the rater should consider their impact on the player's play of the hole. In the first situation, an extra shot was required for the player to reach the green. In the second scenario, however, the player was still able to reach the green with the third shot even though it was a substantially longer shot. Because the player did not necessarily lose a shot in recovering from the trees, the rater would be justified in this case in determining the trees to be a moderate rather than significant problem, resulting in a rating value of 4, or even 5 as all values may be adjusted +/- 1 point.

#### 12-8/5 Chute Adjustment

- Q. Is there any additional guidance on measuring or determining a Chute adjustment?
- A. A Chute adjustment may only be applied for the tee shot. In general, a chute is measured based on the length of the shot from the teeing area and the distance between the extending tree branches at the narrowest point of the chute. However, a few other items may need to be considered:
  - Chute table values assume that a ball that does not pass through the opening in the chute will hit the trees and likely be deflected. If the ball may be hit over or under the chute, it would be appropriate to lower the chute table value by one or two points. Additionally, if the trees that make up the chute are sparse and some shots may be successfully hit through the trees, a reduction in the table values would be in order.
  - For example, in the image to the right, the trees overhanging the right side of the fairway end 100 yards from the teeing area and the trees on the left end 120 yards from the teeing area. It would be
    - appropriate to use 100 yards as the length of the shot required to clear the chute since the ball is no longer within the chute after 100 yards. If the trees are staggered, but never directly across on opposite sides, this would not qualify as a chute. However, it may result in an increased table value and/or possibly the Obstruct adjustment.
  - The narrowest width of a hole with a chute may not result in the highest adjustment value. For example, on a tree lined hole the narrowest width is 12 yards wide at 60 yards from the tee, but then widens to 16 yards from that point out to 120 yards from the tee. The 60-yard shot through a 12-yard wide chute is a +1 from the table, but the 120-yard shot through a 16-yard wide chute is a +2 from the table. In this case the +2 should apply as the higher of the two values.
  - The length used to determine the adjustment value cannot exceed the carry distance for the player. For example, a bogey woman player cannot have chute length of more than 130 yards as the ball is on the ground by that point and is not affected by the extending tree branches. However, at a high altitude (above 2000 feet) a bogey male player could have a chute that extends beyond 180 yards since the ball will carry farther than the standard 180 yards based on an altitude below 2000 feet



• The same tree(s) cannot be used to apply both a Chute adjustment and an Obstruct adjustment. If the tree(s) qualify for a Chute adjustment, do not apply an Obstruct adjustment for the same tree(s). It is possible for both the Chute and Obstruct adjustments to apply on the same hole, but only when one set of trees makes up the chute and a different tree(s) earns the obstruct adjustment.

#### 12-10/1 Women's Bogey Crossing/Lateral Psychological Adjustment

- **Q.** When rating for women, there is a "Bogey Crossing or Lateral Extraordinary Psychological Adjustment Table." Does the table imply that the "minimum bogey Psychological rating" is added to Psychological value determined from the sum of the other nine obstacle ratings?
- **A.** No. The purpose of this table is to ensure that the Psychological rating is at least 3, 6, or 10 for holes with bogey Crossing or Lateral values of 5, 6, or 7 (or more), respectively, when the sum of the other nine obstacle values would not yield a Pschological value this high for the bogey woman player. The maximum possible Psychological rating recorded on Form 1 is 10.

#### **SECTION 15**

## THE EFFECT OF COURSE MANAGEMENT AND MAINTENANCE ON COURSE RATING

#### 15/1 Effect of a Long Par-4 Hole on the Bogey Player's Rating

- Q. To what extent does a long par-4 hole affect the bogey player's rating? Doesn't the shorter approach shot reduce the bogey player's rating too much on a hole bogey is going to need at least one more stroke to reach the green?
- A. No. When a par-4 hole is unreachable by a bogey player in two shots and the transition zone concept cannot be applied, the bogey player will, in most cases, have a relatively short approach shot. In this case, the bogey player's Green Target value will be based on a relatively short approach shot. This will also be reflected in the bogey player's Bunker and Recoverability & Rough ratings. Indeed, these ratings will most often be lower than if the bogey player were hitting a full-length second shot into the green. However, the effect of these lower obstacle ratings is more than offset by the higher Length Rating that results from the hole being longer.

# **Appendices**

THE COURSE RATING SYSTEM MANUAL

**Effective January 2020** 



#### **COURSE RATING FORM 1**

Effective playing length and obstacle evaluation

#### Facility/Course Name:

Tee:

Date:	Hole	1	2	3	4	5	6	7	8	9
Reason:	Length									
	Par									
	Green Width X Depth									
	Effective Green Diameter									
	Roll									
	Elevation (Tee to Green)									
Table I and a	Dogleg									
Team Leader	Forced Lay-Up									
Manakana	Topography									
Members	Approach Elevation Change									
	Stance/Lie Problems									
	Fairway									
	1st Landing Zone Width									
	2nd Landing Zone Width									
Narrator	3rd Landing Zone Width									
	Green Target									
Rater's Notes	Approach Shot Length									
	Adjusted Approach									
	Recoverability / Rough									
	Adjustments									
	Bunkers									
	Fairway									-
	Bunker Fraction									
Wind Adjustment:	Crossing Obst.									
Grass Type:	Crossing #1									•
	Crossing #2/3									
Rough Height:	Lateral Obst.									
Stimpmeter:	Landing Zone #1									•
	Landing Zone #2									
Shot Length (Yards):	Landing Zone #3									
Scratch 1 =	Green									
Scratch 2 =	Trees									
Bogey 1 =	Recovery Problem(s)		<u> </u>	<u> </u>	i		<u> </u>	<u> </u>	<u> </u>	
Bogey 2 =	Adjustments									
Bogey 3 =	Green Surface									
Altitude (ft): 0										
	Pace GTT/Carts/HH		0 0	<b>3</b>	0 0	€ €	<u> </u>	0	0 0	

# WORLD HANDICAP SYSTEM RSA USGA

#### **COURSE RATING FORM 1**

Effective playing length and obstacle evaluation

#### **Facility/Course Name:**

Tee:

Date:	Hole	10	11	1	2	13	3	14	1:	5	1	6	1	7	1	8
Reason:	Length															
	Par	Ī														
	Green Width X Depth															
	Effective Green Diameter	T														
	Roll	1														
	Elevation (Tee to Green)	)														
<u> </u>	Dogleg															
Team Leader	Forced Lay-Up	,														
	Topography															
Members	Approach Elevation Change	•	•													
	Stance/Lie Problems	\$														
	Fairway															
	1st Landing Zone Width	1														,
	2nd Landing Zone Width	ı														
Narrator	3rd Landing Zone Width	1														
	Green Target	t														
Rater's Notes	Approach Shot Length	,		1												
	Adjusted Approach	1														,
	Recoverability / Rough	,														
	Adjustments	\$	•													
	Bunkers	,														
	Fairway	/	•													
	Bunker Fraction	ī														
Wind Adjustment:	Crossing Obst.															
Grass Type:	Crossing #1	d i	•													
	Crossing #2/3	3														
Rough Height:	Lateral Obst.															
Stimpmeter:	Landing Zone #1	ı i	<u> </u>													
	Landing Zone #2	2														
Shot Length (Yards):	Landing Zone #3	_														
Scratch 1 =	Green															
Scratch 2 =	Trees	3											,			
Bogey 1 =	Recovery Problem(s)					-		<u> </u>								
Bogey 2 =	Adjustments	_													$\vdash$	
Bogey 3 =	Green Surface														$\vdash$	
Altitude (ft): 0				_									=	<u>—</u>	_	
	Pace GTT/Carts/HH	1	1													

#### **EXAMPLE — MEN**

#### Par.3 Hole Over Penalty Area

Penalty Area, less than 5 yards, surrounds 1/4 to 1/2 of the green.

#### **Description of Hole**

Length	161 yards
Topography	Level
Green Target	35 yards wide by 17 yards deep
Rough Height	1¼" warm season
Bunkers	Less than ¼, 4 feet deep
Out of Bounds	None
Crossing Obstacle	153-yard safely crossing
Lateral Obstacle (penalty area)	19 yards lateral
Trees	Minor recovery problem
Green Surface Two tiers se two feet, moderate	parated by an elevation change of ely contoured Stimpmeter at 10'6"

#### **Green Target**

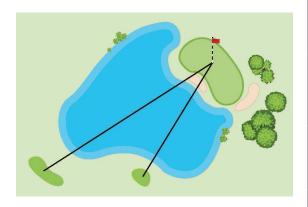
Since the green width is more than two times the depth, using the formula from the "oddly shaped greens" section, the effective green diameter is (17+17+35)/3=23.

## Recoverability and Rough

The table rating is 5 for the scratch player and 6 for the bogey player.

# Crossing and Lateral Obstacles

To carry the penalty area safely, players must carry the shot 153 yards. At that length, the scratch Crossing Obstacle rating is 3 and the bogey is 6. Since the carry over the Crossing Obstacle closely borders the green, the +1 Carry adjustment applies to both players. The rating for Lateral Obstacles, 19 yards from the centre of the target, is 4 for the scratch player and 5 for the bogey player. From the **S**urrounded (S) adjustment table, there is a +1 adjustment to both ratings because the penalty area surrounds between 1/4 and 1/2 of the green and is less than 5 yards of its edge.



Obstacle	Description of Hole	Rati	ngs	Final		
Obstacle	Description of Hole		Bogey	Value		
Topography	Par-3 Hole	0	0	0 0		
Green Target	35 yds wide by 17 yds deep, 23 effective diameter					
	<ul> <li>Scratch Approach Shot: 161 yds</li> <li>Bogey Approach Shot 161 yds</li> </ul>	(5)	(6)	6 7		
	• Tiered (T) green	+1 6	+1 7			
Recoverability and Rough	<ul><li>1¼" warm season rough</li><li>Table Value</li></ul>	(5)	(6)	5 6		
Bunkers	Less than ¼ of green closely bordered It is determined there is no Carry adjustment					
	<ul><li>Table Value</li><li>4' deep (D)</li><li>Par-3 Hole (N)</li></ul>	(3) $+1$ $\frac{-1}{3}$	(4) $+1$ $\frac{-1}{4}$	3 4		
Crossing Obstacles	153 yards / safe crossing  • Table Value	3	6	4 7		
	• Carry (C)	$\frac{+1}{4}$	$\frac{+1}{7}$			
Lateral Obstacles 19 yards left	<ul><li>19 yards lateral</li><li>Surrounded (S)</li></ul>	(4) +1 5	(5) +1 <b>6</b>	5 6		
Trees	Minor Recovery Problem	1	1	1 1		
Green Surface	Stimpmeter at 10'6", moderately contoured		(8)	7 9		
	• Tiered (T) green	<u>n/a</u>	+1 <b>9</b>	7 9		
Psychological	• Scratch: 4 @ 23 • Bogey: 5 @ 35	(3)	(6) <b>6</b>	3 6		

#### **EXAMPLE — WOMEN**

#### Par-3 Hole Over Penalty Area

Penalty Area, less than 5 yards, surrounds 1/4 to 1/2 of the green.

#### **Description of Hole**

Length	120 yards
Topography	Level
Green Target	35 yards wide by 17 yards deep
Rough Height	114" warm season
Bunkers	Less than ¼, 4 feet deep
Out of Bounds	None
Crossing Obstacle	112-yard safely crossing
Lateral Obstacle (penalty area)	19 yards lateral
Trees	Minor recovery problem
Green Surface Two tiers se two feet, moderat	parated by an elevation change of ely contoured Stimpmeter at 10'6

#### **Green Target**

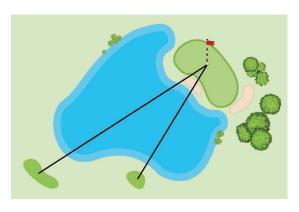
Since the green width is more than two times the depth, using the formula from the "oddly shaped greens" section, the effective green diameter is (17+17+35)/3=23.

## Recoverability and Rough

The table rating is 5 for the scratch player and 6 for the bogey player.

### Crossing and Lateral Obstacles

To carry the penalty area safely, players must carry the shot 112 yards. At that length, the scratch Crossing Obstacle rating is 2 and the bogey is 7. Since the carry over the Crossing Obstacle closely borders the green, the +1 Carry adjustment applies to both players. The rating for Lateral Obstacles, 19 yards from the centre of the target, is 4 for the scratch player and 5 for the bogey player. From the **S**urrounded (S) adjustment table, there is a +1 adjustment to both ratings because the penalty area surrounds between 1/4 and 1/2 of the green and is less than 5 yards of its edge.

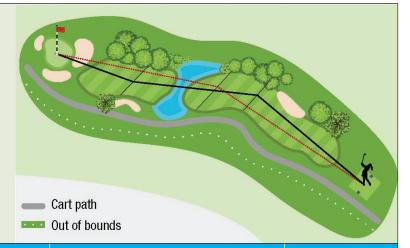


	Burning Co.	Rati	ngs	Final		
Obstacle	Description of Hole		Bogey	Value		
Topography	Par-3 Hole	0	0	0 0		
Green Target	35 yds wide by 17 yds deep, 23 effective diameter					
	<ul><li>Scratch Approach Shot: 120 yds</li><li>Bogey Approach Shot 120 yds</li></ul>	(4)	(6)	5 7		
	• Tiered (T) green	+1 5	+177			
Recoverability and Rough	<ul><li>1¼" warm season rough</li><li>Table Value</li></ul>	(5)	(6)	5 6		
Bunkers	Less than ¼ of green closely bordered It is determined there is no Carry adjustment					
	<ul><li>Table Value</li><li>4' deep (D)</li><li>Par-3 Hole (N)</li></ul>	(3) $+1$ $\frac{-1}{3}$	$(4) + 1 - 1 \over 4$	3 4		
Crossing Obstacles	<ul><li>112 yards / safe crossing</li><li>Table Value</li><li>Carry (C)</li></ul>	2 +1 <b>3</b>	7 +1 8	3 8		
Lateral Obstacles 19 yards left	<ul><li>19 yards lateral</li><li>Surrounded (S)</li></ul>	(4) +1 5	(5) +1 <b>6</b>	5 6		
Trees	Minor Recovery Problem	1	1	1 1		
Green Surface	Stimpmeter at 10'6", moderately contoured	(7)	(8)	7 9		
	• Tiered (T) green	<u>n/a</u>	+1 <b>9</b>	1 3		
Psychological	<ul> <li>Scratch: 4 @ 22</li> <li>Bogey: 5 @ 36</li> <li>Extraordinary (X) for bogey due to Crossing Rating</li> </ul>	(3) n/a <b>3</b>	(6) +4 10	3 10		

#### **EXAMPLE — MEN AND WOMEN**

**Difficult 18th hole** 

Length: 444 yards (Men); 374 yards (Women)



			Rati				
Effective Playing Length Factor	Description of Hole	М	en	Women		Final Value	
			Bogey	Scratch	Bogey		
Roll	Level		0	0	0	0 0	
Elevation	+20' from tee to green					+20 +20	
Dogleg / Forced Lay Up	None		0	0 0		0 0	
Obstacle Factors							
Topography	Minor Problem in all landing zones Approach Shot +10 for both scratch and bogey		(2)	(2)	(2)	2 2	
Fairway	1st Shot: Scratch 40 yards wide     Bogey 28 yards wide		(5)	(3)	(5)		
	• 2nd Shot: Bogey 34 yards wide		<u>(4)</u> <b>5</b>	<u>n/a</u>	<u>(4)</u> <b>5</b>	3 5	
Green Target	24 yards wide by 30 yards deep  • Scratch Approach Shot: 194 yards [164 yards — women]  • Bogey Approach Shot: 74 yards [94 yards — women]  • Visibility (V) on the bogey approach shot only		(3) +1 <b>4</b>	(5) 	(4) +1 <b>5</b>	5 4 M 5 5 WM	
Recoverability and Rough	3¼" cool season rough		(6)	(6)	(6)	6 6	

			Rat			
Effective Playing Length Factor	Description of Hole	м	en	Wo	men	Final Value
			Bogey	Scratch	Bogey	
Bunkers	At the green > ½ to ¾  4' deep (D)  Carry (C)  No (N)  Near both fairway landing zones (2)	(5) +1 +1 -1 n/a 6	(5) +1 +1 n/a +1 8	(5) +1 +1 -1 n/a 6	(5) +1 +1 n/a +1 8	6 8
Crossing Obstacles	<ul> <li>Scratch 2nd shot crossing of 60 yards [35 yards — women]</li> <li>Bogey 2nd shot crossing of 110 yards [95 yards — women]</li> </ul>		(4) <b>4</b>	(0) <b>0</b>	(5) <b>5</b>	0 4 M 0 5 WM
Lateral Obstacles	<ul> <li>Tee Shot: OB 30 yards left (tweener value)</li> <li>StroKe (K) adjustment</li> <li>Cart path along boundary (+B)</li> </ul>	(4) +1 +1 (6)	(4) +1 +1 (6)	(4) +1 +1 (6)	(4) +1 +1 (6)	
	<ul> <li>Scratch second shot: OB 35 yards left of green</li> <li>StroKe (K) adjustment</li> <li>Cart path along boundary (+B)</li> <li>Bunker to the left of green (-B)</li> </ul>	(2) +1 +1 -1 (3)		(2) +1 +1 -1 (3)		
	<ul> <li>Bogey second shot: OB 35 yards left</li> <li>StroKe (K) adjustment</li> <li>Cart path along bondary (+B)</li> <li>Bunker to the left of the fairway (-B)</li> </ul>		(3) +1 +1 -1 (4)		(3) +1 +1 -1 (4)	6 6
	<ul> <li>Bogey third shot: OB 35 yards left of green</li> <li>StroKe (K) adjustment</li> <li>Cart path along boundary (+B)</li> <li>Bunker to the left of the green (-B)</li> </ul> Note: (K) adjustment does not apply to bogey men third shot		(1) n/a +1 -1 (1)		(2) +1 +1 -1 (3) <b>6</b>	
	since table value is 1	6	6	6	6	
Trees	<ul> <li>Scratch player: Moderate recovery problem (Moderate recovery in tee-shot landing zone due to intervening water; this drives the rating. No trees at green.)</li> <li>Bogey player: Moderate recovery problem (Moderate recovery in the tee-shot landing zone due to intervening water; this drives the rating. Minor recovery in second landing zone and no trees at green.)</li> </ul>	(4)	(4)	(4)	(4)	4 4
Green Surface	Stimpmeter at 11'6", relatively flat	(7)	(7)	(7)	(7)	7 7
Psychological	Scratch: 5 @ 30     Bogey: 5 @ 32 (7 @ 42)		(5) <b>5</b>	(4) -4	<u>(6)</u>	4 5 M 4 6 WM

#### **APPENDIX C - SAMPLE RATINGS EXPIRATION LETTER**

[Golf Club]

[Address]

Dear,

A key aspect of the World Handicap System<sup>™</sup>, which addresses the portability of a player's Handicap Index<sup>®</sup>, is the ability to submit scores using Ratings that are based on an objective standard. Utilizing the Course Rating System<sup>™</sup>, Ratings are provided by an Authorized Association and need to be renewed periodically due to changes on a golf course (e.g. trees mature, different golf course marking/set up), as well as changes that need to be accounted for due to periodic modifications to Course Rating System policy. This letter is being sent to [The Club] as you are due for a re–rating of [The Course].

According to "Appendix G" of Rules of Handicapping, a golf course must be re-rated at least once every 10 years. A new course must be re-rated once within five years of the initial rating and every 10 years thereafter. [The Course] was last rated on [Effective Rating Date]. The [Authorized Association] needs to schedule a re-rating of [The Course] as soon as possible to ensure it remains in compliance with the World Handicap System Rules of Handicapping, Appendix G.

If Ratings expire, they are no longer valid, can no longer be used, and the [Authorized Association] will withdraw the rating(s). Scores will not be acceptable for handicap posting purposes (see Rules of Handicapping, Rule 2.1), and the golf course is not in compliance with the Rules of Handicapping. A course also jeopardizes its ability to utilize the World Handicap System in the future and the [Authorized Association] must notify the course that its Ratings are no longer valid and scores are not acceptable to be submitted for handicap purposes at the course. Some golfers or groups may be less likely to play at a course without valid Ratings and this could be detrimental to the total number of rounds played and thus the revenue of a golf course.

In order to stay in compliance with the World Handicap System, at your earliest convenience please contact (name) at the [Authorized Association] by calling (number) to have the course re-rated. It will be done at a mutually agreeable time at no cost (or a cost of \_\_\_\_\_ ) to the course.

Thank you for your prompt attention to this matter and for your support of the World Handicap System.

Sincerely,

[Authorized Association]

## The Course Rating System Manual

Effective January 2020



