

## The Size of the Putting Sward

By C. V. PIPER

Broadly speaking, there are only four types of 1-shot holes. These are: (1) holes of about 90 to 140 yards the length of which calls for a relatively short high pitch shot; (2) holes of about 180 to 210 yards in length so constructed as to call for a long high shot if one is to reach the green from the tee; (3) holes of about 160 to 180 yards with an open running-up approach; (4) holes usually 225 to 240 yards with an open running-up approach. The essential difference between 1 and 2 as contrasted with 3 and 4, that is of the pitch-shot as compared with the running-up shot, is emphasized by a hazard of some sort in front of the green in the former, while in the latter there is an ample "approach." In common parlance the four types are often referred to as "mashie holes," "spoon holes," "midiron holes," and "driver holes," because of the club the average good player would probably use from the tee. This classification ignores the low back-spin shot which a small percentage of expert players can use successfully even on a "mashie hole."

The above ideas may be further extended to 2-shot holes. Most 2-shot holes are theoretically 1-shot holes plus a full drive from the tee. In 2-shot holes, however, the second shot is not from a tee. Even if the play from the tee has been perfect, it is proper that the second shot to the green should be relatively less difficult than a 1-shot hole of equal distance, because the player has not the advantage of placing the ball as he may prefer. There is no valid reason why 2-shot holes which demand two mashie shots, say 140 yards each, or two midiron shots, say 170 yards each, should not be used more; but such holes are rarely seen. Even holes that are more anomalous would add to the variety, as for example one demanding a 140-yard shot from the tee and then a 200-yard shot to the green. However, no matter what the combination of shots used from the tee to the green, the latter should be constructed in reference to the four types of holes first outlined.

It will probably be acknowledged by all who have given the subject reflection, that the putting sward of a 140-yard hole should be smaller than that of a 240-yard hole. "Putting sward" is used purposely, as the *putting green* is by definition the area enclosed by a radius of 20 yards from the hole, excluding bunkers. Many putting swards are smaller than this, and a few much larger. There are, however, some differences of opinion as to the most desirable size of the putting sward for each of the four types of 1-shot holes, which with some latitude should also apply to all 2-shot holes. The most important consideration is that the size of the sward should bear proper relation to the kind of shot required. An additional argument is used by those who favor large swards, namely, that the approach putt is one of the most trying shots in golf and, therefore, should be provided for; on the other hand it is argued that there are enough long approach putts even on moderate-sized swards, and that the shot from the fairway just outside the putting sward is even more trying. Another consideration dwells on the cost of upkeep, which increases in almost exact proportion to the size of the sward. A few students would have the putting swards of the last nine holes smaller than those for corresponding holes of the first nine.

There can be little question that the tendency in recent architecture has been to reduce the size of the putting swards. Indeed many clubs have

## Actual Sizes of Putting Swords on Twelve Golf Courses

Hole No.	The Apawamis Club Rye, N. Y.		Rhode Island Country Club, Nayatt, R. I.		Columbia Country Club, Chevy Chase, Md.		Cherry Hills Golf Club, Denver, Colo.		Inverness Golf Club, Toledo, Ohio.		Hollywood Golf Club, Deal, N. J.	
	Length yds.	Size sq. ft.	Length yds.	Size sq. ft.	Length yds.	Size sq. ft.	Length yds.	Size sq. ft.	Length yds.	Size sq. ft.	Length yds.	Size sq. ft.
1	377	3,600	366	5,390	366	4,537	333	4,948	385	6,880	426	7,030
2	350	5,330	397	5,760	320	3,069	400	6,820	392	5,950	360	5,500
3	315	2,400	349	4,964	370	4,876	316	3,588	135	5,950	420	6,920
4	325	5,500	340	5,850	395	3,946	412	7,747	430	7,735	155	4,700
5	150	5,500	144	4,560	560	4,841	527	4,925	438	7,200	354	5,850
6	323	3,200	298	6,400	472	5,608	150	5,172	360	5,625	370	5,760
7	405	6,500	440	4,550	327	4,043	360	4,746	320	6,000	515	6,160
8	177	6,000	471	4,550	194	6,000	220	6,803	208	6,000	375	8,910
9	600	6,100	431	4,048	441	5,089	421	6,492	492	4,800	390	6,525
10	335	6,000	234	4,480	394	5,089	379	5,098	346	5,200	510	4,860
11	340	4,200	509	5,920	448	6,792	473	6,670	359	7,200	400	6,075
12	203	4,500	299	4,800	437	6,792	205	5,484	522	6,120	435	6,490
13	260	4,500	397	3,600	157	4,043	302	4,740	150	5,400	350	5,400
14	520	3,200	392	5,328	400	5,089	437	6,837	417	5,600	360	5,610
15	365	3,600	356	4,800	368	4,015	115	4,447	443	5,025	175	5,870
16	215	3,900	399	5,600	138	4,000	397	4,804	410	6,800	450	7,200
17	490	5,300	135	4,200	265	4,128	535	6,290	430	6,375	230	9,360
18	295	8,000	384	4,060	410	8,093	445	7,252	332	4,250	405	8,460
Total	6,045	87,330	6,336	88,864	6,387	89,462	6,427	102,858	6,569	107,610	6,680	116,680
Hole No.	Kittansett Club, Watertown, Mass.		Merion Cricket Club, Haverford, Pa.		Pine Valley Golf Club, Clementon, N. J.		Country Club, Brookline, Mass.		Chevy Chase Club, Chevy Chase, Md.		Indian Hill Club, Winnetka, Ill.	
	Length yds.	Size sq. ft.	Length yds.	Size sq. ft.	Length yds.	Size sq. ft.	Length yds.	Size sq. ft.	Length yds.	Size sq. ft.	Length yds.	Size sq. ft.
1	410	6,824	335	6,860	421	8,200	430	8,256	410	7,803	560	7,728
2	390	5,843	523	6,520	352	10,000	310	8,100	300	9,226	433	9,200
3	145	6,188	195	8,150	184	8,500	435	10,800	400	12,565	458	12,500
4	355	6,050	570	6,875	431	8,000	300	10,080	145	11,439	283	8,918
5	400	6,660	420	5,050	205	8,200	420	8,100	330	6,084	445	6,960
6	373	6,730	427	7,600	365	8,000	290	8,175	430	9,746	377	8,370
7	465	8,000	355	8,000	551	6,300	190	7,200	375	6,896	314	7,500
8	187	6,580	350	4,800	303	2,500	380	8,075	590	6,984	339	5,502
9	375	6,540	170	6,575	411	7,000	415	6,300	230	10,695	160	7,448
10	325	5,280	335	7,250	134	7,500	325	6,375	145	6,800	141	6,365
11	220	6,800	378	4,900	395	6,300	520	8,500	425	9,075	350	8,526
12	376	5,780	407	6,500	312	5,200	140	9,500	350	5,625	381	8,428
13	335	4,820	125	5,500	433	10,000	390	7,500	195	7,830	186	9,250
14	168	7,300	407	7,154	164	5,000	490	6,800	340	7,533	433	8,245
15	465	8,160	340	6,000	597	7,000	330	8,000	435	8,874	511	10,185
16	390	6,260	433	6,800	428	9,000	155	8,550	360	6,504	432	8,550
17	370	6,400	215	7,260	335	4,500	370	9,500	335	6,827	145	9,790
18	445	7,890	425	6,538	425	13,000	410	9,350	410	9,408	522	8,232
Total	6,194	117,610	6,410	118,382	6,446	134,200	6,330	149,161	6,365	149,514	6,420	151,697

thus modified their courses by reducing the areas of putting sward, leaving more or less of the periphery to grow grass of fairway height.

Putting swards of less than 4,000 square feet are often found, but the turf becomes punished too badly to make such small greens advisable. On the other extreme, swards of 16,000 square feet are occasionally used. The area of a circle of 20 yards radius—that is, the official “putting green”—measures 11,310 square feet, assuming that there are no bunkers in the circle. Factors which to some extent determine the most desirable size for a sward are the slope of the ground—that is, level, sloping toward the approach, or sloping away from the approach. The hardness of the soil sometimes enters into the problem. Another point that merits weight is the degree of “mental hazard.” Where this is great, the sward may properly be larger than usual. Sometimes a sort of double putting sward is used and so constructed that the player who is on the wrong part of the sward is no better off than one who is not on the sward at all.

All that which is written above refers to grass-covered putting swards. Where the swards are sand or oiled, quite other dimensions prevail.

The actual sizes of the putting swards on twelve golf courses may be of interest and are here tabulated. The same data were also requested from a number of other well-known clubs, but have not been received. Analyses of their sizes so far as type is correlated with area of putting sward, show wide diversities. The total area devoted to putting swards also varies greatly.

Some of these holes are not familiar to the writer; so there is doubt as to the type of play the design calls for. Holes built for long high shots are not very common; so in cases where the facts are not known it is assumed there is an ample approach to the green.

It is worthy of note that only four of the twelve courses have swards as large as 10,000 square feet.

**TOTAL AREA OF PUTTING SWARDS.**—The total areas of putting swards on these 12 courses range respectively from about 87,000 square feet to nearly 152,000 square feet. The average for the twelve courses is 117,781 square feet. If one may place dependence in averages, this total area of 18 swards is approximately what should be desired.

**AVERAGE SIZE OF SINGLE SWARDS.**—This is least at the Apawamis Club, where it is 4,852 square feet. It is nearly identical at Rhode Island and Columbia. It is largest at Indian Hill, 8,428 square feet. The average size of all the swards of all the courses is 6,544 square feet.

**HOLES 115 TO 155 YARDS LONG.**—Each of the 12 courses tabulated has at least one hole in this class. Chevy Chase, Country Club, Inverness, Cherry Hills, Indian Hill, and Rhode Island each have two. The smallest putting sward in the class is No. 16 at Columbia, 4,000 square feet; the largest is No. 4 at Chevy Chase, 11,439 square feet. In the entire series 18 holes are found in this class. The average size of the swards of these holes is 6,420 square feet.

**HOLES 160 TO 195 YARDS LONG.**—Nine of the 12 courses have holes in this class. Of these 9, Columbia, Kittansett, Merion, Pine Valley, and Indian Hill each have 2. Presumably most of these holes are designed to be played with a midiron, or at least not with a spoon. The smallest sward in the class is No. 13 at Columbia, 4,043 square feet; the largest is No. 13 at Indian Hill, 9,250 square feet. The green at Columbia slopes quite strongly to the approach. The average size of the swards of the 14 holes in this class is 6,389 square feet.

**HOLES 200 TO 235 YARDS LONG.**—Ten of the 12 courses tabulated each have at least one hole in this class, while Apawamis and Cherry Hills each have 2. Columbia and Country Club (Brookline) have none. The smallest swards in the class are No. 16 at Apawamis, 3,900 square feet; No. 10 at Rhode Island, 4,480 square feet; and No. 12 at Apawamis, 4,500 square feet. The largest is No. 9 at Chevy Chase, 10,695 square feet. The average size of the 12 swards in the class is 6,867 square feet.

**HOLES 290 TO 360 YARDS LONG.**—All such holes, it is assumed, are of the drive-and-pitch type. All the 12 clubs have holes in this class. Columbia, Chevy Chase, Kittansett, and Indian Hill each have 3; Cherry Hills, Hollywood, Pine Valley, and Country Club (Brookline) each have 4; Rhode Island, Inverness, and Merion each have 5; Apawamis has 7, without counting its 260-yard hole. The smallest sward in the class is No. 8 at Pine Valley, 2,500 square feet; the largest is No. 4 at Country Club (Brookline), 10,800 square feet. The average size of the 50 swards in the class is 5,722 square feet.

**HOLES 361 TO 500 YARDS LONG.**—Whether drive-and-pitch holes should be limited to 360 yards or should be allowed greater length, is open to question. However, most of the holes of 361 to 500 yards usually require more than a drive and a mashie shot. Among the 12 courses tabulated, there are 103 holes in this class, distributed as follows: Apawamis, 4; Merion and Indian Hill, each 7; Cherry Hills and Pine Valley, each 8; Rhode Island, Inverness and Hollywood, each 9; Country Club (Brookline) and Chevy Chase, each 10; Columbia and Kittansett, each 11. The three smallest swards in the class are each 3,600 square feet, being No. 13 at Rhode Island and Nos. 1 and 15 at Apawamis. The largest are No. 3 at Chevy Chase, 12,565 square feet; and No. 18 at Pine Valley, 13,000 square feet. The average of the swards in the class is 6,916 square feet in area.

**HOLES 500 YARDS IN LENGTH OR LONGER.**—All of the courses except Kittansett have at least one hole in this class. Apawamis, Cherry Hills, Hollywood, Merion, and Pine Valley each have 2. Indian Hills has 3. The smallest in the class is No. 14 at Apawamis, 3,200 square feet; the largest is No. 15 at Indian Hill, 10,185 square feet. The average size of the 18 swards in the class is 6,486 square feet.

It is dangerous to deduce conclusions from statistics alone, but the above data are certainly significant. As before stated, the desirable size of any particular putting sward depends on a number of factors, and unless one is familiar with all of them, any criticism is apt to be gratuitous.

Based on quite other studies than statistics, the writer believes the sizes of putting swards generally desirable are about as follows:

Mashie holes.....	4,000 to 6,000 square feet
Midiron holes.....	6,000 to 7,500 square feet
Spoon holes.....	7,000 to 8,000 square feet
Drive holes.....	8,000 to 9,000 square feet

On two-shot holes the swards may well be slightly larger or else not so closely guarded by bunkers, depending on the type of second shot called for after a good drive.

### Golf Clubs in Canada

According to Fraser's Canadian Golf Directory and Year Book for 1923, there are 358 golf clubs in Canada. Eighty-one clubs have 18-hole