Panelists at the afternoon session of the Philadelphia golf show were, L to r: (top row) Leo Fraser, pres. of the local PGA section, Jack Whitaker, TV sports announcer, and Patty Berg. (Front row) Charles Lepre, Henry Williams, Dorothy Germain Porter, Helen Sigel Wilson and Skee Riegel.

Effective promotion also helped to bring in the big crowd. This was handled by Charles A. White, Jr., an account executive for The Richard A. Foley Advertising Agency, Inc. Rather than splashing big space at one clip, he used 20-line ads in Philadelphia newspapers over a 10-day period prior to the show to help publicize it. Posters were also used in retail stores in the Sheraton and other stores in the center of the city. Tent cards were used to get attention in the various dining and cocktail areas in the hotel.

100 Pros Participate

More than 100 home and touring pros from about 75 clubs in the Philadelphia Section stimulated great interest in golf by giving free lessons, participating in shotmaking demonstrations and assisting in the clinics and panels.

Two panels on golfing techniques were held at 4:30 to 5:30 P. M. and 7:30 to 8:30 P. M. Patty Berg of the Ladies PGA and Jack Whitaker, well known WCAU and WCAU-TV sportscaster, acted as moderators of the afternoon golf panel. Questions from the floor were intelligent and numerous.

Members of the panel included Mrs. Mark Porter and Mrs. Helen Sigel Wilson, both outstanding women amateurs. Also on the panel were three well known professionals, Skee Riegel of Radnor Valley CC, Henry Williams of Berkleigh CC and Charles Lepre of Tavistock.

Patty Was Busy

Patty Berg also was on the evening panel with Bud Lewis of Manufacturers CC, Marty Lyons of Llanerch, Toby Constanza of Sunnybrook and Wally Paul of Warrington CC.

Another highlight of the show, which was under the personal supervision of Leo Fraser, was the awarding of citations to persons in the newspaper, radio and TV (Continued on page 110)
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May, 1961
Nothing Seriously Wrong With Arnold; Laughs at "That" Wedge Shot

Arnold Palmer, the guest artist at the annual spring clinic of the Illinois PGA, displayed ironic good humor in telling what had gone on the week before at the Masters when he wedged himself out of the Augusta affair on the 72nd hole. More than 1,100 persons attended the gathering in mid-April at Chicago's Congress Hotel and more than half remained for the banquet.

Palmer, who probably already has replayed his famous, or possibly infamous, sand shot at Augusta National a couple thousand times either verbally or in his mind, revealed that his wedge skidded into the ball instead of getting under it and lifting. So, instead of dropping gently onto the green, the ball went flying across it. Arnold didn't have any more miracles left in stock and so it took him three more to get down, enabling Gary Player to back into the championship. Palmer, making wry allusions to the happenings around Augusta's 18th green, maintained that the wedge is one of his favorite clubs and has earned much more money for him than it has forfeited. On a great many occasions he uses it for pitching.

Describes Wedge Play

In describing his method of maneuvering the wedge, Palmer said that ordinarily he plays it with a more open face than most pros, attempts to get under the ball with it instead of trying for a kind of closed face contact, and aims to pop the ball up in the air. Strong wrists enable him to play the club in this fashion. Arnold added that in most cases his club stops moving forward almost immediately after contact.

Mentioning that he had once been a notorious duck-hooker, Palmer said that he had corrected this by moving his left thumb counter-clockwise so it rests almost squarely on the top of the shaft. The result is that he addresses the ball with a slightly more open face than formerly and the duck hook has practically disappeared.

Catches It on Downswing

Discussing other aspects of his wood play, the Latrobe strong boy said that he either hits the ball on the downswing or at the exact bottom of the arc with his driver and, unlike most circuit pros, doesn't catch it on the upswing. He conceded that this undoubtedly costs him distance but he is convinced that it gives him better control. To compensate for loss of elevation because of this method of contact, Palmer uses a driver that is slightly more lofted than average. Arnold maintained that he hits "inside-in," meaning that he stays inside the line at all times. But he emphasized that in taking the club away, he keeps it square to the ball for perhaps the first 18 inches.

As for that famous Palmer dictum, "hit it as hard as you can," Arnold modified this by adding "but stay within your ability to control the ball." Like most circuit pros, Palmer pointed out that even on the hardest hit shots he still has 20 per cent of his strength in reserve.

About the only statement Arnold made that may have caused doubt in the minds of his listeners was to the effect that the first movement he is conscious of in the downswing is that of his hands. One heckler, asking for repeated demonstrations, insisted he wasn't keeping his right elbow snug to his body throughout the swing, but the general consensus was that it couldn't have been much closer unless it had been bolted.

Questioned as to his attitude or approach to tournament golf, 1960's leading money winner said that one reason he gives the game all he's got is "that it's a nice way to make a living — and if I weren't doing this, what the hell else could I do."

Harry Pezzullo, pres. of the Illinois PGA section, introduced the speaker and served as the middleman during the question and answer period.
The best golfers... the men and women who know golf best... prefer ETONICS for golfing comfort, for golfing fashion. Only ETONICS give you that "feet-stay-dry" Weather Sealed construction. Only ETONICS offer so many cushioned styles for all-day golfing comfort. Only ETONICS interpret golf fashions so successfully. Follow the lead of the leaders in golf... enjoy ETONICS this season!

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Whiteness of a ball is important only to the eye. What is inside the ball determines its ability to take punishment and regain its vitally important roundness, internally as well as externally.

The diagrams at left show what happens to any golf ball when struck by a club:

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Only a ball such as the BEN HOGAN 90+ or the BEN HOGAN Golf Ball is constructed internally to take the terrific punishment shown above and quickly regain its enduring roundness... with maximum distance!

Ask your Golf Professional to recommend the Ben Hogan Golf Ball that is best for your game.

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No Matter How You Cut It

The Roots Get Hurt

By R. R. DAVIS
Professor of Agronomy, Ohio Agriculture Experiment Station

This article is condensed from a speech made by Davis at the 1961 GCSA convention.

A REDUCTION in root growth from mowing grasses has been reported many times. In general, the closer a given grass is mowed the fewer roots it produces. Welton and Carrol, working in Ohio, studied the effect of four cutting heights on a Kentucky bluegrass — redtop — white clover sod in the field for three years (1935, '36, '37). Samples were taken 8-ins. deep to measure root development each year. The amount of roots produced under the sod cut 2-ins. high is shown as 100 per cent and the roots produced at the 1/2-in. cut is related to it (Fig. 1). Note that the difference in root production at the two heights becomes greater with time. The close-cut sod becomes weaker each year.

Juska, Tyson and Harrison at Michigan State University grew Merion bluegrass alone and in many mixtures at two heights of cutting and two levels of nitrogen fertilization. Fig. 2 shows that the root growth was more than twice as great when the grasses were cut two inches high than when cut at 3/4-in. in this greenhouse study. The effect of nitrogen, of course, on clippings and roots is evident.

Clipped vs. Unclipped

Eliot Roberts studied the effect of mowing height on grasses in a greenhouse test at the University of Mass. (Fig. 3). Grasses were clipped at 1/4, 3/4 and 1 1/2 ins. and a treatment left unclipped. The unclipped grasses had a much greater root system than clipped treatments. The shorter the clipping, the less the root growth.

Using several forage grasses, including
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May, 1961
Kentucky blue, Crider found that many clipping treatments stopped the growth of grass roots. With the exception of orchardgrass, a single clipping that removed most of the foliage caused root growth to stop for periods ranging from 6 to 18 days. Stoppage occurred usually within 24 hours and growth didn't resume until recovery of the top growth was well advanced. When these clippings were repeated periodically, root growth of all the grasses stopped for periods that ranged from 25 to 45 days during the growing season. The percentage of roots that stopped growth varied in proportion to the percentage of the foliage that was removed. /  

Root Growth Stops

The effects of clippings repeated frequently were much more severe. All root growth stopped after the first clipping of 90 per cent of the foliage, and the three-times-a-week clippings that followed prevented root growth during the 33-day test. The repeated clippings were made at the level of the original cut. Removing 70 per cent and 60 per cent of the foliage also stopped all root growth. Stoppage of root growth failed to take place only when 40 per cent or less of the foliage was removed. /  

The tremendous reduction in root and top growth of smooth bromegrass from a clipping treatment is shown in Fig. 4.

The data presented on the effect of mowing on root development makes it obvious that grasses on courses should be mowed as high as good use will permit. Likewise, the smaller the proportion of the top growth removed at one time, the less the effect on stopping or reducing root growth. Frequent mowing as high as use will permit should give the best possible root system under a given set of environmental conditions.

Invasion by Weeds  

What is the result of a poor root system under sod? A weak sod that offers little resistance to invasion of weeds is one obvious result. A test made at the Ohio Agriculture Experimental station in which several varieties of Kentucky bluegrass were mowed at two heights for four years gave these results:

<table>
<thead>
<tr>
<th>Variety</th>
<th>¾-in. height</th>
<th>2-in. height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breeder's Merion</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Penn. K-1</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Wash. selection</td>
<td>38</td>
<td>2</td>
</tr>
<tr>
<td>Minn. Common lot</td>
<td>105</td>
<td>3</td>
</tr>
<tr>
<td>Delta</td>
<td>102</td>
<td>11</td>
</tr>
<tr>
<td>Park</td>
<td>105</td>
<td>8</td>
</tr>
<tr>
<td>Ky. Common lot</td>
<td>108</td>
<td>5</td>
</tr>
<tr>
<td>Neb. Common lot</td>
<td>150</td>
<td>16</td>
</tr>
<tr>
<td>Average (all plots)</td>
<td>91</td>
<td>8</td>
</tr>
</tbody>
</table>

The average of all varieties, you will note, shows that there are more than 10 times as many weeds when mowed at ¾ (Continued on page 109)