



THE SOUTH FLORIDA GREEN

VOLUME 7

APRIL 1980

NO.2





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President's Message



As your President, I must admit I've always had difficulty trying to write a quarterly message for *The South Florida Green*. I would usually procrastinate and hope for divine providence. When this failed, I would read other publications with President's messages for inspiration. So naturally one would think I would be ecstatic, this being my final message. No, I am not resigning as President, nor have I found another job and am moving, but *The South Florida Green* is.

As was discussed at our last meeting, *The South Florida Green* will become the new state magazine effective with the July issue. At our State Meeting on April 7, 1980, I made the motion *The South Florida Green* become the state magazine. This motion was unanimously approved. It was then followed by another motion that the same guidelines used to run *The South Florida Green* be continued. It was generally agreed upon that income generated by the magazine's first several issues would be set aside to insure the magazines solvency as well as its quality.

We in South Florida have seen *The South Florida Green* grow from a simple six-page magazine to its present national status. This transformation was not achieved overnight, nor was it solely the work of one person. So it is only natural for those of us who have been associated with this magazine to feel a little melancholy with it leaving South Florida. I guess one could compare the growth of the magazine to the growth of a child. Now the time has come for the child to leave home and though we hate to see it go, we know if it is to continue to grow and be successful, it will need the support of more than just the superintendents in South Florida.

I do want to thank all of the members of the South Florida Superintendents Association for the unselfish stand they have taken on this issue as well as other issues this past year. I know it is not always easy to make a sacrifice or change in the name of a greater cause. The Board and I have mixed emotions about some decisions we have had to make this past year. They have not been easy. I do hope, however, they have been the right ones.

Farewell *South Florida Green*, we will miss you, but we wish you continued success in your new role as a communications tool for all the superintendents throughout the state of Florida.

Alan Witzel

The South Florida Green

The Official Bulletin of the South Florida Golf Course Superintendents Association
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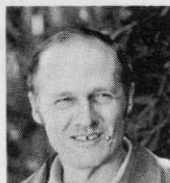
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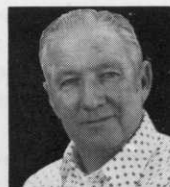
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ABOUT OUT COVER

Shown seated, center, Betsy Rawls, LPGA
 Tournament Director.

Standing left to right Betty Burfeindt, Kathy Young,
 Mary Dwyer and Barbara Moxness.

Color Photograph by Harry McCartha

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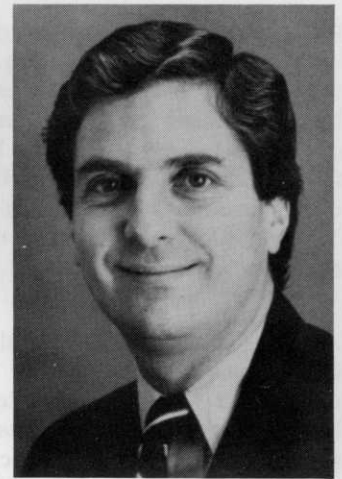
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The Future of the LPGA

By RAY VOLPE



The question that the LPGA Staff and I seem to get asked most frequently involves the growth of the LPGA Tour over the past five years, so I relish this opportunity to take a look into the future, trying to determine what the next five years or so might have to offer.

Nevertheless, I think it's important to begin any analysis of the future with a look back. There is no denying that in the past half-decade the LPGA Tour has experienced remarkable growth in all areas: purses, galleries, media interest, number of players and quality of play. There are a number of reasons for this, but suffice it to say that these improvements were overdue, and that now the LPGA is recognized as a viable and significant entity in the world of professional golf.

One of the dangers we face in the coming years is that people will expect the growth to continue at the same rate as it has in the recent past. It is important that the players, the media — everyone — recognize the fact that this will not be the case, that the rate of growth is going to level off. The business proposition the LPGA has with its sponsors is sound, perhaps the best in professional sports, and we don't want to jeopardize the solid foundation we have built by promoting purse escalation just to keep up with past performance.

If the past five years have been a time of growth, then, the next five will be a time of stability and balance. We will have to determine what is the optimum number of tournaments and length of the tour. Do we schedule 35 or 42 events each year? Do we play for eight months or year 'round? More importantly, we will be striving for balance in the rise in purses. As our sponsorships solidify and become more long-term, our goal is for each event to increase its purse by \$25,000 each two or three years, giving the tour an average rise in total purses of about \$500,000 every two years, which we feel is a reasonable rate of growth at this point. The success of the LPGA Tour has been built on the premise that each event must be a solid business proposition for each individual sponsor, and we can do nothing to undermine that premise without damaging the structure and the future of the Tour.

The future of golf on television — specifically the position of the LPGA on the major networks — is perhaps the most important facet for continued growth of the Tour. Team sports

get massive newspaper coverage nationally because there are teams in virtually every major city with a constant supply of home games to insure continuous coverage. An individual sport like golf, though, has to rely primarily on television as its only form of national coverage; radio and golf certainly do not mix, and newspapers provide coverage only on a local basis, with the national wire services modestly filling in the holes.

There are many signs that golf will continue to weaken in the eyes of the networks, and that consequently network coverage will lessen in the coming years. The PGA Tour is the most vulnerable to this trend, since it has many more events telecast than does the LPGA. If the number of PGA Tour events on network TV is reduced in the next few years, the LPGA will be riding a double-edged sword. Knowing Madison Avenue as I do, the prevailing attitude among advertisers will likely be: "We failed with the men, why take the same chance with the women?" They will probably be reluctant to pursue professional golf as a viable advertising medium.

But if we are successful in opening up new advertising channels, we can benefit from the increase in available dates. In the past we have tried to avoid having an LPGA telecast on one network against a PGA Tour event on another; it doesn't attract a new audience, it serves only to split the existing one. With open dates, that competitive situation is eliminated.

The key, then, will be to interest new advertisers to invest in time on LPGA network telecasts. Hopefully we can lure companies targeted for the women's market — companies that spend millions each year on daytime television — to think on a broader scope and take an active role in sponsorship of LPGA events. There is a lot of territory we can cultivate.

At the same time we will have to invent new formats, new television innovations, to generate new interest in watching televised golf. Golf tournaments all tend to look alike on TV, and the lack of sustained action leaves a lot of dull moments. We need to come up with new approaches that command people to watch that particular event, yet continue to respect the game itself.

In the coming years we will also continue to delve into alternatives to network exposure. In 1978 we started the LPGA Syndicated network, in which we produce our own telecasts, clear the stations and sell the time. We are syndicating four tournaments in 1980, and look to more in the future. The amazing growth of cable TV in recent years opens up another possibility that we actively pursue; cable TV and all professional sports will be brought together more regularly in the future.

Another media-related problem that we hope to resolve in the months ahead is the failure of wire services and newspaper sports editors to recognize official names of LPGA events when they involve a corporate entity. When the Elizabeth Arden Classic, for example, shows up in a wire service story as "a \$100,000 LPGA tournament in Miami," it undermines all our efforts. The press seems to regard using a corporate name as free advertising, an archaic attitude considering the corporation may invest several hundred thousand dollars in supporting the event for the good of the game, with the bottom line being the great amount of money generated for the participating charity.

The inconsistency of the sports media astounds me when it comes to this very serious subject. What is the difference between corporate sponsorship and corporate ownership? Why does the Honda Civic Classic fall under this discriminatory policy and not the New York Yankees or the Miami Dolphins? Major league teams are commercial, profitmaking organizations. A sponsor of a golf tournament is lucky to break even, contributing substantial monies to charity nevertheless.

There is more to the growth of a sports organization than just money and media exposure, and in the coming years I expect the LPGA to grow in a number of other areas. For example, there should be a steady increase in both the quantity and quality of player coming onto the Tour. The advent of the women's movement in the past decade, the acceptance of women as athletes, the Title IX Bill and the resulting number of athletic scholarships now available to

women and the caliber of competition for women on the amateur and collegiate level have all served to better prepare players for the level of competition they can expect on the LPGA Tour. This trend will certainly continue.

I also anticipate a growth in women's golf internationally, with the LPGA participating. We have had in recent years tournaments in England, Japan, Canada, Australia, Malaysia, Singapore and the Phillipines and have had feelers from a number of other countries. The possibility of increasing our foreign schedule and perhaps having a "world tour" on a small level definitely exists.

I have saved for last an area that I consider of paramount importance to the future of not only the LPGA but the game of golf in general: the promotion of junior golf. All statistics in recent years indicate a severe decrease in the number of people playing golf, and this can only be changed by instituting a massive national program to get more junior players involved. The problem now is that each organization — the PGA of America, the National Golf Foundation, the USGA, the PGA and LPGA Tours — all have ideas, thoughts on what to do and programs that have been implemented, but it is clearly not working. We need to eliminate this fractionalization by joining all the groups together and coming up with a unified, powerful program nationwide. Egos and titles must not be allowed to stand in the way of the game of golf, or they will prevent the cultivation of new players at the grass roots level.

In summary, our goal for the early 80s is to establish a pattern of steady, intelligent growth and insure the relationship with each sponsor is a sensible business proposition. As for the LPGA players themselves, they will have to continually reassess their commitment to the Tour, never losing their respect for the game and their feeling for the paying public. We all — players and staff alike — must avoid falling into the Fat Cat Syndrome which I find so repulsive, not letting recent successes go to our heads to the point where we lose our enthusiasm. The LPGA Tour sustains itself on our constant and continued energies, and we must all appreciate where we came from and recognize the efforts of all who have helped us grow to where we are today.

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Boca Greens Country Club was recently opened in Palm Beach County, west of Boca Raton. Shown here left to right are Jeff Carpenter, Golf Professional, Joe Lee, Golf Course Architect and Mike Bailey, Golf Course Superintendent.

Boca Greens was built on 175 acres and features many spectacular water holes. It will be operated as a private club and will be surrounded by several hundred beautiful homes.

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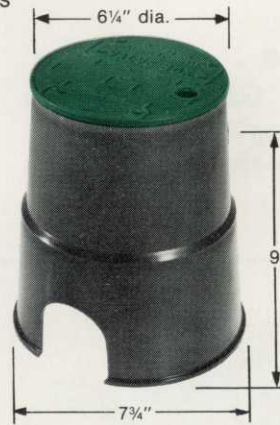
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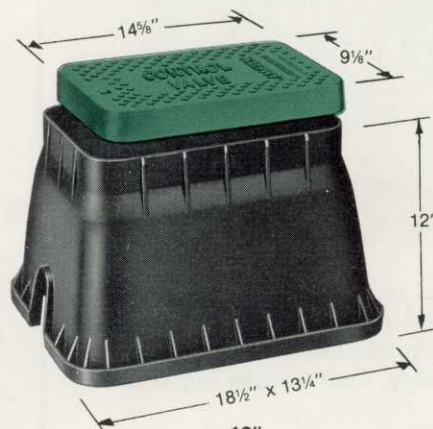
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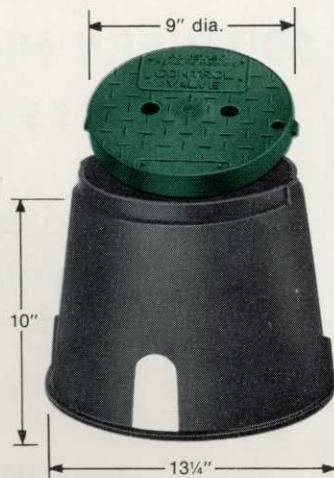
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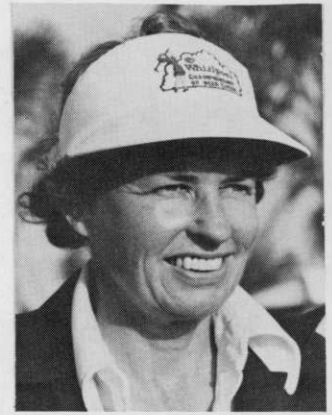


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CREATING A CHALLENGE FOR WOMEN GOLFERS

By BETSY RAWLS
PGA Hall of Fame / Tournament Director



About the Author:

Residence: Spartanburg, South Carolina

Became Professional: 1951

Career Earnings: \$302,664

Tour Victories: (55) Includes two LPGA Championships and four U.S. Opens.

Professional Career: Betsy had her best of many extraordinary seasons in 1959 when she won ten tournaments, the Vare Trophy and almost \$27,000, an enormous sum in those days. She was elected to the LPGA Hall of Fame the following year. She ranks third behind Mickey Wright and Kathy Whitworth in career victories with 55, among them the LPGA Championship in 1959 and 1969. Betsy also won

the U.S. Open four times, including her rookie year. She was twice a leading money winner and in 1953 was named Golfer-of-the-Year by the LA Times. Always a champion both on and off the course, Betsy retired from competitive golf in 1975 and in July of that year became the LPGA Tournament Director.

Personal: Took up golf at age 17 while in high school in Arlington, Tex. . . . Graduated Phi Beta Kappa from the University of Texas with a degree in math and physics . . . Was known as one of the game's greatest shotmakers and a wizard around the greens . . . In the early years of the LPGA she served as president of the LPGA Tournament Operations committee because of her knowledge of golf and its rules.

The LPGA tournament officials have a basic philosophy for women's championship golf. The aim in setting up golf courses is to provide for players a course that is challenging, interesting, and enjoyable. We want a course that will reward good shots and penalize bad ones. Low scores should be possible but should be the result of good shot making. A good course should test every facet of a person's game and character. It should test shot making skill with all clubs, as well as a player's awareness, imagination, intelligence, and emotional control. Our objectives are to reward excellence, promote improvement in the quality of golf that is played on our tour, and to encourage dedication and hard work. The following are some things that we consider in trying to provide a difficult but fair test for golfers.

First of all, we have to know the capabilities of our golfers, and especially in relation to the capabilities of men golfers, because most of the courses are designed and prepared for men players. Secondly, we have to have an understanding of the design of the course and what challenges the architect expected each hole to offer. It is important, also, to be able to adapt the set up of each hole to the existing conditions of the course.

Our testing has shown that the average length off the tee for a woman professional is about 220 yards, with 195 yards being carry and 35 yards being roll. I think it is worthy to note that in order to assure a roll of around 35 yards the fairways must be fairly dry. Men professionals get a larger percentage of distance off the tee from carry, therefore dryer fairways are not as important to them. In fact, soft fairways are preferable in a man's tournament because most courses are too short for such power hitters, anyway.

You can imagine who this relates to your ladies' day play, although I'm not suggesting bringing on a rash of wrist injuries from table top conditions.

For your information, the longest drivers on our tour carry the ball around 230 yards. Naturally this is with a higher trajectory and will produce less roll. On average fairways the end result will be drives of 250 to 255 yards!

The average woman professional hits a 5 iron around 155-160 yards and with that club will hit the green over 75% of the time. She will get within 30 feet of the hole 60% of the time and within 15 feet about 27% of the time. Incidentally, women professionals are very accurate drivers. 70% of their tee shots will land within 30 yard wide fairways.

Another factor to consider is how much height and back spin does the average women player get with each club. This determines how much roll we allow for when setting a pin. On a well conditioned green, with little or no slope to contend with, we would allow around 24 feet for a 5 iron to stop. I would guess the men pros could easily play to a cup within 18 feet of the front edge. Now, do you expect too much of your women members?

When appraising the course we have to consider what the architect wanted to require of a player and if that challenge is also presented to a woman golfer. I think it is safe to say that courses that are designed to reward accuracy rather than length have been more suitable for women's championship golf.

We have often recommended the building of new tees. For

instance some of the larger greens have added so much distance to the hole that pin placements in the backs of greens over bunkers have not been able to be used. Shorter tees have been requested for the following year to bring the pins into play. We make certain, however, that it would not make the tee shot less demanding.

When fairway bunkers are out of reach in the tee shot landing area, we may cut a new tee up in the fairway on a carefully picked level area.

If there is a hazard out of play, and by re-contouring the fairway we can bring it into play, we often do, providing it does not eliminate the challenge of the next shot.

On the whole, we need dryer fairways than the men professionals do to bring the landing area challenges into play, and softer greens to allow for the use of tighter pins. This also gives the staff greater flexibility in setting up more challenging holes.

The types of grasses that are in the fairways and rough certainly affect our thinking in preparing a course for a tournament. Fairways that can be cut to a 1/2 inch are much easier for women to play from than fairways, such as bluegrass, that cannot be cut as short. It is very difficult for women to put enough spin on the ball if any grass at all is between the face of the club and the ball at impact. Certain teeing areas and pin positions are automatically eliminated from consideration if the fairway grass is cut higher than 1/2 inch.

We would never ask a player to play a shot with a two iron from a bluegrass fairway over a bunker to a shallow green, though we might ask her to do this from a bermuda grass fairway.

As a player, what I appreciated the most was an official who was able to demand the most from me as a shot maker without being unfair. To discern this is much harder in women's golf than men's because of the strength factor. You gentlemen who set up the course for women on ladies day have an unbelievable challenge because of the wide variety in strength and skill of your women members. The more knowledgeable players will appreciate your ability, however, and the others will appreciate you and not know why. Of course those golfers that have a good day will always love you, and those ones that have a bad day, well, they'll get you next time.

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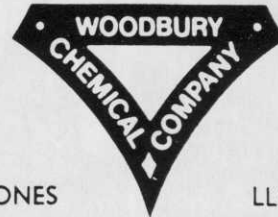
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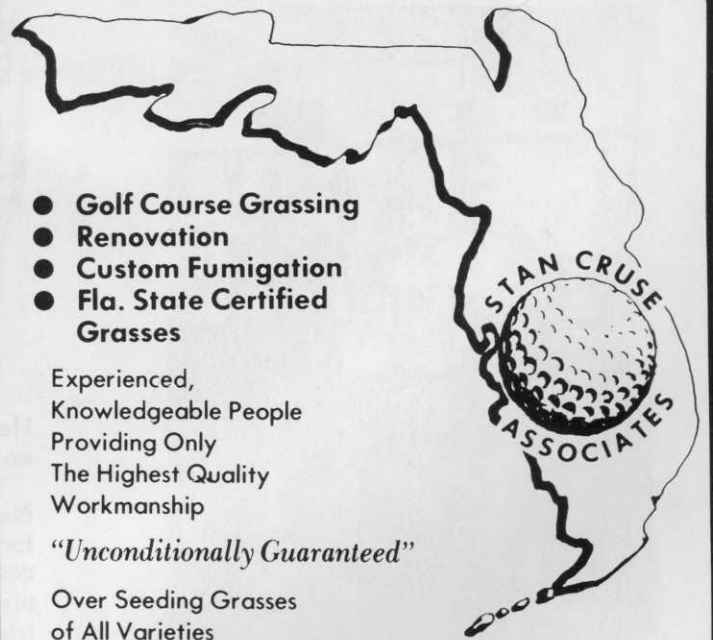
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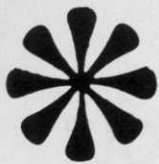
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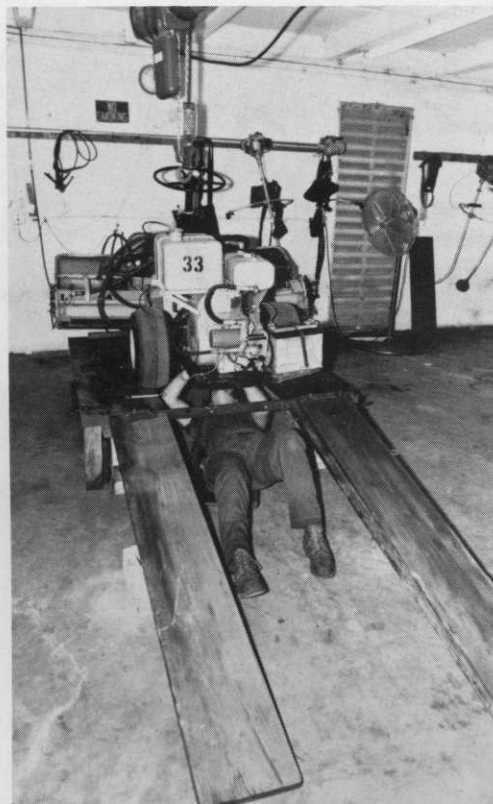
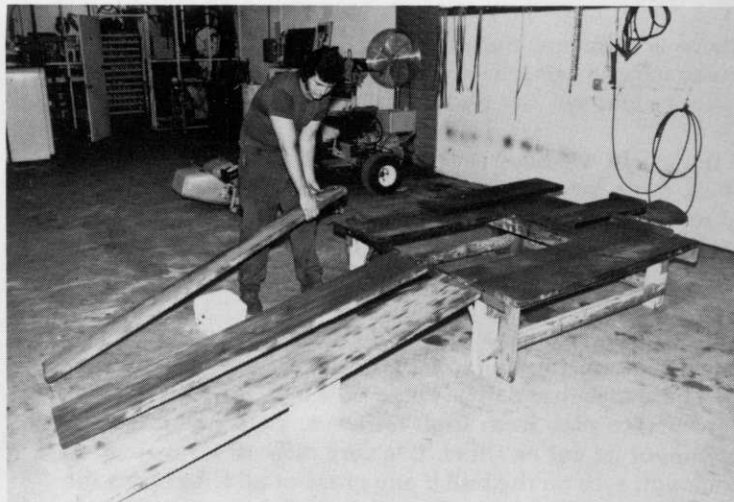
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Here's a "Super" idea by our association secretary Neil Kalin and his mechanic John DeRose.

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(Picture story by Harry McCartha. Call us and share your ideas with others . . . we'll come to you.)

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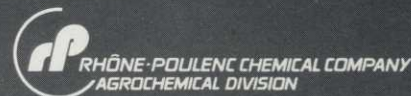
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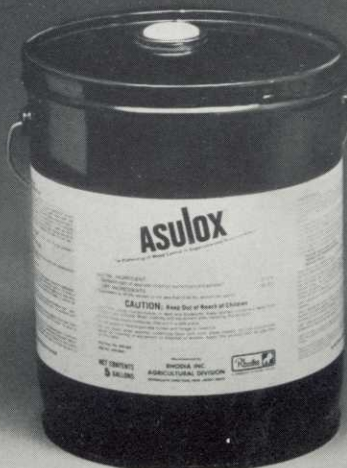
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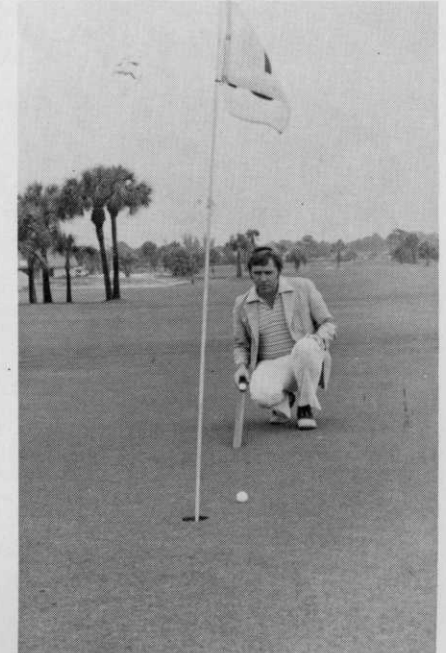
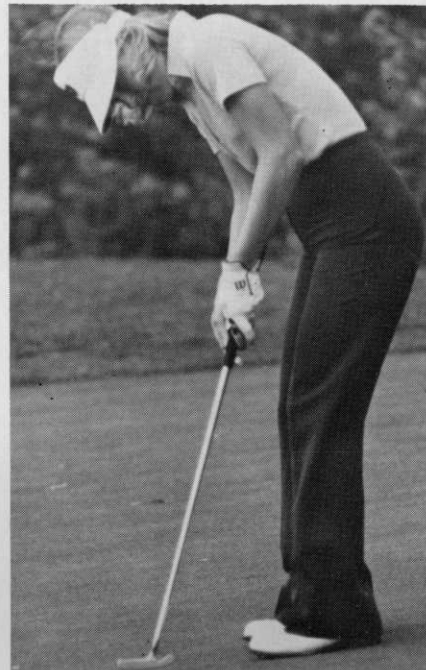
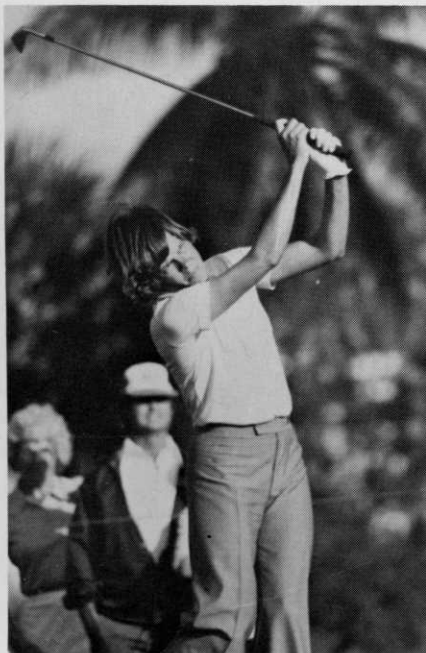
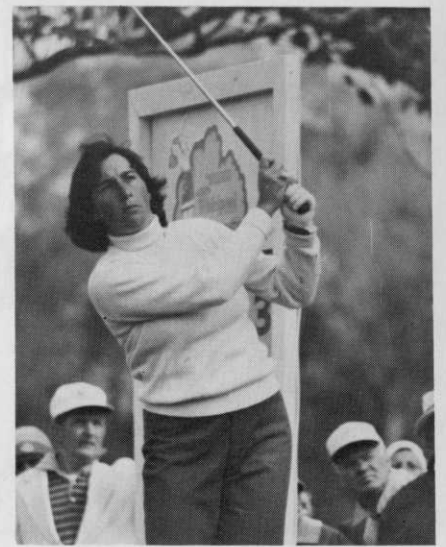
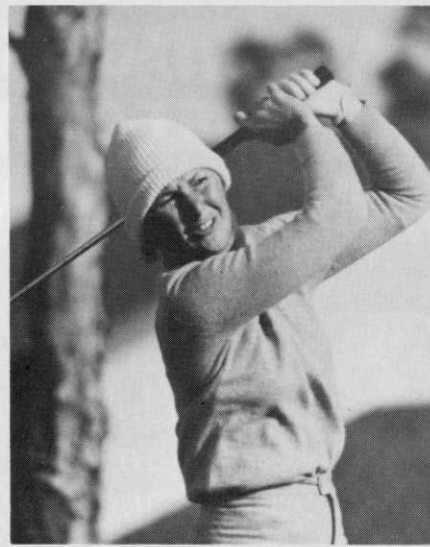
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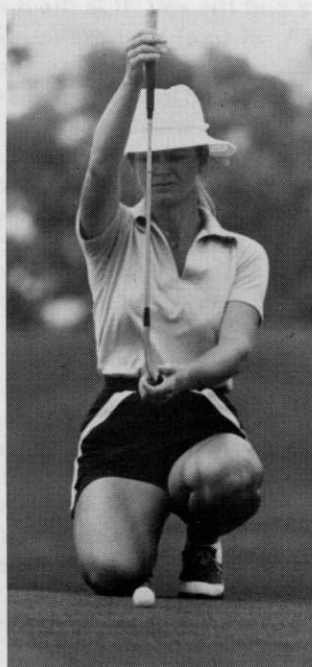
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South Fla. LPGA Tournament Photos

On the left page we show L.P.G.A. contestants at Deer Creek and on the right page pictures taken during the Turnberry Tournament by David Bailey.

Winner at Deer Creek was JoAnne Carner and at Turnberry, Jane Blalock. Superintendent Bob Strait is shown checking speed of greens (lower left page) and Editor Dan Jones is shown with Jane Blalock.



PUTTING LESSON . . .

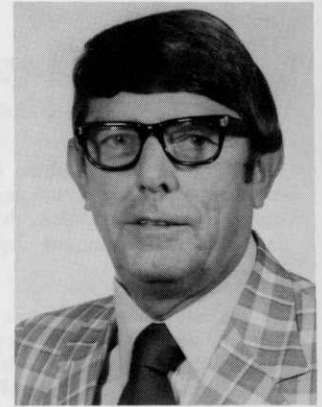
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DAMN IT! ..

Golf Course Superintendents

By HUBERT E.(AL) FRENETTE



Being a golf course superintendent means different things to different people. To some of us, it means growing lush turf; to others it means managing our course to the satisfaction of the owner, membership or city fathers; and to some it means providing the best playing conditions possible for the budget available. We all should understand that the name of the game is to get the ball into the cup. In order to achieve this goal, the superintendent must understand what is meant by "Grooming" the course and "Good House-keeping."

In order to present this subject in a logical manner, we ought to consider the normal route of play and the steps to be followed:

1. Tees

The teeing ground should provide a suitable area to begin the play of the hole. This means a level surface with good purchase and turf that allows the ball to be teed up properly. The height of cut should be such that the tee can be placed in the ground without placing the ball on the turf ($\frac{1}{2}$ " - $\frac{3}{4}$ " would seem acceptable). The moisture level should provide easy penetration of the tee and not require a hammer to drive it into the ground.

The tee area should be provided with yardage markers to designate the 0 point for measuring the yardage corresponding to that on the score card. If your course has not been measured or rated, contact your state golf association. The golfer appreciates knowing the point at which each yardage is measured and having the confidence that the yardage is correct.

The *teeing ground* must be designated by some type of markers. These markers should not be placed haphazardly but perpendicular to the line of play and a minimum of 15' apart. The markers should be moved regularly to change the play (distance and line) of the hole, control the traffic, and prevent excessive wear in favorite areas. When placing the markers, keep them above the turf to prevent smothering and yellowing. Remember the rules of golf, the golfer is allowed to tee the ball two (2) club lengths behind the markers. For this reason, markers cannot be placed closer than two (2) club lengths from the rear of the tee. Placing the markers off the sides of the teeing ground to facilitate mowing is a *no no*.

The area around the tee ought to be checked daily for loose trash, clean ball washers and towels, proper water and

soap. Ball washers, trash receptacles, tee markers and benches should be repaired and painted when necessary. The condition of your tees will have a definite effect on the attitude of the golfer and his enjoyment of the game.

2. Fairways

Most superintendents or their membership have their own ideas about how the fairways should be mowed. This may go all the way from "wall to wall" down to "U.S. Open" width. Some may mow from the tee and others start at 150 yards from the tee. If you maintain an intermediate and primary rough or just a primary rough, you must provide definition between this rough and fairway. This definition requires at least 1" difference in the heights of cut. Anything less is a waste of time.

Fairways should be mowed as low as possible (depending on the type of turf) without scalping to provide good ball contact between the clubface and the soil. It is the opinion of most (including the USGA, of late) that contouring of fairways presents a more natural and pleasing playing ground. Contours should follow ground lines when possible, swinging down from hills and mounts, widening for the high handicap player and narrowing for the better player. Contours look best when they swing inside of fairway bunkers and follow the lines of the bunkers. Holding the line of the fairway approximately six feet (6') seems to give the collar of rough around the bunkers a balanced look. The same holds true for swinging 6' inside green bunkers to tie into the green collar.

3. Roughs

For those of use who prefer rough, we must decide if we want just the primary or want to add an intermediate rough between the fairway and primary. We must understand that each additional height of cut adds to the difficulty of the course. For example, a fairway mowed at $\frac{1}{2}$ " requires a minimum $1\frac{1}{2}$ " intermediate rough and a $2\frac{1}{2}$ " primary rough if we are to achieve any degree of definition. Will your club tolerate this type of penalty? By eliminating the intermediate rough, we can lower the primary rough to $1\frac{1}{2}$ " minimum. This would provide some penalty but allow the members to locate an errant shot without too much difficulty. Whichever method you choose, be consistent. Do not create rough that you cannot easily maintain at the desired height.

4. Bunkers

Most of us feel that the golf course superintendent is

(Continued on Page 17)



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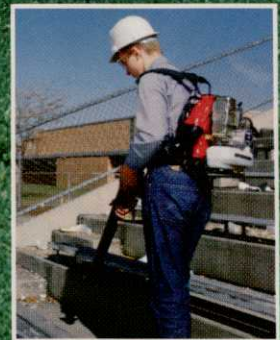
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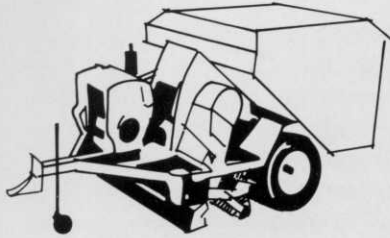
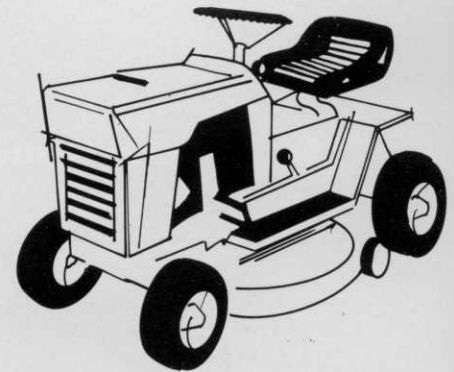
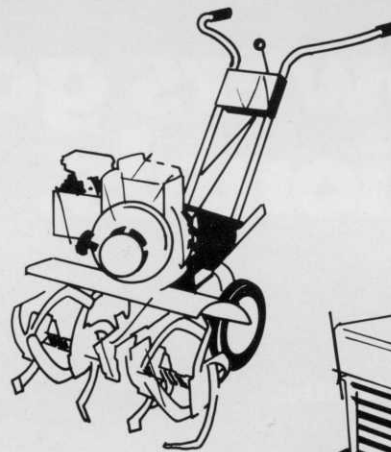
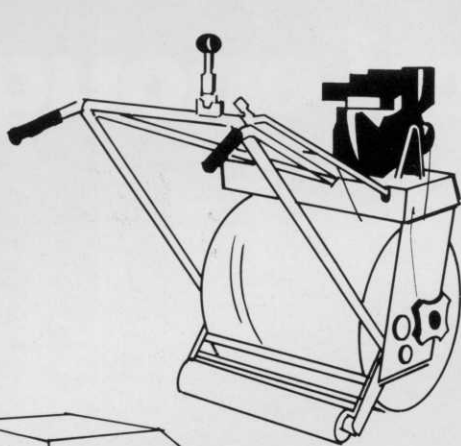
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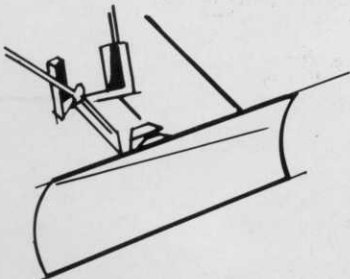
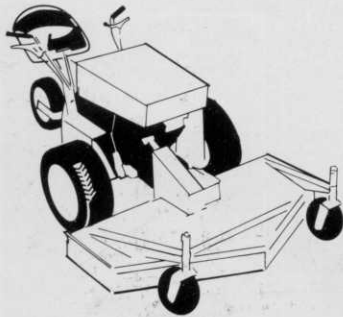
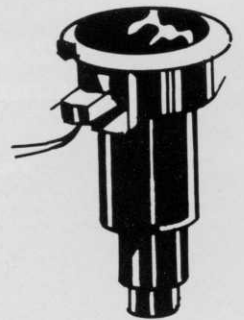


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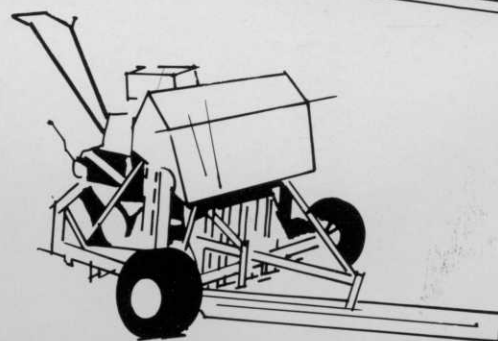
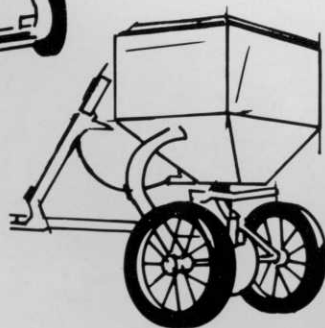
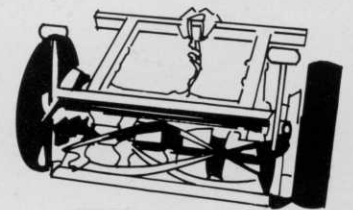
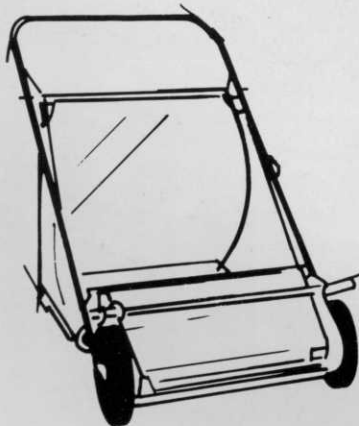
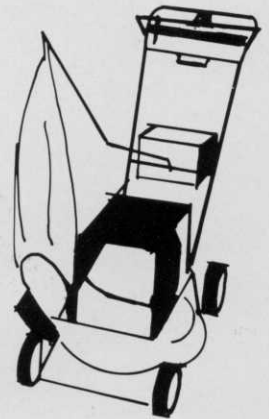
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best known by the greens he keeps. I measure his knowledge of superintendency by the way he maintains his bunkers as well as greens. How often we see bunkers raked just perfect and the sand pulled out onto the turf. Obviously someone does not understand the purpose of the bunker. We can define most hazards with stakes or lines but the boundary of a sand bunker is the sand itself. Who is to know the limits of the hazard if the sand spills out onto the turf. The superintendent should see that the persons responsible for the bunker maintenance understand these details.

How often we see slopes around bunkers devoid of turf. Mowed to fairway height with no way to survive the stress of drought and traffic. Experience has shown that golfers will not traverse a rough when they can travel in the fairway. Keeping a band of rough around the bunker serves two purposes; (1) provides a healthier turf able to withstand the droughty conditions of a slope, and (2) provides a barrier to keep the slightly miss hit shot from rolling into the bunker.

Edging of bunkers is a necessary evil if there ever was one. Done properly it is an operation that gives the bunker a soft, natural look. Some edging leaves a bunker looking like a scar on the landscape that doesn't want to heal. Turf that lays over the edge hides the soil and provides a canopy for water falling into the bunker. In addition, it helps keep the soil from mixing with the sand. Keep the turf clipped and runners out of the sand but do not butcher the edges.

To complete the grooming of your bunkers, be certain that rakes are available and in good condition. The number of rakes provided will depend on the size of the bunker. Remove all bent or broken rakes.

5. Collars

One thing that stands out most on a televised golf tournament is the way the fairways tie into the collars. It provides a blending of fairway and green. The USGA recommends a collar mowed at fairway height and from 30-36 inches wide. We often see collars that are the width of a triplex greens mower. This width gets the job done quicker and cheaper but it leaves the green looking as though someone has allowed it to grow in too much. The collar should complement the green, not dwarf it. The little extra time and manpower spent mowing at 36 inches gives the green a well-groomed look.

6. Greens

So much has been written about this area of the golf course that it is difficult to choose something new and informative. This writer shall only dwell on what he thinks a well-maintained green should look like.

The most important feature of the putting surface should be its ability to keep the ball rolling. On a perfect putting surface, it appears the ball (when properly stroked on a level area) will never stop rolling. When you see a putt come to an abrupt stop, it is a poor quality putting surface. Friction is the culprit. The heavier and rougher the surface is, the more friction you have. The secret seems to be keeping the leaf blades thin (juvenility) and maintaining a minimum of thatch between the young blades and the soil.

Color should be secondary as color is the result of nutrition and growth. Controlling thatch means controlling clipping yield which means controlling fertilization. The growth rate

on the green should be such that the turf is able to recover from wear and maintain a density that will resist traffic, nothing more.

Ball marks are a constant source of aggravation with the golfer. He makes the marks, never repairs them, and constantly complains about their presence. Many superintendents have long since quit trying to educate the golfer and have gone to repairing or completely ignoring the darn things. We should continually strive to educate the golfer to repair his ball marks and instruct our crew members to take a minute to repair several when they are on a green. Scheduled topdressings will mask these for a short time.

Change cups regularly (daily during the playing season) to give the golfer a new look at the hole each time it is played. This also distributes the traffic over the entire green, lessening the wear on the turf.

Cup cutting is an operation that should be assigned to the best crew members you have. Good training and constant vigilance are necessary to keep the complaints to a *minimum* as there is no way to satisfy all the golfers on this one. We can only hope to understand some basic rules and insist that they be followed:

- a. Keep the cup a minimum of 12' from the edge of the putting surface.
- b. Maintain a minimum of 3" (radius) of *reasonably level* area around the cup.
- c. Cut the cup plumb regardless of any slope.
- d. Clean and sink the cup exactly 1" from the surface. (This prevents a ball from rimming out and provides a degree of stability to the soil around the cup.)
- e. Brush any loose soil from the cup area.
- f. Replace the plug flush in the old hole and water thoroughly to prevent wilting.
- g. Replace worn cups and flagsticks, when necessary, to keep the flagstick plumb and snug in the cup. Replace chipped cups.
- h. Check the ties on the flag and swivel. Replace frayed flags.
- i. Plug any scarred areas that will not recover within a few days.

7. Trees and Shrubs

Nothing detracts from the aesthetics of a course more than dead trees, shrubs, and stumps. Many new courses neglect the selective clearing phase of construction. In time, the barked and buried trees will die and have to be removed but in the meantime, they create an eyesore. Stumps not only detract from the appearance of your course but add to the maintenance problems. Weeds grow around them and they interfere with the mowing equipment. Remove these trees and stumps on a continuing basis.

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Trim low-hanging branches in the primary rough to eliminate eye injuries. This also makes it easier to maneuver the mowing equipment. Fallen limbs should be collected regularly and removed from the course.

Planting trees and shrubs to enhance the landscape is a necessary part of improving the course. However, once the planting is complete, these plants must be cared for on a regular schedule. Putting out a couple thousand dollars worth of plants and failing to spend \$30-\$40 per week to keep them watered makes no sense.

Many flowering trees and shrubs produce numerous suckers which should be trimmed regularly to produce a well-shaped plant. Early pruning of young trees will provide a balanced mature plant that complements the landscape. Young trees and shrubs should be mulched. Shrub beds need to be weeded and mulched, as needed.

8. Hazards

Lakes, streams, ditches and other hazards should be maintained to the point that they present a natural appearance. Determine the extent of mowing or trimming desired and be consistent. Nothing detracts from a lake more than overgrown edges. Maintain a band of rough along streams and ditches as well as the lakes. When possible, lakes should be kept free of algae and aquatic weeds. The use of a pond dye during special events adds a lot to the looks of your lakes and water hazards.

10. Employee attitude

The most important ingredient for success in keeping your course well-groomed is your maintenance crew. Their attitude should be one of pride and motivation. Encourage them to perform each task with pride and understanding of what effect they are trying to create. Provide them with good equipment and insist that they understand its capabilities and limitations. See that they operate and maintain this equipment properly and you will have a more productive crew and a better looking course.

Knowledge of the game and its rules will allow you to maintain your course for the benefit of the golfer, not just to see how much green grass you can harvest. One of the few benefits of being a golf course superintendent is being able to look over your shoulder and see that you and your staff have provided the golfers with the best playing conditions possible.

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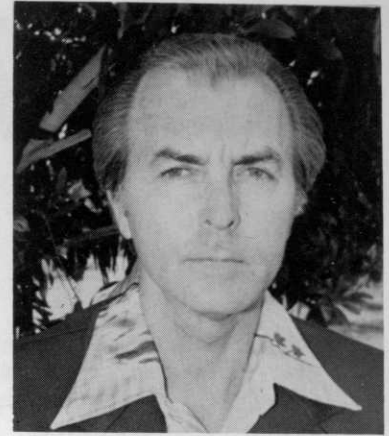
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AN INTERVIEW WITH KARL LITTEN

By HARRY McCARTHA



After years with a noted golf course architectural firm, Karl Litten has formed his own golf course design team located in Boca Raton. He has been closely involved with over 60 golf course projects, lending his talents to design, plans, specifications and field supervision.

"Karl, do you plan any particular design innovations that other architects are overlooking?"

"Having a civil engineering background, I have always been a strong advocate of proper drainage design and field implementation. Probably the most innovative design effort that I hope to implement is a total mechanized maintained golf course.

With yearly maintenance budgets flirting at \$300,000 a year and with constant inflation, hand labor will soon be prohibitive. Traps must be designed for the turning radius of the trap rakes; rolls must be graded gentle around traps to eliminate the fly-mows. Greens must be designed slightly oversized to accommodate the tri-plex green mowers and allow for a border wide enough for turning between the putting surface and the traps. I hope to give a lot more consideration to green and trap drainage than is generally accepted. The placement of landscape material is of the utmost importance in eliminating hand labor. All of the above and more can be accomplished without sacrificing the aesthetic or the playability of the golf course.

(Continued on Page 22)

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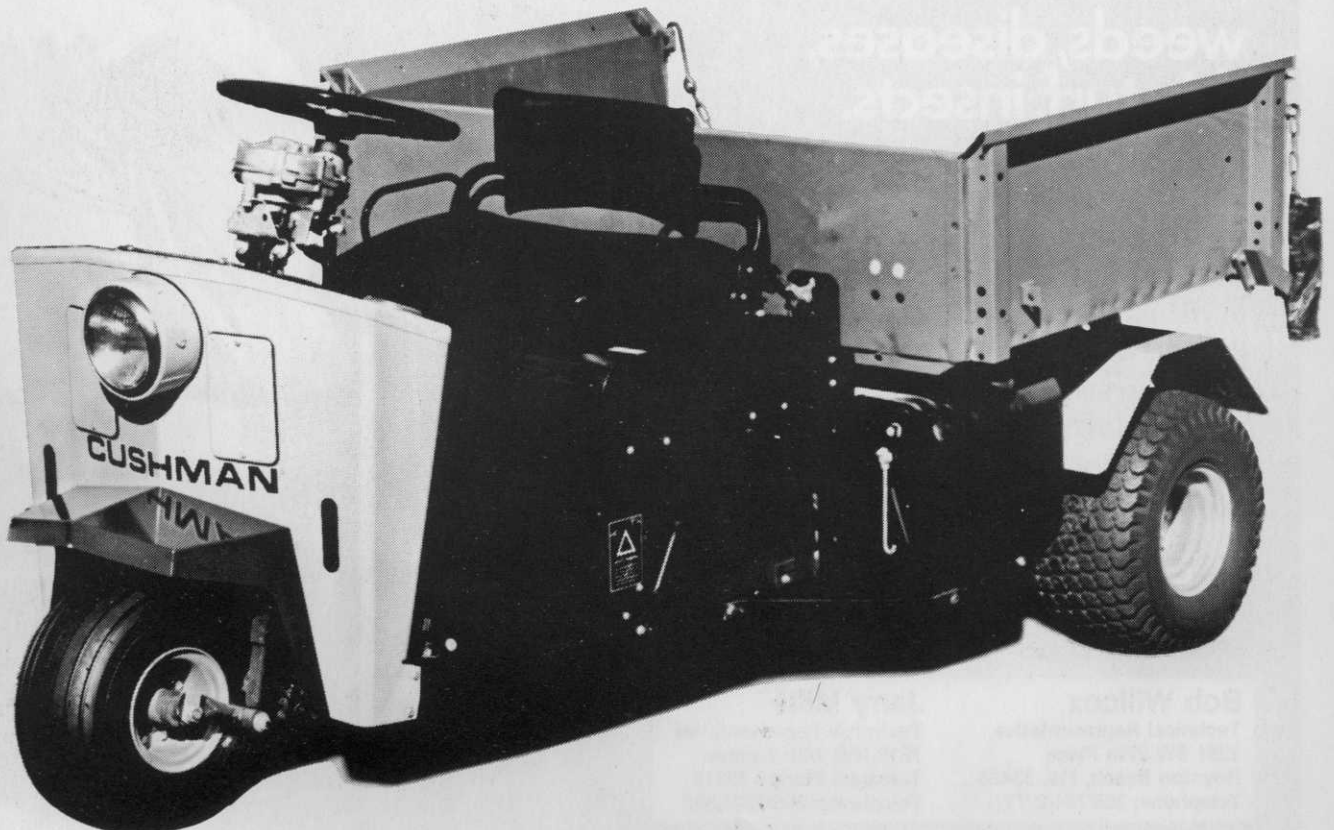
Suspension System: Torsion bars, leaf springs, front and rear shocks.

Dump Construction: Single wall.

Headlights: Single.

Seating: Single seat for one passenger with back rest and hip restraint.

Price: Virtually the same.



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Suspension System: Heavy duty torsion bars, leaf springs, front and rear shock absorbers, designed to support the bigger payload.

Dump Construction: Heavy duty diamond plate steel with rugged rear bumper for heavier loads and longer life. Easily convertible to flat bed.

Headlights: Dual lights for greater night vision.

Seating: Dual seats for two passengers with individual back rests and hip restraints, constructed for larger men, greater comfort.

Price: Virtually the same.

Summary: E-Z-GO carries a greater payload, is easier to maintain, is larger, more durably built, and safer with a wider wheel base. E-Z-GO uses top quality components from companies such as Bendix, Borg Warner, Dana, Onan, and Rockwell International.

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Florida; once the lots around the course are sold the owner generally turns the course over to the members. From that day on the maintenance budget comes under close scrutiny, and if there are any built in areas that require special maintenance attention they are generally eliminated in time. Why build them initially, why build 15 foot high features in this flat South Florida landscape; not only do they look out of place, they block views and breezes and are often built so sharp that the fairway units slide off, not to mention the erosion problems."

"How many cubic yards of fill do your designs generally require to sculpt the golf course?"

"I don't have a rule of thumb and never will have because each piece of property is different even in this typical South Florida flat land. The water table varies, the depths of muck varies; some are solidly vegetate, others sparcely and with almost no vegetation at all. All of this information and other criteria is necessary in evaluating the total cubic yards of material needed to generate the movement required for the golf course. I feel if one gets a preconceived figure of cubic yardage required for each course, the design will most likely fall short of what the final result could have been."

"Some architects don't particularly want the golf course superintendent on site until the course is planted. What is your feeling?"

"I would prefer the superintendent start at the time irrigation installation commences; not only can he gain the knowledge of where all the lines, gate valves, etc. are placed, but he can inspect the proper installation on a daily basis better than the architect. He can also handle liaison efforts that are becoming very important around this phase of construction. He can be of great help in the planning and the construction of the maintenance barn as well as seeing that all of the equipment is ordered and on hand when needed. There are countless other jobs he can do prior to starting his normal maintenance duties."

Editor's Note: Karl Litten has 12 years experience as Golf Course Designer, was formerly Vice President and Chief Designer for Von Hagge and Devlin, Inc.

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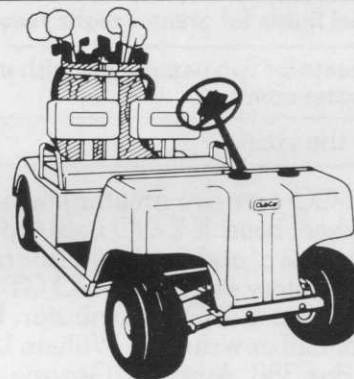
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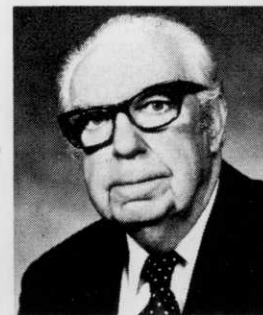
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GOLF: Where Is It Now? What's Ahead For The '80s?

By HARRY C. ECKHOFF
NGF Director Information Services



Golf, which has enjoyed almost a full century in the United States, is indeed in a very healthy state and will continue to grow in the 1980s.

This conclusion is based on numerous nationwide studies and surveys recently accomplished by the National Golf Foundation, a not-for-profit organization which for almost 50 years has been helping individuals or groups build golf courses, encouraging people to take up the game, and aiding golf courses throughout the country in improving their operations and increasing golf play.

An analysis of golf play in the nation during 1979 reveals that total play increased 2.8% during the year to an estimated 346,000,000 rounds, representing an increase of 9,000,000 rounds. For 1978, a comparable nationwide survey showed an increase of only 0.9%.

For 1979, 62% of the facilities responding to NGF's survey reported increases in play; 35% a decrease; and 3% no change.

Strong regional increases were experienced in the South Atlantic census region (6.2%); Pacific (5.4%); and Mountain (3.2%). Smaller gains occurred in the Northeast (2.2%); East North Central (1.1%); and the South Central (0.5%). A decrease of 0.9% was shown in the West North Central region.

As these figures show, golf outside the older, non-growth areas of the Northeast and Midwest increased at a much greater rate. When play is analyzed for the South and West regions only, the result is a gain of 4.3% for the year.

Population growth in the Sunbelt is creating golf participation growth as more and more golf oriented people locate in these regions.

Play at resort areas such as Myrtle Beach, Hilton Head Island, Pinehurst and Walt Disney World also aided the strong gains in the South. Increases in these areas average 12.1% for 1979.

Participation By Type of Course

Golf participation at private clubs showed the largest increase among the three major types of courses. Total play increased 3.9% during 1979, representing a gain of 4,300,000 rounds. This brings total play by private club members to 115,300,000 rounds or 33.3% of the U.S. total.

Daily fee play rose 2.9% or 4,200,000 rounds. Golfers utilizing daily fee facilities play the largest portion of total rounds with 151,400,000 or 43.8%.

As has been the trend in recent years, municipal golf play experienced the smallest gain at 1.1%. However, despite this limited growth of 900,000 rounds, municipal golf represents 22.9% of the U.S. total or 79,300,000 rounds, while accounting for only 14.9% of the facilities.

Public golfers, who make up about 80% of the nation's golfing population, play around two-thirds of all the rounds played annually throughout the country.

An in-depth study accomplished by NGF Director of Research Ed Wells in 1979 provides an excellent statistical

(Continued on Page 26)



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Golf: What's Ahead For The 80's

(Continued from Page 23)

picture of the public golfer. He (85% are males) is 42 years of age, with 13½ years of education and a median family income of \$24,100.

He shoots an average score of 90 and plays 47 times a year. Typically, he took up golf at age 22 when invited by friends or relatives to give the game a try. He rides a golf car about once in every four rounds and 40% participate in club or league competitions.

The spending habits of the public golfer show annual median outlays of \$271 for green fees, golf cars, tournament fees, etc.; \$121 for equipment (clubs and balls) and \$70 for clothing and shoes.

In short, the typical public golfer of the 80s is a mature adult with a sound education, better than average income and a genuine desire to play the Game of a Lifetime.

Golf Play Demographics

Senior golf participation continued to grow at the fastest rate showing a 7.3% increase representing 4,000,000 additional rounds for a total of 59,100,000 or 17.1% of the U.S. total. However, junior golfers made some surprising gains in 1979 and ended the year playing 24,700,000 rounds, an increase over 1978 of 1,200,000 or 5.1%. This is most encouraging considering junior golf declined 3.7% in 1978.

The largest gains in both senior and junior play occurred at private clubs. Of the 4,300,000 rounds increase at private courses, 2,700,000 were attributable to the oldest and youngest segments of membership. Municipal facilities also saw strong increases in senior and junior play while daily fee facilities experienced a decline in junior play and only limited increase in senior play.

Geographically, senior play made the greatest gains in the South Atlantic, Middle Atlantic and Mountain regions, while junior play grew the fastest in the South Atlantic and Pacific regions.

Participation by women and men, ages 18-64, showed lesser gains in 1979 with 2.0% and 1.5% respectively. One encouraging fact, however, was that women made their greatest gains on public courses, historically the weakest areas for women's golf. Largest regional increases in women's play occurred in the Mountain and East North Central regions.

The trends for increased play by mature Americans and the strong growth of golf in the South and West will continue into the 1980s as more and more people advance into middle and upper age categories and Americans look to the Sunbelt areas for their new homes.

Golf Course Development Up

The overall golf development picture for the 1980s looks promising. Both new course construction starts and new course prospects were up in 1979.

Construction began on 147 new courses in 1979; was 103 in 1978. Prospects increased from 118 to 130.

The leading states with new golf course starts in 1979 were Florida 24, Texas 11, Michigan and North Carolina each 10, Alabama and Minnesota each 7 and Indiana 6.

Leading states in the new prospects group were California and Florida each 14, Michigan, Mississippi and Texas each had 8, Minnesota, Montana, New York, Ohio and Oregon each 6.

The leading states among the 125 courses reported opening during 1979 were Florida 15, California 14, Michigan 10, Ohio 8, Illinois and Texas each 6 and North Carolina and Pennsylvania each had 4. It is interesting to note that 53.6% of the total course openings occurred in eight states.

About 14% of the new openings were short courses (executive and and par-3's); around 10% of the new construction starts in 1979 were short courses. For some years there has been no significant change percentagewise in the number of short course openings.

Of the regulation length courses opening in 1979, about 33% were private, 42% daily fee and 25% municipal. For new construction starts in 1979 the figures were 37% private, 45% daily fee and 18% municipal.

Thirty-nine percent of the 125 newly opened courses were additions to existing facilities — a favorable sign for the overall golf business.

About 35% of the current golf course developments are associated with golf real estate developments.

Of the 11,966 golf facilities in NGF's computerized inventory of January 1, 1980, 40% were private, 45% were daily fee and 15% were municipal.

Of the 5,991 golf facilities in NGF's inventory 20 years ago, 52% were private, 33% daily fee and 15% municipal. The great growth during these two decades has been in the privately-owned daily fee courses while municipal growth percentagewise remained constant. Golf facilities in the nation almost doubled between 1960 and 1980.

What's Ahead In The 1980s

A report released in December 1979 by the U.S. Department of Interior's Heritage Conservation and Recreation Service Agency contains some interesting assessments, among them:

- A majority of Americans regularly participate in some form of recreation — passive activities are still the most popular, but the trend is toward more active recreation;
- The amount of personal income spent on recreation is rising faster than consumer spending as a whole — it now totals nearly \$200 billion annually;
- Participation in outdoor recreation is higher among males than females but the gap is narrowing . . . the family exerts the strongest influence on recreation participation;

(Continued on Page 28)



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- Recreation provides relief from daily stress, increased employee productivity, greater family solidarity, physical and mental fitness, and economic gains.

Intergovernmental and public/private cooperation are among the salient messages of this third Nationwide Outdoor Recreation Plan just released. A national plan is required by Public Law No. 88-29 every five years.

Since 1965, Interior's Bureau of Outdoor Recreation, which was renamed the HCRS during the Carter Administration, has administered the popular 50% matching grant program to states and through states to their political subdivisions for the acquisition and development of public outdoor recreation areas and facilities.

For fiscal year 1980, \$300 million was approved for this program. Hundreds of golf courses have been developed or purchased by municipalities throughout the nation with the aid of the HCRS matching grant program.

How does all this affect golf? We must continue to spread the word to potential golfers that golf is fun, healthful, relaxing, a game of character and can be played during one's entire lifetime. Competition among recreational activities is keen! It should be. \$200 billion a year for recreation is big business. Some 25 or more types of outdoor recreational activities are vying for these recreation-spent dollars. NGF has numerous programs designed to attract people of all ages to the Game of a Lifetime. We seek the support of every golf-oriented organization or business.

How does a recession affect golf? We have learned by past experience that rounds of golf played are likely to increase during a recession.

I recall public golf course operators saying, during past recessions, that they had planned to raise their green fees but, due to heavy play by unemployed people, the fee structure was not changed. Even in depression times, golf is a good buy. It is 3½ to 4½ hours of entertainment for a few dollars.

And, as NGF Executive Director Don A. Rossi recently remarked, "The good thing about golf is that it is for everybody. Mama can play; papa can play; and grandpa can play with grandson. Hard times tend to bring people together. More people stay home instead of travelling."

The same holds true during energy crises. Golfers will not travel as far, but play on nearby courses usually flourishes.

Golf facility development in the 80s will continue to be an important element in the growth of golf. Even more important — courses now being built usually are quality creations prepared to compete for the attention of both public and private golfers.

NGF influence here has been considerable in providing basic planning guidelines to developers.

Due to spiraling land and course development costs, the NGF suggests that prior to embarking on a new golf venture, developers assure themselves through intensive feasibility studies that the planned golf course has possibilities for success.

Cost of developing a new 18-hole facility, including land and clubhouse could easily exceed \$3 million. Annual course maintenance costs may range from \$85,000 to \$200,000 or more. They have tripled in many areas during the past two decades.

It is no secret that there are many golf courses in a for-sale status in various sections of the nation. While this may have happened because of decreasing and shifting populations in certain regions, some may have been doomed for failure prior to opening. Much time and money can be saved by determining the project's feasibility for the area concerned.

How many golf courses will be built in the 80s? That's a tough question!

- New courses will always somehow be built where they are needed;
- Golf-oriented resorts and real estate developments will continue to play a major role in new construction;
- The trend of private and public sectors working together in the development of needed facilities for their respective communities seems on the increase;
- Successful existing golf courses will continue expansion programs as they have through the years.

My guess is that the 80s will average from 125 to 200 course openings per year.

A record high of 16 million people are now actually playing golf in the nation. They are also playing more rounds of golf than ever before.

There are more player development programs in action throughout the country than ever before. New junior golf promotion ideas are constantly being initiated. The PGA of America is sponsoring excellent junior golf programs. The NGF has long been involved in developing junior golf play.

The PGA TOUR recently committed \$200,000 for the construction of a short course and training center for youngsters between the ages of 6 and 12 at Walt Disney World at Lake Buena Vista, Florida. Says TOUR Commissioner Deane Beman, "Our real need is to expose youngsters to the game who have never swung a club or seen a tournament."

We of the Foundation feel golf is prepared for whatever the 1980s may bring. NGF has the finest staff ever. NGF is ready to provide assistance in facility development, course management and operation, player development — in fact, in almost anything that will help this great Game of a Lifetime to grow!

THREE NEW HERBICIDES FOR WEED CONTROL

Three new herbicides for the control of weeds in southern turfgrasses are Sencor, Basagran, and Asulox.

Sencor 50% Wettable Powder is recommended for use only on established areas of bermudagrass turf on golf course fairways and commercial sod farms. This product when applied to dormant bermuda prior to initiation of weed growth, will control the following broadleaf weeds: common chickweed, corn speedwell, henbit, parsley-piert, and spurweed.

Basagran is used for the control of yellow nutsedge in established ornamental turf. In Florida, this includes bermudas, bahia and centipede. Basagran is to be applied as a post-emergence to yellow nutsedge when growing actively. It may be repeated at 10-14 day intervals.

Asulox is labeled for use on Tifway 419, Bermudagrass and St. Augustinegrass only. It may be applied only to fairways and roughs on golf courses. Applied as a postemergence once per season, it will control Bullgrass (*Paspalum supinum*), Crabgrass (*Digitaria sp.*), Goosegrass (*Eleusine indica*), and Sandbur (*Cenchrus sp.*).

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Editorial

The golf course mechanic situation in South Florida has now reached emergency status. How can we continue to ignore this situation hoping it will go away?

It will not go away! General Motors estimates the mechanic shortage (just to do preventative maintenance, not repairs) for automobiles at 275,000. Japan has one mechanic for every 54 cars. Germany has one mechanic for every 82 cars. The U.S. has one mechanic for every 275 cars. Now where does that leave golf courses?

Our only logical choice is to train qualified young people to become golf course mechanics. This is where I believe Toro and Jacobsen have completely let the golf industry down. Great strides have been made to sell the red and orange machines but very little effort is made to insure their serviceability.

I would like to see Toro and Jacobsen have roving teams that tour the U.S. training mechanics. Even if this required adding a \$5.00 surcharge to each piece of equipment sold, it would be well worth it.

Alone we are lost in this issue. Segmented we can be average. Together we can come up with the answer.



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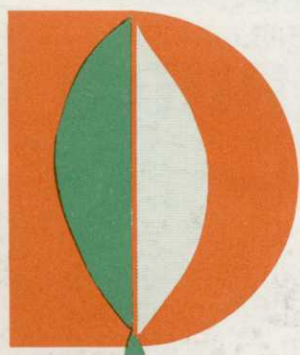
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