

## Let's Tip Our Hats to the Area's Golf Course Superintendents

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One gent who has been particularly overlooked by this department is Wayne Lippold, golf course superintendent of The Forest, the fine 18-hole development course which opened up just off U.S. 41, south of Gladiolus Drive two weeks ago.

Lippold has done an incredible job in gradually bringing the entire playing area of The Forest into superior condition. The Forest could well have opened for play several months before the gates actually swung open on Dec. 13 — that's the kind of job Lippold accomplished.

"Wayne has been working for several months along with the construction crew on irrigation installation, grass planting and attending to the 1,001 details of a new crew and maintenance procedures," Sanderson said. "His experience bringing in new courses, not only in this area, but also up north, should make the The Forest a super layout by opening day."

It did.

"Another superintendent who has been equally hard at work bringing in a new golf course is Mark Tallmadge at Burnt Store Marina," Sanderson says. "This course may be ready for play in February, depending on the germination of the overseeded grasses. It will be a very exciting, demanding short course with 18 holes initially and plans for 27 soon."

Sanderson reports that Toby Strahan, course superintendent at Bear's Paw, "spent all of the past year bringing that course to its peak for the opening day a few weeks ago. From what has been said about Bear's Paw by those lucky enough to play there, it is a real test of any golfer's ability. It features several grass covered fairway traps and water placed in very strategic areas and conditions are excellent."

They certainly are.

"Mark Hampton, superintendent at the new Wyndemere course and vice president of the Everglades Golf Course Superintendents Association, is also approaching opening day," Sanderson said. "And he's been spending many months worrying whether everything would come together at the right time to make his 27-hole golf course look its best after the ribbon cutting."

Hampton has not only been worrying and sweating the opening of the magnificent Arthur Hills-designed Wyndemere layout, he has been practically sleeping with it. But Hampton and his crew's dedicated works will come to at least partial fruition this Friday when 18 of the Naples' course's 27 holes are opened for play.

And if the year 1980 was a satisfactory period for the golf course superintendents of Southwest Florida, 1981 is looming every bit as challenging since more new development courses will be in various phases of construction.

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To name a few: Quail Creek, Fiddlesticks, Alden Pines, Wildcat Run and Sandhill Pines. These will be comparable to The Forest, Burnt Store Marina and Wyndemere and one of the most vital roles played in their building processes will be the dedication of the golf course superintendents.

And the Everglades Golf Course Superintendents Association has an abundance of this commodity on hand. ■

Reprinted from Fort Myers News-Press.

## Growing Turf-Grass Under Shade

By UDAY K. YADAV

In most landscapes, turfgrasses are grown in association with trees, shrubs or buildings. This association involves shading which reduces the light intensity and alters the quality of the light reaching under a canopy of trees, shrubs and other structures. Grasses differ in their ability to endure shade. The relative shade adaptation is as follows:

Excellent  
St. Augustine grass

Good  
Zoysia grass

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## Growing Turf-Grass Under Shade

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Medium  
Centipede grass  
Bahia grass

Poor  
Bermuda grass

In spite of these limitations, shade tolerant grasses or plants can be established and maintained under shaded conditions. Following practices are likely to improve turf-grass performance under these conditions:

1. Use shade tolerant grass. The shade adaptation of St. Augustine grass is excellent in Florida. In northwest Florida, zoysia grass has shown good shade adaptation.
2. Light intensity can be improved by pruning the tree limbs below 10 ft. or through selective pruning of branches in the crown of the tree. Undesirable trees may be eliminated from the landscape.
3. Remove grass clippings, pine needles and other debris to encourage turf establishment. Fallen tree leaves may smother the grass or provide a home for insect and disease organisms.
4. Air circulation can be enhanced by the elimination of thick underbrush and judicious pruning of overgrown shrubs. This would create drying conditions, lowering relative humidity and retarding disease development.
5. Prune shallow tree roots to reduce competition for water and nutrients.
6. Deep and infrequent irrigation to increase deeper root system.
7. Raise the cutting height to increase the leaf area index.
8. Control application of nitrogen fertilizers to avoid depletion of carbohydrates and to produce tougher tissues.
9. Redirect or control traffic in shaded areas to protect turf from wear injury.
10. Fertilize established trees by drilling or punching holes 12" deep to soil 2 to 3 feet apart from trunk to drip line.
11. Maintain a favorable soil reaction for the grass.
12. Maintain a regular weed control program to reduce plant competition and to improve the appearance of overall landscape.
13. In hard to mow or hard to establish situations, use a suitable ground cover. Monkey grass (*Liriope Muscari*) and Mondo grass (*Ophiopogon Japonicus*) excel as a ground cover in heavy shade and beneath trees (such as live oaks) which have shallow, competitive root systems. Plants such as English Ivy, Algerian Ivy, and Periwinkle are also suitable ground covers. ■

## Pesticide Ban Stirs Controversy

By LOUIS RUKEYSER

Are all well-meaning U.S. environmentalists contributing to a coming global food catastrophe?

Many objective observers have come to think so and, if they're right, an early test of Ronald Reagan's resolve to curb governmental overregulation may hit him directly in the breadbasket.

Right now, Americans are being spared any serious effects from this problem. Indeed, it has helped swell the demand for U.S. farm exports, which in turn has contributed to a strengthening dollar.

But as with the energy crisis — which most Americans refused to believe, even when it was staring them right in the gas pump — the food crisis that is taking shape is entirely authentic and is likely, in the end, to hurt us, too. And not just with rising prices.

The millions facing famine, social disruption and political instability today in lands of exploding populations and squandered resources in Africa, Asia and Latin America will need no convincing. A Presidential Commission on World Hunger, appointed by Jimmy Carter but ignored by him, termed the frustrated desire of the poor for food and other basics "the most potentially explosive force" on earth today — and a growing threat to U.S. security.

One experienced journalistic analyst of foreign affairs, Stanley Karnow, concludes bleakly that "it may already be too late for effective measures against this coming catastrophe.

So what does all this have to do with environmentalists? More than you might think. The fragile ability of many nations to feed their people has been set back by the growing list of restrictions placed on the use and sale of certain agriculture chemicals produced mainly in the U.S. Moreover, pending proposals by the Environmental Protection Agency (EPA) would ban still more farm chemicals.

Clearly, it would be a grotesque exaggeration to focus solely on this aspect of the world food crisis, which is exacerbated by factors as diverse as the rising cost of oil, the cutback in agricultural acreage and an addiction to discredited economic policies. But the contribution of environmental extremism increasingly is being recognized, too; as one shrewd Washington observer put it to me, "the more unreasonable restrictions are placed on the use of pesticides and other farm chemicals, the closer we inch to disaster."

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## Pesticide Ban Stirs Controversy

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Or listen to another expert, Dr. Jack D. Early, president of the National Agricultural Chemicals Association, who says: "Reality would have us face the fact that without pesticides, preservatives and fertilizers, crop losses would likely double. And if we continue to unreasonably restrict their use, we will have to accept at least some of the responsibility for the problems that will likely result."

As with so many problems that were presented in the 1960s as clear moral choices — but were not — the agricultural chemicals issue is a complex equation requiring judgment and balance.

Only an idiot would disregard all potential damage to the world we will be presenting our grandchildren. But too many Americans have never passed beyond the one-sided (and factually dubious) fervor of Rachel Carson's best-selling "Silent Spring," which warned against interfering with nature. The rush to ban pesticides, old and new, became a religious crusade.

Perhaps the most striking example was the most effective pesticide of all — DDT. One authority, Dr. Robert M. Devlin of the University of Massachusetts, describes it as "the safest and most efficient chemical for its purpose ever produced by man," adding that DDT alone has been responsible for saving more human lives than all the wonder drugs combined. Indeed, as far back as 1972, an EPA hearing examiner acknowledged that DDT was harmless to humans and that, properly used, it posed no threat to animal, bird or marine life. Yet it remains outlawed. ■



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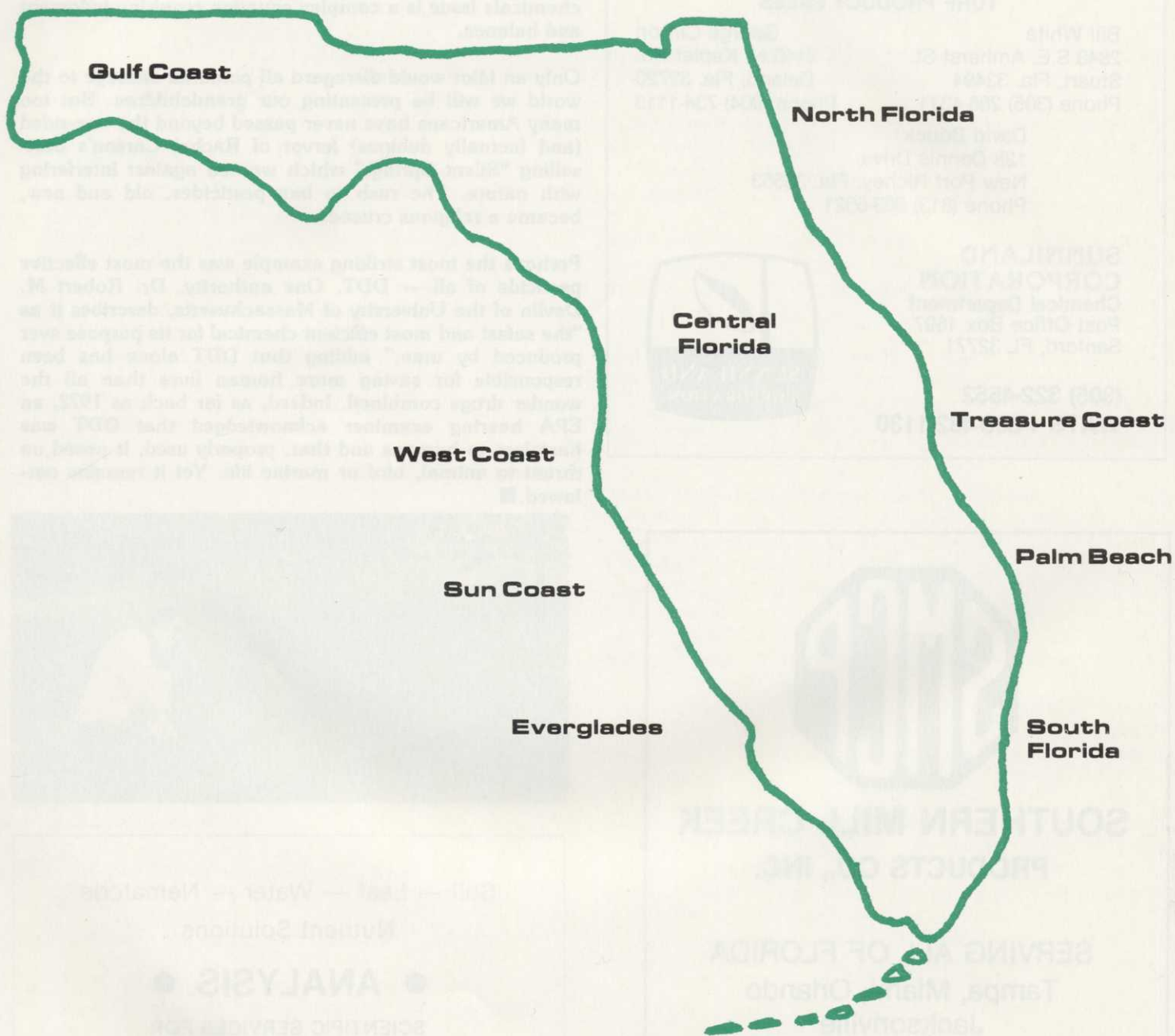
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# Down the Golf Car Path

Construction, placement of the mini-roads require careful planning

By David B. Hueber

**C**onstruction and placement of golf car paths represent a substantial investment for a club. About 80 per cent of the paths constructed are built after the golf courses already have been in operation.

The decisions for the construction and placement of these paths often rest with individuals who are facing this problem for the first time. This decision should be made with a thorough appreciation of the needs of both the golf course and the golfers.

## Why Golf Car Paths?

The benefits of having golf car paths are many. Complete tee-to-green paths permit play by golf car after severe rains without damage to the turf—and without the loss of rental fees. Golf car paths direct golfers onto a surface designed for volume traffic. This “herding” of the golfers moves the traffic away from the playing areas, thereby making golf course maintenance easier.

In addition to increasing the rounds played by golf car, paved paths can mean lower maintenance costs on golf cars. Even though golf cars are designed to traverse rolling terrain, severe jolts to the suspension system can cause damage and the golf car can go out of alignment. Poor alignment leads to inefficient tire wear and unsafe maneuverability of the vehicle.

Mud and other debris from dirt paths also can clog up the mechanical systems. Frequent breakdowns mean fewer rental dollars and fewer golf cars available when the golfers probably want them the most.

Owners of electric golf car fleets should note that complete paths will probably increase the range of their cars. (However, there will be a slight increase in tire wear.) The exact amount of electric car range will depend upon the climate of the area, the terrain of the golf course, and the age and make of the golf cars. An easy

experiment that demonstrates the difference between asphalt pavement and grass is to drive a golf car on both surfaces, noting the difference in speed and handling.

It also would be worthwhile to check with other local electric fleet operators who have complete paths. If they have good maintenance programs, they probably are getting good range from their cars and experiencing fewer breakdowns.

Another factor favoring the extensive use of golf car paths is safety. Golf car paths not only protect the turf, they also protect the golfer. Not all golf car drivers are created equal, unfortunately, and you can expect that some drivers will not use good judgment in operating their vehicles. They might try to climb too steep of a hill when the grass is wet and slippery, or they might go down a hill too quickly and lose control after hitting a bump or dip in the ground. Golf car paths can minimize some of these risks. It also is a good idea to place curbs in those areas where golfers might want to tempt fate and take a dangerous shortcut.

## How Extensive?

Golf car path installation is expensive. Like any investment, a good return for the money is desired. Several factors should be considered when determining the extent of path construction.

Two questions should be asked initially. How can the placement of paths help certain problem maintenance areas? Does the size of the golf car fleet and/or its use justify the installation of complete or partial paths? The former question can be answered by the golf course superintendent. The latter question requires careful consideration because the cost of installing complete paths will continue to increase. All of the benefits of having complete or partial paths must be weighed against the cost of current versus future installation.



*David Hueber wrote this article while he was director of golf facility development for the National Golf Foundation. He recently joined the headquarters staff of the PGA Tour, where he will be involved in the development of Wee Links golf courses (for beginners and youngsters). The PGA Tour's outreach program to bring golf to youngsters will be the subject of a future article by Hueber.*

There is no set formula for determining the exact number of golf car rounds to justify either complete or partial paths. The factors in this decision vary in importance from region to region. The type of golf course, its length, the climate, the turf, the terrain and the number of golf car rounds all must be considered.

For example, turf damage is not only made in wet weather; it may be that drought conditions and water shortages make the turf particularly sensitive to heavy traffic.

Any rule of thumb as to the number of golf car rounds that would justify complete path installation would be inappropriate for general use. An initial guideline would be that if a golf course (18 holes regulation length) has a busy fleet of about 40 golf cars, some consideration should be given to installing complete paths.

Most golf courses have paths that just go around the tees and greens. This is an efficient utilization of the

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## Golf Car Paths

(Continued)

where most golfers typically hit their shots. The guideline is to place the paths in those areas where most golfers will find it convenient.

There are instances when it would not be appropriate to have the path on the right side. There might be a lake, a creek, or an out of bounds, etc., along the right side of the fairway, and in this case it would be desirable to have the path on the left side. A path next to a hazard could unfairly come into play by exaggerating the consequences of a misdirected shot. The paths are not intended to come into play.

As a general rule the paths should be placed in the right rough about twenty-five feet from the fairway edge. The idea is to keep the path far enough from the fairway to keep it out of play and yet close enough to the areas where most golfers might play their shots. Common sense within the scope of these guidelines is the best placement determinant.

There always will be exceptions to

the rule. The design of the hole might encourage golfers to keep it on the left side; in this instance, the path should be placed where it is convenient for the golfers.

Another guideline is that the path should not cross the fairway if possible. If a path must cross the fairway, it should cross in front of the tee and never in front of the green. Placement of the path in front of the green detracts from the beauty and playability of the hole. Usually this problem can be circumvented by good planning.

Paths should always go in the rough around behind the green or alongside the green; and, whenever possible, go along the right-hand side of the tee and down the right rough. Again, there are exceptions. For example, if the tee is quite large, the golf car path can be used to divide the tee. This division will reduce wear by keeping the traffic off one tee while the other is in use. When a fairway must be crossed, it

should be crossed away from the usual shot-landing areas.

Even if a club is only planning partial paths, the development of a master plan will help avoid such problems as the crossing of fairways. Problems often arise when "unplanned" partial paths are extended to the full length of the course. If the original partial paths are not placed with their future extension in mind, the costs of extending these paths will be significantly higher. It is not unusual to see a golf course completely tear up the old paths because the old paths could not be adapted to a full-course routing.

The use of one common path for two adjacent holes is not recommended. In the short-run common paths are cheaper; however, in the long-run these savings may not be worth the risk and inconvenience. Common paths are not as safe and they concentrate activity onto a single roadway. Collisions are always possible. Play is

slowed because the path will be convenient to most players on only one out of two holes. Only in rare situations will a common path serve two holes equally well.

### A Sample Master Plan

A master plan will facilitate the successful routing of complete paths throughout the golf course. The illustration on the second page of this article is a master plan. The routing of the path is indicated by a white line. It is always easier to design the master plan on some type of scaled drawing of the golf course.

After the routing plan is designed, it is a good idea to double-check the plan with a first-hand review of the course by golf car. This exercise might stimulate new ideas and help you avoid mistakes.

Not all of the guidelines suggested could be strictly followed on this master plan because of the unique characteristics of the golf course layout. The

front nine of Ahwatukee Lakes Golf Course in Phoenix presented some unique path-routing problems for the architect, Gary Panks.

Ahwatukee Lakes is a middle (executive)-length golf course. Although the routing of the paths generally follow the established guidelines, some changes were made to accommodate expected traffic patterns.

In summation, plotting the route of any complete path requires a thorough appreciation of the needs of the golf course and the golfers. It requires a practical understanding of some planning fundamentals and a lot of common sense in applying the principles. The suggested guidelines for construction and placement of golf car paths should be utilized, but they should be suited to the unique needs of each golf course.

Finally, the development of a master plan is the key to having car paths that are functionally located and convenient to use. □

## Editorial

**Are you a certified golf course superintendent? If not, why not? Being certified must be a goal of every national member. Personal pride in yourself, profession, and club will lead you to obtain this level of distinguished excellence.**

Florida had 26 certified superintendents at the beginning of the year. Illinois leads the nation with 35, and Ohio is runnerup with 28. Following our state is California 18, Michigan 16, New York 14, Maryland 14, and New Jersey 12. The importance of these numbers shows that still only a small number of serious superintendents achieve this level. An early criticism of the program "that everyone will become certified" has not materialized.

Many young well-qualified superintendents are counting the days until they are eligible to earn this rating. After class A status has been achieved the waiting period of two years has been established. This may be holding the numbers down. The route to a certified level will average 10 years. Four years college, two years field experience, three years to earn an A rating and then the two-year waiting period. You can be a practicing medical surgeon in less time.

**Lets push for Florida to be the nation's leader in certified superintendents. Which local state chapter will be the leader?**



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