



## Outlook—'70

# What's Happening

**T**HE GOLF BOOM continues! More than 11 million golfers from all economic levels of our society play the game regularly and their number is increasing at the rate of about 10% a year.

Despite the tight money situation and high interest rates, developers continue to build new golf courses. Regardless of the type project—be it a housing development, high rise condominiums and apartments, mobile home sites, ski resorts, hunt clubs and equestrian operations or a summer theater venture—somewhere in the master plans will be golfing facilities. More than 430 new golf courses are in some stage of construction throughout the nation today.

### Public Growth Phenomenal

For many years, the majority of the nation's golf courses were private country clubs. It was only during the past decade that this picture changed. A study of NGF facility statistics for 1958 and 1968 reveals the following:

Semi-private courses experienced a meteoric rise of 115% during the 10-year period ending Jan. 1, 1969. Municipal operations increased 45% and private clubs 42% during the same decade.

The overall growth for all types was 67%—going from 5,745 courses in 1958 to 9,615 in 1968. Active golfers now total more than 11 million, up from about four million a decade ago. A recent NGF study as to where golfers play gives the following picture: 45% use municipal courses; 35% semi-private and 20% private.

### NGF's New Speedy Program

In an effort to help the nation's public golf course operators speed up snail-paced play reported on many courses, NGF initiated a nationwide Speedy Play program in 1968. This program included a series of posters and information sheets.

The posters depicted various violations of etiquette which induce slow play. A precocious little rabbit named Speedy was created to symbolize NGF's attack on slow play. Speedy is pictured as correcting these breaches of etiquette, for example—leaving carts or cars in front of greens and looking too long for a lost ball.

### Trends in Operational Policies

Many public golf courses are implementing policies and programs designed to increase golf play, especially for weekdays.

Public golf courses located in heavily industrialized communities have found that assisting various industries in organizing golf leagues and making their golf facilities available for league play on certain days has increased play and income materially. One municipal course in the greater Albany, N.Y. area reported that 40 industrial golf leagues were using its 18-hole facility in 1969.

Some courses are catering to special company and organizational events such as golf outings and picnics and are making their golfing facilities available either on a daily rental basis or individual green fee charge. A semi-private golf course operator in the greater Pittsburgh, Pa., area states his course served 97 days of such golf outings last year.

Likewise numerous private golf associations use public golf courses for their golfing activities. One New York county reported that 17 private golf associations were using its five 18-hole municipal facilities as their home courses.

Semi-private courses frequently have a low-cost annual membership arrangement which requires members to pay a green fee each time they play. A Mid-Atlantic course operator has the following scale of annual membership fees: single person \$50; husband and wife \$75; each additional family member \$15. Holders of such memberships may play 18 holes on weekdays for \$3; weekends and holidays \$4. They may bring guests who may play 18 holes by paying \$1 more than the quoted fee for card-holding members.

Use of powered golf cars has become an accepted practice at all types of golf courses in the United States. A well-managed, well-maintained fleet of golf cars can be one of the golf course's best sources of income. The golf car industry reported on June 30, 1969 (end of fiscal year) that a total of 42,260 golf cars were manufactured during the year—an increase of 15% over the 36,760 units produced in 1968. It is estimated there were 147,000 golf cars in use in 1968.

### Courses for Specific Uses

Another trend to help speed up play is to provide different types of facilities which may appeal to golfers of varying playing capabilities. The pattern that is emerging is for 27 or 36 holes of golf—18 regulation length and 9 or 18 regular par-3 or executive type (some par 4 holes). Such variety of facilities will be

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# in GOLF

challenging and interesting to golfers at all levels of capability.

The recent trend to build and operate golf courses for kids only is another movement to ease the pressure on crowded golf courses. Nine such facilities are known to be in operation in the United States today. Six are a part of private club facilities; the other three are municipal.

Bangor, Me., operates—in addition to its 18-hole regulation length layout—a 4-hole, 335-yard course for youngsters ages 6 through 12. Play is free. However, in order to be eligible to use it, youngsters must take at least one golf lesson (also free). Lessons are given every Saturday morning. Juniors up to age 16 may also attend these classes. A special city employee supervises play on the kids' course. Bangor municipal golf course officials report an average play from 25 to 30 a day by youngsters during the golfing season.

Lincoln's Junior Golf Course (Nebraska) is for golfers 15 years of age and under. Here the rules read "Adult golfers may play only during hours when school is in session or after 9:00 p.m."

More than 100 youngsters age 17 and under regularly play the Hazeltine National Junior Golf Course at Chaska (near Minneapolis), Minn. This is a 9-hole, par-3 layout about 820 yards long and built adjacent to the regular 18-hole course.

One very familiar use is the course designed as a recreational focal point for a cluster of subdivision homes. Some recent high rise apartment and condominium projects also include golf facilities for use of the occupants. About 24% of all the new courses opened in the

nation in 1969 were part of real estate ventures.

Similar projects for mobile homes are under development in many areas. One such golf and country club, part of a planned huge mobile home community in Florida, currently has an 18-hole regulation layout and a 9-hole, par-3 under construction. The project provides for 4,000 mobile homes. Purchasers of sites for their mobile homes must agree to a monthly maintenance fee which provides full maintenance for the lawns, grounds and the golf courses.

Many schools, colleges, industries, fraternal organizations, military and Veterans Administration installations throughout the country own and operate golf courses. There are also courses for use of male golfers only.

A northern New Jersey golf course developer opened a new 18-hole facility in June, 1969 (Princeton Hills Golf Academy and Country Club), which is being used solely for golf instruction and golf outings. From mid June to Aug. 30, the facility is used to accommodate five two-week golf schools serving 150 students each. Facilities include motel-type accommodations sufficient to house the student body and faculty. No memberships or daily fee play are contemplated for this operation. When not being used for the golf academy, the entire facility is available on a daily rental basis to industries and other groups wishing to hold golf outings.

Golf courses are springing up these days in many small rural areas of the nation where until a few years ago country clubs of their own existed only in the wishful

thinking of a few residents. Chief assist here has come from long term (up to 40 years), low interest rate loans available to nonprofit associations in rural communities of 5,500 or less population for recreational purposes through the Farmers Home Administration, U.S. Department of Agriculture. Since the program's inception in 1963, FHA has approved 800 such loans through fiscal 1968 for a total of \$88 million. About 600 of these projects included golf courses. Loans often cover 80% of the costs of such ventures.

The major airlines in the United States are using golf as an aid to their business. United Air Lines has a five-year contract with Arnold Palmer and offers commuters between Chicago and New York golf quizzes written by him and awards golf balls as prizes.

Eastern Airlines has its Flying Golfers Club now numbering 20,000 members with Jack Nicklaus as its flying pro, who expects to increase club membership to 50,000.

American Airlines solicits key business accounts to participate in its annual Astrojet Golf Tournament. It also pushes special golf tours to Phoenix—says it will have about 500 of them in 1969 (150% more than last year).

National Airlines sponsored a new \$200,000 open golf tourney this year. Pan American set up a VIP Executive golf school. Julius Boros supervised six week-long instruction sessions at the school located in the Bahamas.

## Golf Growth Will Continue

There is every indication that golf course development will continue

to grow in the 1970s. Some 346 new regulation length facilities opened for play in 1969 (NGF's fiscal year ended Sept. 30). Another 381 were in some stage of construction. In addition, NGF files indicate 681 new regulation course prospects and 124 new par-3 prospects for the fiscal year.

Leading states in new golf courses opened for play in 1969 were: Florida (27); Texas (23); Ohio (22); Michigan (17); New York, North Carolina and Pennsylvania (each 15); Illinois (13) and 12 each for California, Georgia, Kentucky, Minnesota and Wisconsin.

Good golf courses are expensive to build. While the cost may vary from \$200,000 to \$2 million, an 18-hole regulation length facility—

completed and ready for play—is seldom accomplished for under \$500,000. Golf courses are also expensive to maintain. Annual maintenance budgets for 18 holes run anywhere from \$50,000 to \$100,000 or more.

There is no indication that there will be any significant decline in interest rates, prices of land or construction costs. If market research results for a specific golf project are favorable, the time to build is NOW.

Golf has become a big business getting bigger each year because it fits snugly with the Leisure Age. It takes about five hours to get around the average golf course. These hours spent getting from the first tee to the 18th green provide creative use of leisure with the out-of-doors and

exercise thrown in.

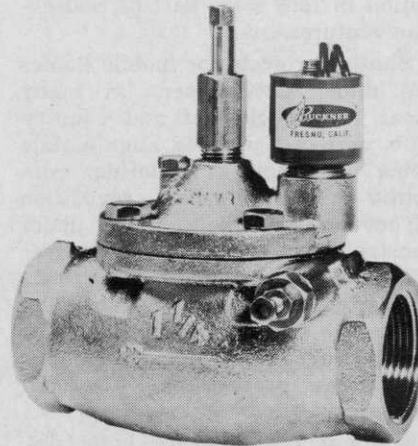
Spending by U. S. golfers for golf products will top \$1 billion in 1969—more than is spent on any other sport. Costs for golf are increasing—initiation fees and dues are rising as are green fees—to help offset mounting labor costs which were up about 8% last year.

Women golfers are increasing rapidly and now number more than two million in the nation. More are taking up the game each month. The number of junior golfers, growing faster than any other division, is just under a million.

The United States, with more than 11 million golfers and about 9,800 golf courses, leads the world in the continuing and apparently limitless expansion of the game of golf.

## Outlook—'70

# Irrigation



By H. M. CLARK  
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**L**OOK TO 1970 for accelerated use of modern irrigation principles for expanding turf acreage in recreation and beautification.

Automatic sprinkler irrigation has grown tremendously and, undoubtedly, will continue to be a major factor in encouraging the expansion and improvement of golf courses and other recreational areas, as well as beautification of cities, highways, and industrial areas.

Many things point to the sharply expanded use of automatic irrigation, including the constant search for lower maintenance costs, more efficient controlled use of water, and accurate night watering.

The landscape architect's first concern is that everything planted in accordance with his design can and will be properly maintained. He is, also, aware of the difficulty and cost of any labor, wasted water, or awkward restrictions on the use of water; and he knows that accurate and regular applications of water are the best assurance of superior land-

scaping results. These factors can apply to a school; small business, such as restaurants, motels; an entire shopping center; or highway and city street plantings.

Many new golf courses already are in the planning stages for 1970. As a result of the proved advantages of automatic systems, these new courses, as well as many existing golf courses with manual irrigation systems, undoubtedly, will get modern automatic irrigation this coming year.

The trend to retire the old manual and waterwagon methods of irrigating city and highway planting that started in a small way with the advent of dependable automatic irrigation equipment a few years ago is now in high gear.

We will see great strides in 1970 in increased production, sales, and installation of automatic irrigation on both new and old landscaping.

With the rapid increase in the demand for automatic sprinkler irrigation equipment, manufacturers

have constantly had their research departments keyed to better automatic valves, a wider range of dependable underground rotary sprinklers with improved quality, larger diameters, and better water distribution patterns. Controllers with features to meet many specialized watering requirements and simplified installation are presently or soon will be on the market.

Another factor required in this fast-growing market was the training and experience necessary to develop knowledgeable automatic sprinkler system installers. This is quite a new field, but, from only a few knowledgeable installers 10 years ago, the number has now grown to a point where there are dependable, experienced contractors readily available throughout the country.

Unless there are drastic changes in the present economy, 1970 will be the largest to date in the sprinkler irrigation industry for turf and general landscaping projects.



# Sod Industry

By DR. HENRY W. INDYK\*

**L**OOKING at the future of the sod industry obviously is a more difficult task than reminiscing about its past. A more comfortable and positive position would be to observe rather than predict.

It is evident, from a brief look into the past, that the progress and developments of the sod industry are of rather recent date. One of the most striking developments has been the rapid emergence of sod production as a highly specialized and sophisticated industry from the "pasture stage" of long standing. The primary stimulus for such rapid advancement was the realization that there was a demanding market for a high-quality sod. The industry quickly and successfully responded to satisfy this market.

Striking improvements in sod

quality were achieved through the adoption of intensive turfgrass cultural practices, improved turfgrass varieties of known genetic purity and high-quality seed. The improved quality of sod more than any other single factor stimulated the surging interest in the use of sod.

A continued increase in the use of sod as a means of establishing home lawns and other turfgrass areas can be expected as long as the sod industry continues to provide high-quality sod of improved turfgrass varieties. Statements of this nature should not be misinterpreted to mean that there shall be or there presently exists a large unsatisfied demand. The industry has kept pace with the demand and there is every reason to expect it will continue to do so.

The need for more efficient production will become increasingly critical. In view of the rising costs of all factors of production whereas the price tag on the sod has remained somewhat stable, it will become increasingly difficult to maintain a desirable profit margin. Under this type of "squeeze" that is presently in effect, it becomes highly essential to take a critical look at the total operation to seek out more efficient means of production.

Mechanization will become a prime consideration in achieving more efficient production. Considering not only the high cost of labor but also the difficulties encountered in obtaining satisfactory labor, sod production must become a mechan-

ized industry. Furthermore, there is no immediate hope for improvement in the labor market. The area in many sod operations that is most in need of mechanization is the harvesting and handling. Great and rapid advancements in the harvesting and handling of sod have made equipment available that has substantially reduced not only the costs but also the drudgery of this phase of sod production.

It is interesting to note that many of the developments in sod harvesting have been developed by individuals actively engaged in sod production. The major stimulation was their recognition of the need for achieving a more efficient means of production.

Closely associated with mechanization in the sod production industry is a need for mechanization in sod placement. A breakthrough in this area was observed at the American Sod Producers Summer Field Day conducted last August in New Jersey. Sod placement is plagued by similar labor problems as the production phase. The development of efficient mechanization in sod placement will be a major factor influencing the future interest and demand in the use of sod for the establishment of turfgrass areas.

Many new turfgrass varieties will become available. The industry will no longer be a predominantly single variety industry. It will become increasingly important to become acquainted with new varieties to de-



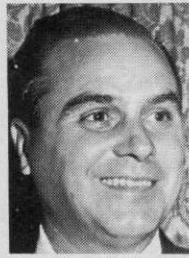
Indyk

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termine this adaptation and acceptance within a specific marketing area. Many of the new varieties will be similar in appearance. Positive identification on the basis of visual morphological characteristics will become increasingly difficult. The value and necessity of sod certification programs, as a means of assurance of genetic identity, will become more evident.

In addition to new turfgrass varieties, other technological advances can be expected. The necessity of staying abreast of new developments will become increasingly important. Various means of gaining turfgrass knowledge pertinent to the production of sod are presently available. Turfgrass conferences and field days, publications such as Weeds Trees and Turf, and membership in state, regional or the national sod producer organizations provide unlimited opportunity for keep up-to-date.

In order to be a part of a rapidly advancing and progressive sod industry, a sod producer no longer can afford to be content with the accomplishments of the 60s but must look forward and be a part of the changes that will be coming in the 70s.



## Outlook—'70

# Contract Applying

By STAN G. RAPLEE, JR., Washington Tree Service, Inc.  
Past President, Pacific Northwest Pesticide Applicators, Inc.

ON OCT. 14, 15, 16, Seattle had the dubious honor of being host to a three-day hearing on the banning of DDT. While no decision will be made until the end of December, we feel there may be some restrictions forthcoming.

The hearings pointed out two things. First, there is a well-prepared group fighting the use of DDT and all chlorinated hydrocarbons. If your state has not yet gone through this, be prepared. Opponents are organized and have a big lead on us. Under such names as "environmental council," they appeal to the public. The news media, while crying they are not biased, most certainly are. They favor headlines. Secondly, we must do something to improve our public image. Because we are mostly small businesses, and unable to do much by ourselves, I

would say one of the most important things that must be done is to at least lay ground work for a national organization in 1970. Our association, Pacific Northwest Pesticide Applicators, Inc., now includes both Washington and Oregon. The job is a big one, but it's the old story of "united we stand, divided we fall."

1970 should be a good year if we do the right things. Our cancellations indicate tighter money. A lot of people still look at spraying of trees and shrubs as a luxury, but most of them will find they have become accustomed to living without insects. They will be back. In the meantime, there are literally thousands of people who aren't aware our service even exists.

The sellers' market we have had the past few years is slowing down. More attention will have to be giv-



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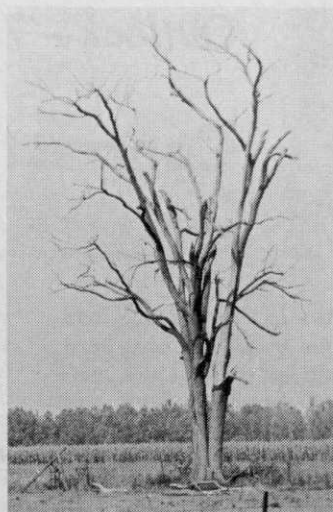


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## On the Canadian Side of Lake Erie,

If you're fighting for more budget or seeking more business that's related to Dutch Elm Disease, suggest to the people to whom you're directing your plea that they take a trip across the Canadian side of Lake Erie. The ravages of DED there should easily prove your case. A trip along Highway 3 this summer afforded the traveler a poignant look at the progressive total destruction of elms. Rondeau Park, straight north across Lake Erie from Cleveland, still has a number of healthy elms. But as you travel, east on Highway

3, passing St. Thomas and Tillsonburg, the number of diseased and dying elms increases sharply. The presence of DED is more noticeable in this region because of the high population of elms. The pictures above were made between Tillsonburg and Simcoe. They were taken from one spot by rotating the camera in a full circle. Beginning from the left, the direction is northwest, northeast, southeast, southwest, and west. Elm skeletons diminish gradually as you continue eastward. They've either fallen to the ground or have been removed. A service station attendant at Dunnsville

### Contract Applying

en to sales, but resist the temptation to drop prices. It's more important than ever to keep a good set of records, not just for taxes at the end of the year, but also for checking anytime to tell if you are making a profit.

Among other things ahead for us in 1970 is a new concept in education. The Washington Chapter of the Pacific Northwest Pesticide Applicators, Inc., will put on a 10-week course, financed and taught by our own industry.

We shall attempt to teach our employees more of the things we want them to know. In previous years, we have gone through the extension service. This year, because in reality no one knows better than we do which subjects are pertinent, we decided to teach the program ourselves.

If all goes well we hope to expand this into a 20-week apprenticeship course each winter.

One of the best ways to show a good public image is to perform a good service in a professional manner. To do this it is imperative that we send well trained men into the field.

What's ahead for 1970? In summary: a national association, a professional image, more education, and hopefully, of course, to show a profit!

## Typical WTT Business Involves Six Operations, Survey Shows

Readers of WEEDS TREES and TURF magazine represent an industry that amasses an estimated \$5.25 billion in sales annually. This projection comes from the more than 30,000 WTT operators whose businesses accrue an average annual volume of \$175,725.

The figures were disclosed in an industry survey conducted this summer. Questionnaires were sent to

2,000 readers, selected at random by computer. A 22.5% response was achieved without follow-up.

The composite business employs 22 persons, indicating a labor force of more than 700,000 in the industry of vegetation management.

Respondents indicated that their businesses are engaged in an average of six different operations. These functions are listed in Table 1. Golf

TABLE 2: TYPES OF OPERATIONS

Question: Which operation listed accounts for the major portion of your business?

	Percent*
Golf Course Superintendent	21.9%
Custom Pesticide Applicator	20.6%
Rights-of-Way Maintenance	16.4%
Arborist	16.4%
Park Maintenance	15.1%
Commercial Turf Maintenance	11.0%
Residential Turf Maintenance	10.5%
Sod Production	6.5%
Other (Miscellaneous)	2.3%
Total	120.7%

\*Multiple answers account for the percentage greater than 100.