

Great Lakes courses serve 28 percent of nation's golfers

by Lorraine Abbott

Perhaps the most significant characteristic catching the astronomical eye as it scans our North American continent is a cluster of five great bodies of water known as the Great Lakes. Closest company to these life-giving resources are the states of Michigan, Ohio, Indiana, Illinois and Wisconsin. Add to this watery family its southern neighbor, Kentucky, and you have an area stretching 700 miles long and 600 miles wide — the region about which this story of golf will be told. It is a significant story in the American golf scene, for within its sprawling, river-cut boundaries lie close to 2,900 golf courses with over three-and-a-half million people frequenting their fairways. That's 23% and 28%, respectively, of our nation's totals — a formidable standing for an area representing only 12% of the United States.

The past decade has seen a healthy increase in numbers of courses. Between 1968 and 1978 there has been a 24.6% increase while total regional population grew only 4.6%. Michigan added the most courses with 167 (up 37.5%); Ohio added 93 (up 17.6%); Wisconsin increased by 83 (up nearly 30%); Illinois, 69 (up 15%); Indiana, 66 (up nearly 24%) and Kentucky, 50 courses for the highest growth, a jump of 45%.

Looking at regional course development in the past year we find that 38 new courses (or additions to existing courses) were opened for play. This represented over 26% of the



Lorraine Abbott has been director of the NGF's Great Lakes Region since September. Director of Educational Services for the past three years, Abbott joined NGF in 1966 as educational consultant.

national total. Michigan alone had 15 openings, ranking second in the nation behind Florida's 25. Ohio ranked fourth nationally with 10 openings and Illinois sixth with 8. Courses going under construction in the region last year numbered 22, with 24 more on the drawing board.

The outlook for this year and the immediate future projects a positive picture for the continued development of facilities. A review of NGF project files, representing on-going projects in various stages of development, reveals as of this writing a total of 55 courses under construction (40% of which are additions to existing facilities) and 88 courses in planning stages (44% additions). The majority of these are nine hole projects, with the most active states being Michigan, Ohio and Illinois.

Rising taxes

Sometimes in larger metropolitan areas of the region a private operator is threatened by rising property taxes and/or the lure of real estate takeovers. In some instances, rather than lose the golf course, the municipality will step in to purchase the facility, with possible intent to lease it back for private operation. Such a move has occurred on 25 occasions during the past decade where NGF has been apprised. Perhaps equally as significant has been the strong will on the part of private operators of public courses to protect their investments by forming state associations for the purpose of generating new ideas and programs for more effective operations as well as for a show of strength in the eyes of legislators who may unknowingly impose unrealistic tax burdens on the owners. Such organizations are proving to be an asset to the growth and maintenance of that category of public golf which represents the greatest percentage of golf facilities in our region, and indeed in the country, today. To date, Michigan and Ohio have formed state associations.

The gesture of a municipal takeover where courses are relinquished by private enterprise indicates once again the value of golf to a community and the importance of retaining green belt areas for its

welfare. Federal and state funding programs assist the golf course buyer/builder for this reason, as well as to preserve our land and water resources. Kentucky is a prime example of the latter, whereby its state parks system offers more than fifteen public golf courses, made possible in large part by land and water conservation grants.

With over one-fifth of the nation's golf facilities housed in this six-state region it is not surprising to learn that of the 348 active certified golf course superintendents nationwide, 102 or well over one-fourth can be found here. In fact, Illinois leads all other states nationally with 32 CGCS personnel. A survey of a sampling of these provided information on climatic conditions and their effect on course maintenance in various parts of the region. Temperatures range widely here, with moderate to high humidity and precipitation throughout the year. Detroit reports that 34-36" is not unusual rainfall during a year. Winters stretch from December to March in most areas, with sub-zero mercury and deep, long-standing snow cover on many a day. North-eastern Illinois logged a record 114 days of snow cover this past winter, at times as much as 60" in Chicago. Southernmost state, Kentucky, on the other hand escaped the snow, suffering instead much rain, sleet and ice.

Climate

Our temperate-zone climate lends itself well to the cooler strains of blue- and bentgrasses. Most courses will maintain bluegrass fairways with either bluegrass or bentgrass tees and bentgrass on the greens. A few highly exclusive clubs will sport bent fairways as well, such as the prestigious Muirfield Village Golf Course in Dublin, Ohio. Roughs are generally composed of bluegrass and fescue. A milder climate prevailing in southern Illinois and Indiana will permit Bermuda grasses and the increasingly popular zoysia to be sustained. Present but unwanted by most superintendents is the familiar *Poa annua*. Some tolerate it, others attempt to combat it, and in a few instances one will "join it".



Typical landscape of the Great Lakes Region includes gently rolling terrain and scenic tree cover. This is Cog Hill Golf & Country Club, Lemont, Illinois, owned and operated by Joe Jemsek.

Freshly constructed Hulman Links Golf Course in Terre Haute, Indiana represents a more southern part of the region.

Winter left much for Great Lakes turf managers to do this spring. Bob Williams, veteran superintendent in the Chicagoland area, reported large amounts of pink and grey snow mold damage to tees, greens and sodded areas. "The quick onset of winter brought a snow cover before the ground had the chance to freeze, resulting in a 'greenhouse effect'", said Williams. "Many were caught without the opportunity to spray for the disease, and those who did spray still found the problem this spring." Dr. John Street, turf specialist at the University of Illinois, reinforced these remarks and added reports of winter kill downstate where turf was exposed to ice and freezing rain. Recovery has been slow due to an extremely cold spring in central and northern portions of the region, thus delaying the effects of treatment and growing weather until late May-early June. Frost was recorded as late as May 20 in northern Illinois.

Williams further reported the prevalence of insects and compaction in greater amounts this year — a situation remedied by frequent aeration to break up the topsoil. Overflowing rivers in the downstate flatlands of Illinois, Indiana and Ohio created much debris and ice damage. Tree and rodent damage were concerns in some areas.

By contrast, Kentucky experienced a relatively mild winter according to Thomas Stoker, manager of Louisville's nine municipal courses. "Our biggest problem wasn't from the weather", he replied, "but from damage caused by sledding".



Pests

Aside from winter snow mold in hard-hit areas this spring, turf diseases most frequently encountered throughout the region include Dollar Spot, Brown Patch, Fusarium Blight, Pythium and Leafspot. Insects and pests commanding the attention of many superintendents were reported to be cut worms, sod web worms, white grubs, moles, Bill Bugs, Cinch Bugs and the much talked about Ataenius Beetle — a major topic at the Chicago District Golf Association's spring greens seminar.

Curtailling the growth of crabgrass, goosegrass and once again, *Poa annua*, was an additional challenge mentioned by some superintendents. Good success was reported in treating for these diseases and pests through the use of contact and systemic

fungicides and pesticides — both in wet and dry applications.

Budgets

Maintenance budgets reflect large amounts for chemicals in addition to fertilizers, water for irrigation, equipment repair/parts, and by no means least, labor costs. Labor is becoming an increasing problem for some municipalities. Louisville's Thomas Stoker points out, "Our biggest problem is trying to obtain good seasonal help. Funding has been reduced to where we can't afford the Federal minimum wage, although we do somewhat exceed that set up by the state."

Again, like many other regions, large metropolitan area courses are facing a major challenge in dealing with the increasing shortage and expense of water — so much so in the Chicagoland area that a research proj-

ect has been launched to test the effects of recycled wastewater on local turfgrasses. Instrumental in the project are local chapters of the Golf Course Superintendent's Association, the Chicago District Golf Association and the University of Illinois, all working in cooperation with the Highland Park Sanitary District. If successful, the project will stimulate more districts in the 5-county area to consider a means of recycling their water for golf course irrigation. Such a move would not only better utilize this precious resource but would do so in a manner that may well reduce the expense of disposal while at the same time enable the municipality to comply with federal regulations for wastewater purification set by the Environmental Protection Agency.

As is typical for other regions of the country, budgets for maintenance range widely — from \$75,000 to \$125,000 in midsized Springfield, Illinois to a range of \$120,000 to \$200,000 in metropolitan Detroit, and all points in between. According to Mark Hardyman of Muirfield, LTD in Dublin, Ohio, "A nice private club could range between \$200,000 and \$300,000; but

most 18-hole courses average about \$180,000, or \$10,000 per hole." A survey of nineteen facilities in northern Illinois and Indiana showed maintenance budgets ranging between \$82,000 and \$230,000 with a median amount of \$156,000. This survey also revealed a range in superintendent salaries from \$14,000 to \$38,000 with a median of \$23,400. Seasonal help added to the crew varied from 3 to 20 workers, the median number being 6.

Maintenance

The barometric nature of maintenance costs has direct effect on the overall expense of course operation. This in turn will influence the level of greens fees for its players. "Golfer News," a popular northeastern Ohio newspaper based in Cleveland, reported that "Greens fees will be up at practically every golf course this year (1978) The trend has been for maintenance costs to take ever larger bites out of increased income. A five year comparison between 1972 and 1977 shows an increase of 41.9% in the maintenance costs per hole."

As reflected in a regional survey of GCSA chapter officers, specific main-

tenance practices vary according to the particular weather conditions of a given locale. Proximity to the Great Lakes brings cooler temperatures, and generally operators in far northern portions enjoy cooler summers than their southern counterparts. A digest of survey responses revealed some common practices, with their frequency varying according to a daily analysis of weather and course usage by the players.

Mowing programs were reported as 5-7 times a week on greens, 2-4 times weekly on tees, 3-4 times a week on fairways and once or twice weekly for rough. Topdressing is done periodically as needed throughout the season while major aerifying and fertilizing is generally done spring and fall. Depending on conditions, superintendents will oversee annually or bi-ennially. Constant watch for turf diseases and pests results in a carefully planned program of chemical applications based on preestablished formulae for prevention or cure of the infections.

Education

Each spring educational seminars

RYEGRASS

the all around performer

Adaptability and versatility have made ryegrass the world's most widely used grass.

Now, with the emergence of the turf-type proprietary varieties, ryegrass can fill every need on any course where cool season grasses flourish or on Southern courses where the native grasses are winter dormant.

Long ago the public varieties found a permanent home where color is important and there's a need for an inexpensive, durable turf.

With the advent of the finer-bladed varieties, the

domain of ryegrass has expanded and it is now widely used on roughs and fairways, tees and greens.

On greens it has proven its ability to thrive when cut to putting green heights and survive nicely throughout chilly Southern winters.

Both the public and private varieties will germinate in a matter of days, respond rapidly to fertilization and produce a turf that never needs pampering.

Ryegrass — the all around performer.

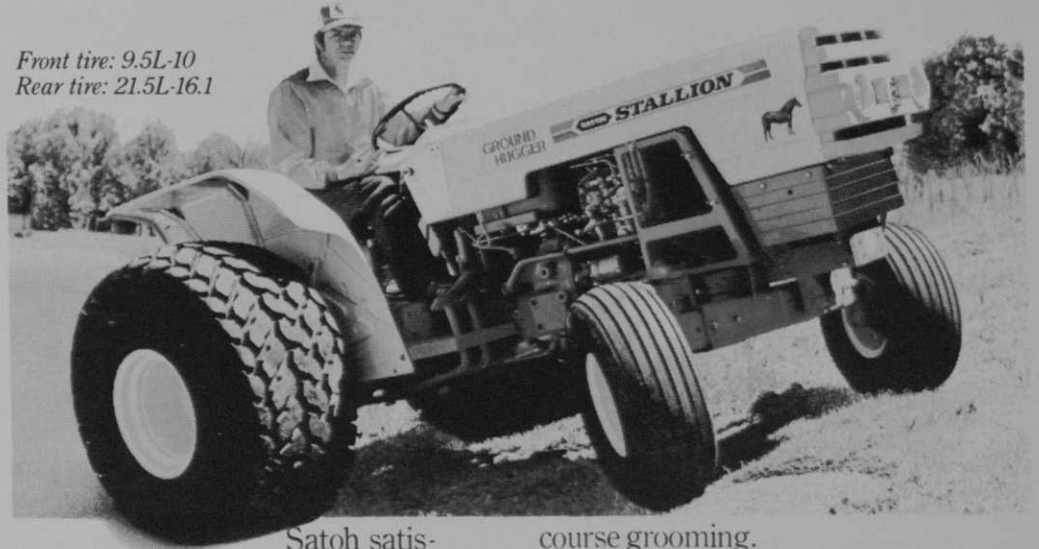
Oregon Ryegrass Commission

draw superintendents together to share information and learn better methods of taking care of their courses. Oscar Miles of Broadmoor Country Club in Indianapolis is presently researching a practice whereby his maintenance procedures will be determined solely by checking soil temperature each day. Bill Lyons of Lyons Den Golf in Canal Fulton, Ohio has developed a "Turf Testing Kit" to facilitate morning analysis of weather and turf conditions. Drs. William H. Daniel and Ray P. Freeborg of Purdue University have recently prepared a publication entitled, **Turf Manager's Handbook** detailing specifications for growing and maintaining all types of turf-grasses.

Earlier this spring while addressing a gathering of superintendents, Dr. Al Turgeon of the University of Illinois made a significant statement, declaring, "With all due respect to the farmers that plant and harvest, sustaining high quality turfgrass over a period of time is the most difficult technology demand in plant culture today. You, the superintendent, have the challenge to be a successful practitioner."

"Satoh hugs the hillside like a mountain goat. And that satisfies me."

Front tire: 9.5L-10
Rear tire: 21.5L-16.1



Satoh satisfaction starts with the Stallion Ground Hugger's dependable, smooth-running 38hp water-cooled Diesel engine. With nine forward speeds (three reverse) and dual-speed live PTO (540 and 1,000 rpm), the cost-efficient Stallion Ground Hugger is ideal for hilly terrain uses such as municipal park maintenance and golf

course grooming.

And its standard power steering gives you effortless maneuverability.

Let Satoh satisfy your tractor requirements like a pro. It satisfies mine.

**Satoh.
Satisfaction!**

Get it at your **SATOH** tractor dealer.
P.O. Box 5020, New York, N.Y. 10022

Circle 117 on free information card

St. Petersburg knows a good natural resource when they see it.



A shortage of fresh water and an overabundance of polluted saltwater bays forced St. Petersburg to take a bold step. And a refreshing one.

With the help of federal and city agencies, they set up a precedent-setting water reclamation project.

High nutrient wastewater, treated until it's nearly as fresh as potable, is being used to irrigate golf courses, parks, commercial sites and street parkways.

And Rain Bird is helping.

In fact, over 90% of the irrigation equipment in this 26-mile system is Rain Bird.

Rain Bird® sprinkler heads were chosen, in engineer Tom Thornton's words, because "the efficiency was especially advantageous; there's hardly any clogging and that keeps maintenance costs down."

Water availability has increased and costs have been reduced. Needless to say, the people of St. Petersburg are benefiting from the changeover.

And Rain Bird is happy to have been a part of it all.

RAIN BIRD®
Bringing new ideas to life.

7045 N. Grand Avenue, Glendora, CA 91740

® Rain Bird is a registered trademark of Rain Bird Sprinkler Mfg. Corp., Glendora, CA 91740.

Circle 115 on free information card