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

LOOK 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 landscaping 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.