## **GOLF DEVELOPMENT**

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California and Texas each (26), Ohio (21), North Carolina (20), Colorado and Michigan each (14), Indiana and South Carolina each (11), Illinois and Washington each (8), Arizona (7) and Virginia (6).

At year's end, NGF files also contained a list of 292 prospective golf course developments. Regulation courses comprised 245 of the prospects; 23 were for executive type courses and 24 for par-3 layouts.

Leading states in the prospect list were California (29), Florida and Ohio (19), Colorado (18), Virginia (17), Michigan (15), Illinois (12), Arkansas, Indiana and North Carolina (11), Arizona and Pennsylvania (10).

As the nation's official clearing house for golf information, the National Golf Foundation has records on golf course growth since 1931. Each year all new courses are added to NGF's computerized national inventory of golf facilities.

For 1931 — the first year for which figures are available — there were 5891 golf courses of all types in play. In 1961 — thirty years later — the total was 6623 or a net increase of only about 16%. But during the period from 1961 through 1973 the inventory jumped to about 10,870 — a whopping increase of 64% in 12 years! A look at the relative growth of all types of golf courses in play from 1931 through 1973 is shown below.

Land costs and operating expenses, including rising taxes, make it increasingly difficult for memberowned clubs and private courses to financially survive in many communities.

More financial resources available to municipalities. Among them are sale of general obligation or revenue bonds, Federal grants, private development with leaseback and outright public or private donations. Among the Federal programs that have assisted municipalities greatly in recent years are those of the Bureau of Outdoor Recreation (Department of Interior). These are fifty percent matching grants for land acquisition and development of outdoor recreation facilities and the Federal surplus property program whereby certain Federal lands are conveyed gratis when used for recreational purposes.

Current emphasis on recreation and open space has created more official and citizen support for golf/recreation complexes. Such complexes often include, in addition to a well designed and constructed golf course, tennis courts (sometimes lighted for night play), swimming pools, artificial ice skating rinks, playground and picnic areas, a community center building, camping, hiking, nature study and sometimes ski areas.

All the above listed factors are making it easier to sell a municipal golf course proposal to the public. While many new municipal golf information on these services contact Don Rossi, Executive Director, National Golf Foundation, 707 Merchandise Mart, Chicago, Illinois 60654.□

## Future Of Turf Research Toward The Basics

The need for stepped-up research to obtain basic information related to turfgrass was emphasized by a Cornell University scientist.

Prof. John E. Kaufmann, a turf specialist at the N.Y. State college of agriculture and life sciences, Cornell, said that the trend is toward basic research in turfgrass science.

"Turfgrass science must progress beyond the point of merely summarizing research information based on observations," he said.

Kaufmann made his remarks in a talk discussing future directions of turfgrass research at the Cornell Seed Conference in December.

Pointing to the uniqueness of turfgrass science, Kaufmann said that many species of grasses are used as ground cover for home grounds, athletic fields, and recreational areas under a wide range of climatic and soil conditions across the country.

"Despite tremendously divergent growing conditions facing turfgrasses, they are universally expected to do well," he pointed out.

Home lawns, for example, are subjected to wear and tear of a variety of physical as well as environmental stresses such as human traffic, heat, cold, drought, shade, and sometimes floods.

"No one dares to walk on vegetables and flower beds, yet people expect the lawn to do well under heavy traffic and play," Kaufmann pointed out.

Growth and performance of grasses are highly variable because of extreme environmental variations under which they are to survive.

"What works for one turfgrass professional does not necessarily work for another," he said.

In developing research, emphasis should be placed on the effect of stressful conditions on growth, development, and related characteristics of the grasses.

"The object is to come up with a prediction of the performance of a turfgrass species or variety under a specific set of growing conditions," Kaufmann said.

Table 3. Four decades of golf course growth.

TYPE Private Daily Fee Municipal	1931	1973	CHANGE
	4448	4825	+ 377
	700	4610	+3910
	543	1436	+ 893
Totals	5691	10,871	+5180

The tremendous growth in public golf courses reflected in the above figures brings clearly into focus the trend in golf course development in recent years. Golf no longer belongs solely to the few; it is Everyman's game.

Population growth, urbanization, more leisure time and increased personal income and mobility continue to put enormous pressure on public recreation facilities including golf courses. A good solution to the demand is more municipal courses owned and operated by cities, counties, states or regional park-recreation districts.

Why municipal golf courses? Practical politics and economics dictate such action.

courses have been built in recent years, NGF studies reveal there is still an enormous need for more public golf facilities in numerous areas throughout the nation.

Providing assistance in the planning and development of golf courses is one of the principal functions of the National Golf Foundation. Highly trained NGF facility development consultants are available to assist golf course planning groups in making feasibility studies to ascertain their need for golf and outlining a plan of action including methods of financing and operation. Facility development consultants are located at eight strategic locations throughout the country. For further