

Golf course equipment: A history of progress, initiative



Photo courtesy of Mel Lucas

By CLAY LOYD

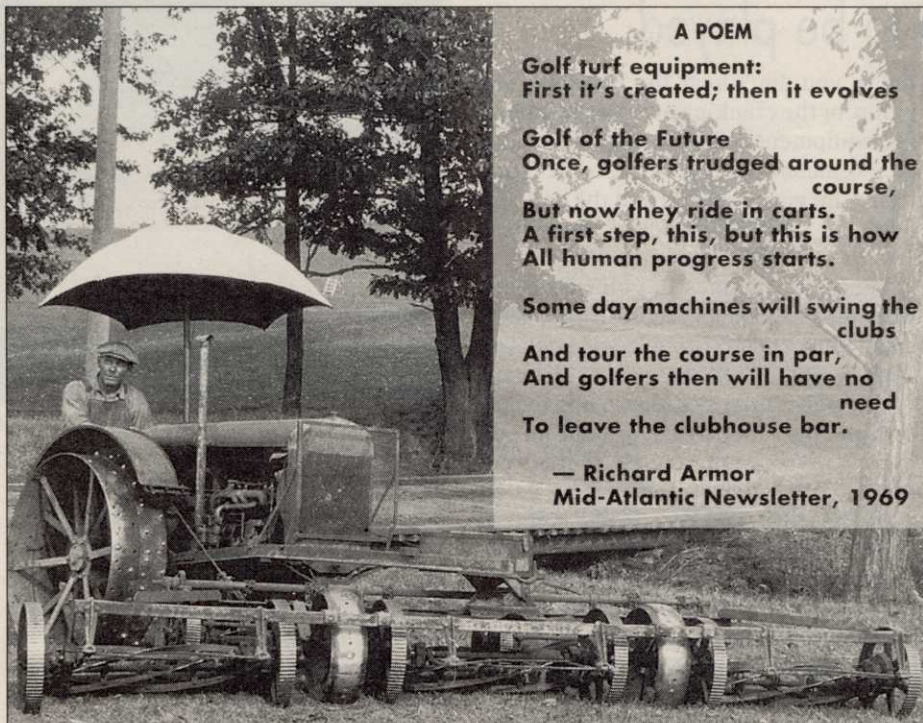
Roughly a half millennium ago, the only use made of the linklands of northern and eastern Scotland was to pasture sheep. They found shelter in natural hollows. Turf, such as it was, consisted of bentgrass and some fescue with stiff blades. The sheep kept it mowed. Rabbits were among the other animals that shared the land. They dug holes. Then, as some accounts would have it, bored shepherds began challenging each other to see who — using the staffs that were the tools of their trade — could strike the most rocks into the rabbit holes. But look out. Don't land in those hollows.

That, they say, was the beginning of golf. It really took off as railroads came in and began transporting people from the cities to the coasts on holidays and weekends to see how this new game was played. Soon, the city folks, too, were swinging golf clubs. Then they carried their newfound sport back to town.

And grow golf did. Eventually, it became a struggle to keep pace with the demand for more and better golf course management equipment. It's easy to see how such an industry has grown up around the game. Those hollows where sheep sought refuge centuries ago, for example, would become the bunkers of today and would have to be maintained.

The rabbit holes of yesteryear would someday be the cups of modern golf and would need to be leveled, and lined to

A retired director of publications at GCSAA, Clay Loyd is an active member of GCSAA's Historical Preservation Committee and has written a book about the association's history.



A tractor-driven National Mower five-gang mowing unit, circa mid-1920s.

A POEM
**Golf turf equipment:
 First it's created; then it evolves**
Golf of the Future
Once, golfers trudged around the course,
But now they ride in carts.
A first step, this, but this is how
All human progress starts.
Some day machines will swing the clubs
And tour the course in par,
And golfers then will have no need
To leave the clubhouse bar.

— Richard Armor
 Mid-Atlantic Newsletter, 1969

Photo courtesy of National Mower Co.

prevent collapse. And — try though they did to keep the grass cut — those sheep eventually would have to go.

This is a quick look at the evolution of some of the many pieces of golf course management equipment required to build and maintain the venues for the game today.

The first real breakthrough came with the invention of the mower. You might call it the superstar of the century in the golf course management equipment inventory. "Mowers," wrote Drs. Charles V. Piper and Russell A. Oakley in their landmark book *Turf for Golf Courses* in 1917, "are the most essential element on every golf course."

That was true in the beginning, and it is true today.

Until the mid- to late-1800s, scything was about the only practical way to cut grass, except for sheep. But scything was only effective when the grass was wet. That meant you had to get up before dawn to take advantage of the dew. And it took teams of women and children following the



An old Toro walkbehind greens mower.

Photo courtesy of The Toro Co.

"scythen" to collect the clippings.

Most of the credit for advancing beyond the scything era should go to Edwin Beard Budding, an engineer from Gloucester, England. In the mid-1800s, he adapted rotary knife machines used in textile factories to remove nap from cloth and invented what is believed to have been the first mechanical lawn mower. Its main advantage was that it could cut dry grass.

After obtaining a patent, Budding and a partner began granting licenses to manufacturers, and the commercial turf man-

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Collections of antiques on view at MSU, Penn

Probably the two best collections of vintage golf course management equipment in the world are the Dr. Kenyon T. Payne Collection at Michigan State University and at Mascaro/Steiniger Turfgrass Equipment Museum at Pennsylvania State University.

During his life, Payne gathered more than 120 pieces of antique equipment under one roof. Along with other groups and individuals, the Golf Course Superintendents Association of America (GCSAA) has added to the collection.

Among the many artifacts at Michigan State are a Turferator (an early aerifier), an Ideal greensmower, a Caldwell demountable roller/brush, a Thompson wheelbarrow seeder, a Shawnee-Worthington greensmower, steel horse hoof plates and a Paddleson leather horse boot.

In the tons of antique iron at Penn State are such pieces as Mascaro's prototype aerifier; a creosoted, wooden irrigation pipe from a golf course; an early Greensaire turf aerator by Ryan; a Royer soil shredder; and a Worthington tractor.

Payne was a turfgrass scientist and educator. Mascaro, an entrepreneur as well as an inventor, is remembered for his "Verticut" mower to remove thatch from greens as well as for his aerifier.

One of the best places to see modern and new golf course management equipment is at the huge GCSAA Golf Course Conference and Show held annually in a major Sun Belt city.

A COMMENTARY

A historical perspective of the golf course greenkeeper

By MEL LUCAS

As we enter into a new century where vast new horizons await all professions, we too must be prepared to advance with new technology and research. The last 25 years have pushed our industry into the most robust time a golf course superintendent has ever experienced.

Every segment of our earning power has been dramatically influenced by mowing equipment, irrigation technology, hybridization of turfgrass cultivars, biostimulants, putting green construction, fertilizer and chemical specificity toward fine-turf management, educational opportunities through journals, conferences geared toward turf care and the strong promotional activities of the Golf Course Superintendents Association of America (GCSAA).

We must take note that in no small way, the environmental movement has helped us a great deal.

How did we get to this point? We should reflect on our humble beginning. Oftentimes superintendents refer to ourselves as a bit of art and a bit of science. This is, of

course, preaching to the choir. Let us trust that the choir is well informed as to where we are and from where we came.

Many people judge us on an individual basis, be it private or public golf course. As much as GCSAA makes people aware of an honorable profession, there have been times that we have been cast as a true artisan of turf grooming; times we have been vilified via TV coverage; and times regarded as journeymen, as perceived by a judge during a case involving geese killed on a New York golf course many years ago.

The very first mention of a person responsible for the golfing grounds was in 1774. The records from The Royal Burgess Golfing Society of Edinburgh mentioned that "a boy was engaged to convey messages to and from members, to serve as waiter at dinner, carry the Captain's clubs and to alter and mend golf holes on the links." Later in their records of 1774 the titles he was given were "our cady — our officer — our greenkeeper."

The terms "greenkeeper," "keeper of the green" and "custodian of the links" have been used throughout the

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The profession of greenkeeper has come a long way since the days of the boater hat and the first steam-propelled mower (circa 1910s).

Photo courtesy of Mel Lucas

Greenkeeping: a work in progress

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years, and are now shared with the title "golf course superintendent" in the British Isles.

Looking at the technologies we deal with today, one must ponder the marvel of the major step forward made by Robert Gay. His invention of an instrument to form holes was purchased in 1828 by Musselburgh Golf Club. This is the first reference to such a tool. If we accept that golf came into being in 1457 and 371 years later the first greenkeeping tool was created, it must have produced a major impact on greenkeeping.

Prior to this invention, the greenkeeper was noted mainly for his ability to cut a circle and extricate the soil, by hand, in such a manner that the surrounds of the hole were not damaged. Should we dare think that this invention might have negatively affected their earning power?

When we read the wonderful books written from 1890 to 1910 that not only considered the play of the game, but included its history and the role people played in its development, we learn in-depth accounts. Throughout these volumes come the passages of the greenkeeper's bent in life. His basic, if not only, duty to the golf course was to change cups, tend sheep and repair rabbit burrows as well as iron skelps (divots).

Horace Hutchinson wrote in *Golf Greens and Greenkeeping* (1906) that the rabbit was known at some courses as the "chief, and almost the only greenkeeper."

Hutchinson continued that "the rabbits crop the grass short and produce an admirable quality of springy turf."

The names of early greenkeepers are legend in the golfing world. Among them, Hurd, Dunn, Robertson, Denham, Gourlay, Gunn, Park and Tom Morris all worked prior to the turn of the century.

As we read into "Auld Tom's" background of greenkeeping prowess, he was very much in favor of sand top dressings, and often. He was a beloved figure in St. Andrews as well as all of Scotland. His expertise had him visiting many courses to advise on maintenance as well as architectural changes.

It would be appropriate to say that he pushed the greenkeeping envelope a bit higher.

In North America golf was birthed in 1880. A Mr. McNulty was paid for his services in connection with caring for the green. In 1894 St. Andrews (N.Y.) engaged a professional (not named) to take general supervision of the links, mend the balls and clubs and practice with the members.

As golf courses have turned 100 years old, the club histories are sketchy on greenkeepers. However, the closest known names are Tom Fay at the Country Club in Brookline (Mass.), 1887; Willie Tucker at Maidstone (on Long Island, N.Y.), 1894; Harry Grindlay at Los Angeles Country Club, 1898; and Perin Slocum at Misquamicut (R.I.), 1901.

The early ranks of greenkeepers were made up of Scottish immigrants, many of whom had worked under Tom Morris. We saw Donald Ross start as a greenkeeper, to become one of the best-known golf architects.

Peter Lees was acknowledged in The

Chronicle of The Royal Burgess Golfing Society of Edinburgh 1735-1935: "Greenkeepers, as we know them today, for a special branch of the professional side of golf which sprang into prominence during the latter half of last century. In effect, a new generation of greenkeepers arose. Barnton's (1895) first greenkeeper was Lees. He moved on to Mid-Surrey in 1911."

Golf was becoming big business in America at the turn of the century and all of the suppliers of any description in golf

in the UK looked west for a new fortune to be made. The suppliers of fertilizers, chemicals and signage opened distribution centers in New York and Chicago. They published books on how to keep grass growing and spawned the concerns of the U.S. Golf Association (USGA) to better educate those in the business. At this time, C.B. MacDonald sought out Lees and brought him to the United States in 1914 to help build and be greenkeeper of Lido Links (N.Y.).

During his stay, Lees wrote very scientific (at that time) articles on greenkeeping for the first monthly Bulletin of Golf Course Construction and Up-

keep (Peterson, Sinclair & Miller, Inc. of N.Y.), 1916. In 1917 the USGA encouraged Pipe & Oakley of the USDA to publish *Turf for Golf Courses*. Lees then wrote the first book on practical greenkeeping, *Care of the Greens* (1918).

From the infancy of golf in 1457, 542 years later the golf course superintendent has become the Winkel-Stein in every club. Our journey through these years illustrates our lineage as pure greenkeepers to being golf professionals, ball makers, club makers, caddies

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Greenkeeping

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and stewards, all tied into one. As years progressed, each phase of this "jack of all trades" became a specialized field of endeavor. The ranks of professional golfers grew from the ranks of caddies, who in turn were assuming greenkeeping roles at clubs. The club and ball makers came from iron mongers

and carpentry trades, thus adding to the professional golfer and, too, the greenkeepers' role. In the United States it was a lucrative opportunity for the Scots to be the pro/greenkeeper and, in several cases, this still exists today.

However, major shifts in golfers' desires for better playing conditions and having a person devoted to teaching the game to them at designated times, no longer allowed one person to

handle both jobs. This became the true American way, which created two professions.

During the years since the PGA and GCSAA were formed, the two have been as far apart from their beginnings as any groups could be. But over the last 25 years the windows of golf have opened and the organizations have embraced each other. The USGA, PGA, GCSAA and Club Managers Association of

America have recognized that in unity there is overwhelming strength to better the interest of golf and everyone's intrinsic value to this game.

From the perspective of a golf course superintendent, to identify what has happened over the last 81 years, when Lees wrote his book, will take several authors to sift through the collection of the past, housed at GCSAA headquarters, in Lawrence, Kan.

AI's best

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Izaty's Golf and Yacht Club, Onamia
Legacy at Cragun's — South Course, Brainerd*

The Minikahda Club, Minneapolis
Minnesota Valley CC, Bloomington
Somerset Country Club, Mendota Heights
Tartan Park Golf Course, Lake Elmo
Town and Country Club, Saint Paul
Woodhill Country Club, Wayzata

Missouri

Blue Hills Country Club, Kansas City
Gustin Golf Course, Columbia
Keth Memorial GC, Warrensburg
Top of the Rock Golf Course, Ridgedale*

Nebraska

Beatrice Country Club, Beatrice

Nevada

TPC at Summerlin, Las Vegas

TPC at The Canyons, Las Vegas

New Hampshire

Amherst Country Club, Amherst

New Jersey

Ballyowen Golf Course, Sparta
Baltusrol Golf Club, Springfield
Brigantine Golf Links, Brigantine
Brooklake Country Club, Florham Park
Fiddler's Elbow Country Club, Far Hills
Metedeconk National Golf Club, Jackson
Newton Country Club, Newton
Pine Valley Golf Club, Pine Valley
Ridgewood Country Club, Paramus
Somerset Hills CC, Bernardsville
TPC at Jasna Polana, Princeton

New York

Atlantic Golf Club, Bridgehampton
Colonial Acres Golf Course, Glenmont
Eagle Vale Golf Course, Fairport
Old Westbury Golf & CC, Old Westbury
Schuyler Meadows Club, Loudonville
Westchester Country Club, Rye
Winged Foot Golf Club, Mamaroneck

North Carolina

Carmel Country Club, Charlotte
Carolina National Golf Club, Bolivia
Pinehurst #8 Centennial, Pinehurst*
TPC at Piper Glen, Charlotte
Wade Hampton Golf Club
Kinston Country Club, Kinston

North Dakota

Apple Creek Country Club, Bismark

Ohio

Detwiler Park Golf Course, Toledo
Fowler's Mill Golf Course, Chesterland
Sand Ridge Golf Club, Chardon*

Oregon

Black Butte Ranch GC, Black Butte Ranch
Crosswater Golf Club, Sunriver
Heron Lakes Golf Course, Portland
Oregon Golf Club, West Linn
Persimmon Country Club, Gresham
Pumpkin Ridge Golf Club, Cornelius
Quail Run Golf Course, Lapine
Salishan Golf Links, Gleneden Beach
Widgi Creek Golf Club, Bend

Pennsylvania

Chester Valley Golf Club, Malvern
Hickory Heights Golf Club, Bridgeville
Hill Crest Country Club, Lower Burrell
Huntsville Golf Club, Shavertown
Lords Valley Country Club, Hawley
Tam O'Shanter Pennsylvania, Hermitage

South Carolina

The Club at Seabrook Island
Kiawah Island Resort, Kiawah Island
Ocean Course and River Course
Ocean Course at Sea Pines, Hilton Head
Old Tabby Links at Spring Island
Palmetto Hall Plantation, Hilton Head
Whispering Pines GC, Myrtle Beach

South Dakota

Minnehaha Country Club, Sioux Falls

Tennessee

The Legacy, Springfield
TPC at Southwind, Memphis

Texas

Barton Creek Resort, Austin
Fazio and Crenshaw Courses
Palmer Course
Hyatt Regency Hill Country Resort, San Antonio

Lakeside Country Club, Houston
La Cantera Golf Club, San Antonio
Padre Isles Country Club, Corpus Christi
Riverside Golf Club, Grand Prairie

Virginia

Robert Trent Jones Golf Club, Gainesville

Washington

Glendale Country Club, Bellevue
McCormick Woods GC, Port Orchard
Royal Oaks Country Club, Vancouver
Semiahmoo Golf & CC, Blaine

West Virginia

Edgewood Country Club, Charleston
The Greenbrier, White Sulphur Springs

Wisconsin

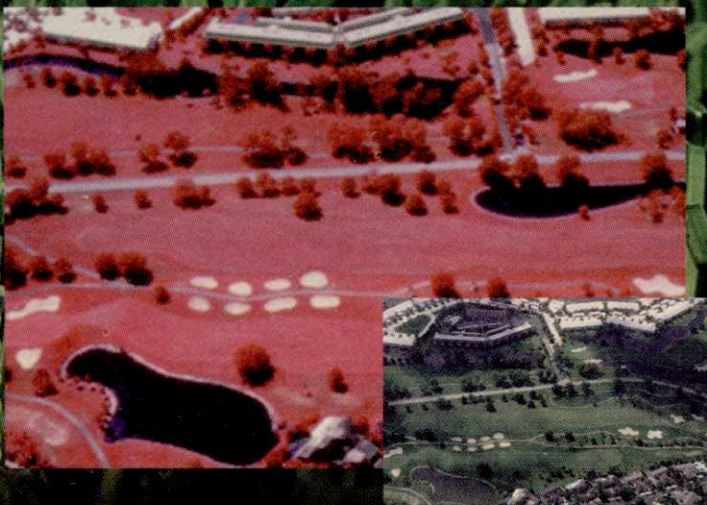
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Monroe Country Club, Monroe
Ozaukee Country Club, Mequon

Wyoming

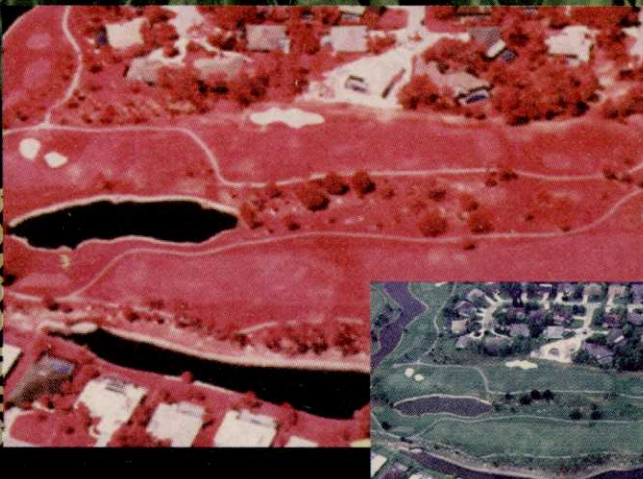
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