Golf course equipment: A history of progress, initiative

By CLAY LOYD

Roughly a half millennium ago, that is, the only use made of the linkslands 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 somehow be the cups of modern golf and would need to be leveled, and lined to 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 "scythers" 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 management equipment industry was born.

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, bio-stimulants, 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? What should we reflect on our humble beginning. Foottimes superintendents referred to themselves 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 we private or public golf course. As much as GCSAA makes people aware of an honorable profession, there has been times that we have been cast as a true artisan of turf grooming; times we have been vilified by 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 club and to alter and mend golf holes on the links." Later in their records of 1774 the titles he was given were "our caddy — our officer — our greenkeeper."

The terms "greenkeeper," "keeper of the green" and "custodian of the links" have been used throughout the years in the Sun Belt city.

A RETIRE DIRECTOR OF PUBLICATIONS AT GCSAA, CLAY LOYD IS AN ACTIVE MEMBER OF GCSA'S HISTORICAL PRESERVATION COMMITTEE AND HAS WRITTEN A BOOK ABOUT THE ASSOCIATION'S HISTORY.

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

Continued from page 11

agement equipment industry was born.
Eventually, someone got the idea of a
classic power lawn mower. One designer tried
to combine a mower with a tricycle. There
were several attempts to perfect a steam-driven
type. A gasoline-powered mower
was marketed in 1896.
The next major advance in mowing
technology came in 1910 in America when
Charles C. Worthington introduced
his own private golf course.

Modern groomers to supplement
traditional equipment are
available for triplicates. Everything is mecha-
nized, rollers included.
Greenkeepers of not too long ago had
to use hand brooms to work top dressing into
greens. Dragmats later were towed
behind utility vehicles, but several
passes were required, and soil compaction could be a
problem.

Gazining into the crystal ball
Tom Mascaro (1915-1997), once pined:
"The day may not be far off when a horse
will be a strange sight on a golf course."
The industry has kept pace with growing
demand for more and better maintenance
equipment, especially in the 20th cen-
tury. It has been done largely by listening
to golf course superintendents, then head-
ing for the drawing boards to help them
solve equipment problems.

"Industry," Mascaro said, "exhibited at
the very first GCSAA trade show, provid-
ing money that drew everybody together...
and it's been supportive ever since."
Indeed, golf course management equip-
ment has come a long way since midway
through the second millennium, espe-
cially in its last century. Today there is
unlimited.

For other work. And on and on.
Golf course management is in
field in which its practitioners don’t often long for
"the good old days." That’s because
the equipment is so much better now.

Michael J. O’Grady came to the
United States shortly after World War I from
Ireland. "Before the advent of the tractor," he
recalled in 1964, "horses were used exten-
sively for all phases of construction and
maintenance. My initial work in this coun-
try was done at Rhode Island Country Club,
where we used up to 20 former Army cav-
ally.

We used them to haul off trees,
stumps and hedges after they had been
them into manageable chunks.

"Horses also pulled scops used in ex-
caving traps [bunkers]. I feel, however,
that horses had the hardest time in cut-
ing grass on fairways. We often
worked late into the night to make it
easier and less tiring on the horses. In
filling the swamps, a horse would some-
times break a leg and had to be shot.

"Before the modern aerifier, we used to
fork the greens 8 inches deep and 4
inches apart. The putting surfaces were
rough for a week..."

The inventor of the modern aerifier,

Laser technology may cut grass, trim
trees, sharpen blades and much more.

Some people say the biggest techno-
logical advance in history of golf
course management began with the
introduction of computers to the field in
the 1980s. Today, computers control parts
inventories; schedule equipment mainte-
nance; track maintenance records; record
chemical applications; fill out government
records; watch budgets; design irrigation
systems; and control irrigation systems.

Another modern convenience is radio.

In times gone by, there was a lot more
shouting and waving of hands and arms
by superintendents to communicate, and,
often, galloping around the golf course
on horseback to direct staff.

One superintendent several decades
ago even developed a comprehensive and
apparently satisfactory semaphore system
using flags, gestures and other symbols.

In the old days, soil was aerified labori-
ously with hand forks if it was aerified at all
by anything except earthworms. The
Turferator, the early aerifier with 12 times,
was introduced in the mid-1920s. A major
advancement occurred in 1946 with the
introduction of the FG Aerifier by Tom
and Tony Mascaro.

Even more dramatic improvements
were made in the 1990s, beginning with
the use of water under extremely high
pressure to blast holes. With that, there
were no more cores to clean up. And
the wear and tear on turf was virtually elimi-
nated. Aerification could be done
quickly and more frequently, and players
could get back to their game in shorter order.

Other equipment changes
Other developments in golf course
management and the tools that it requires
as the world’s second millennium draws
to a close have dealt with such things as
a grooming of turfgrass, pesticide spraying
and computers.

Modern groomers to supplement
more aggressive verti-cutting appear
in numbers in 1996 as attachments to
triplex units. They were introduced to
the fairway in 1990.