E-Commerce —
(Continued from Page 8)

What are the downstream effects of Internet commerce on the superintendent, manufacturers and distribution?

This is the question that we, and others, have been routinely asking ourselves. Most believe that significant change over the long run is likely; however, the emotions related to that speculation range from concern, anxiety, and hostility to optimism and excitement.

In an effort to gain greater insight from both buyer and supplier members, GCSAA is planning another Internet commerce meeting in mid-June 2001 (tentatively June 11 afternoon and June 12 morning). We plan to use an outside facilitator to work with us all to reasonably predict the likely outcome scenarios regarding the following questions (and others that will be identified):

What are the likely long-term benefits and impacts on superintendent services?

What are the likely long-term benefits and impacts on manufacturers / suppliers and distribution?

What are the likely long-term benefits and impacts on GCSAA?

Is the GCSAA gaining financially from this service offering? What is the advantage to a GCSAA affiliate or superintendent member?

GCSAA, through its subsidiary GCSAA Communications, Inc., does have a net revenue sharing arrangement with XS Inc. The organization seeks financial support in various ways through most of the agreements it enters into, and uses those funds to support and provide the many other programs and services that do not pay for themselves. These include superintendent profession image efforts, career development, government relations, chapter services, information and Web site services, education development, environmental stewardship, and others.

Many advantages of this Internet commerce offering to GCSAA affiliate and superintendent members, aside from knowing that all such proceeds are directed back into services and programs benefiting the superintendent profession and industry, are described below. A few overall thoughts, however, follow:

As a result of the rigorous process that GCSAA has undertaken, and the collaborative nature of GCSAA, both buyers and suppliers have input in shaping the ultimate Internet commerce service offerings. Because of the significant amount of concern and anxiety brought about by the Internet and the inherent change at this point in history, this may be of significant value.

If approached by both buyers and suppliers as an opportunity to manage this change, with an appropriate sense of cautious optimism, there is real economic value potential for many buyers and sellers. However, this will not likely be for everyone, and again those not finding real value may choose not to participate.

What is neutrality? Can GCSAA maintain neutrality in commerce?

The association's selection of XS Inc. as a provider of Internet commerce capabilities is one of creating a valued service for its membership through a technology-oriented capability. Although commerce will be conducted through this capability, the association's position is one of neutrality. Neutrality means that the association does not endorse any vendor or product in any shape or manner. The Golf Super-Market and Golf Super-Store are venues (on the Internet) where suppliers and buyers can come together, and a buyer's need can be matched by a supplier's specific offering. Again, a functional venue is being provided; GCSAA is not taking title or making buying or selling decisions.

What capabilities will be provided in storefronts and why would I make the investment to use them?

A storefront in the Golf Super-Store provides the supplier with an instant Internet-based presence. Within a storefront, products can be listed, prices managed, and information conveyed to existing and prospective customers.

The Golf Super-Store storefront is an option that has the potential to relieve the supplier of the costs and difficulties typically associated with purchasing Internet development tools, developing web applications, hosting a site, and administrating and managing a site. Investing in a Golf Super-Store storefront can lessen the investment necessary to draw awareness to your site.

The business decision to purchase a storefront will have to weigh the costs of the annual fee and monthly maintenance fees against factors such as around-the-clock availability, convenience of an Internet-based selling application, global reach, and potentially reduced costs for order-processing, order accuracy, and administrative processes.

Further Analysis: The initial storefront capabilities have been conceived and built based on input from previous industry discussions. Further improvement is expected; input will be obtained directly from those suppliers utilizing the service. Anything is possible, and XS Inc.'s software, design and development team is continuously making changes to improve the offering.

What do I do if I have already invested in a Web site?

It is an individual supplier value decision to stay with their existing site or to utilize a Golf Super-Store storefront. A couple of complementary options:

A supplier can simply use the Golf Super-Market (exchange) - listing products for free - and paying a transaction fee (3% for chemicals only on successful trades); thus avoiding the costs associated with a storefront, or

A Golf Super-Store storefront can be used in conjunction with or as a replacement of an existing Web site. (See the explanation above for greater detail.)

How can manufacturers use storefronts and continue to involve their distributors?

A manufacturer storefront can be used to:

~Promote branded products

(Continued on Page 24)
SUMMER WILL CALL HOURS
MON.-FRI.
7:00 AM - 5:00 PM

PRODUCT DEMONSTRATIONS AVAILABLE

EQUIPMENT FINANCE PROGRAMS

New Solution

GREENSMASTER® FLEX 21
Key Advantages
- Unique flexible cutting unit
- Easy to maintain
- Easy to operate

WORKMAN® 2100
Mid-Duty 16 HP Utility Vehicle
- Unique Active In-Frame™ suspension creates extraordinary traction and ride
- Highest payload in class
- Dentless and corrosion resistant hood and bed

TORO PERFORMANCE PARTS

Pricing extended for two months through June 30th

NEW Wearables Program
May 1st - October 31st

Call Dale or Eric (ext. 284) for details
Have you thought about Irrigation Renovation?

- Why upgrade your irrigation system?
- How to assess your current system
- How to determine the scope of the project
- How to choose the team of professionals
- Discover a creative way to pay for the system

For answers to these and many other questions about irrigation renovation call your MTI sales team today!

Irrigation System Leasing/Financing Available!

PLYMOUTH, MINNESOTA
14900 21st Avenue North
763.475.2200 • 800.362.3665

FARGO, NORTH DAKOTA
4310 Main Avenue
701.281.0775 • 800.782.1031
E-Commerce —  
(Continued from Page 21)

~ Provide product literature.
~ Direct buyers to their local distributors' storefronts.
~ Allow buyers to "BUY NOW" from products listed by agents and distributors in either the net market or the storefront area.

Note: Manufacturer's stocking distributors are not required to buy their own storefront in order to have their product listings to be seen on a manufacturer's storefront.

Within the Super-Market (exchange), what is the anonymity feature and why would anyone want to use it?

Based on XS Inc.'s experience in other markets, our current belief is that the anonymity feature, which allows sellers to list products and prices within the Golf Super-Market (exchange) without identifying themselves, gives suppliers the ability to more comfortably offer cash-and-carry or unbundled prices to buyers. Stated another way, it provides a vehicle to price differentiate products that require full-service versus those that don't.

Note: Buyers who choose to purchase from anonymous sellers would still have the following:

Buyers have a 48-hour inspection period to assure themselves that the goods purchased are precisely as ordered.

Manufacturer warranties are still in place.

All products sold in the Golf Super-Market are standardized goods that will arrive in the manufacturers' original, unopened packages.

That said, it will take ongoing education of buyers to understand that products purchased anonymously are not intended to be supported by local distribution as if purchased at full price.

How is the 3% transaction fee a "value" for me?

The transaction fee is a method of pricing that allows the suppliers utilizing the exchange to pay for that functionality. If the underlying financial settlement and logistics (delivery) services are used, then added incremental operational savings exist as a result of avoiding supplier credit, billing, collection, and logistics processes. Further, ten day cash collections means greater time value of money.

As pointed out, this incremental operational savings for suppliers would be greater for some than others. Each supplier should carefully analyze its own cost of money and the related processes.

Will the Golf Super-Market and Golf Super-Store erode prices and margins in the supply chain to the superintendent?

These two questions address the same issue and that is "what is the economic role and impact of the Internet on suppliers and consumers." Although everyone understands that the association did not invent the Internet, and Internet commerce and exchanges are increasing in all markets, we do understand that by bringing the Golf Super-Market forward now, Internet commerce is being introduced and may likely be adopted more rapidly into this market.

The Internet in general, and Internet commerce specifically, has resulted in more information in the hands of the consumer. With greater understanding of price/services information, availability, and features, consumers are able to make better-informed choices prior to purchase. Although suppliers benefit from increased exposure to existing and prospective buyers, buyers have greater control of their purchases by virtue of the additional information. This negotiation will likely center around those needing full service or some established level of service, and those needing less or no service.

Although the business landscape has changed, the business relationship essentials still hold (META Group):

All business relationships are economic. In the absence of a compelling value proposition, price determines value.

Commitment is the key to building and sustaining relationships.

Individuals buy, but companies pay.

Relationships taken for granted have no value.

Performance is the key to realizing value.

All businesses today, including the association, are searching for better ways to employ the opportunities and the challenges provided by the Internet in service to their customers.

Should I Sell on the Internet?

Additional questions are "Should your company use the capabilities of the Golf Super-Market or the Golf Super-Store?" or "Should we sit and wait for this all to shake out (maybe go away)?" Once again, this based on your business strategy. In developing the business case or rationale for making this decision, consider the following benefits:

Increased Revenue

Attract New Customers - ability to reach new customers through global exposure, 24-7 availability, and overall shopping convenience.

Service Existing Customers - as compared to phone, fax, and mail, the Internet provides around the clock availability and exposure to the end customer, including the ability to advertise or suggest additional products.

Reduction in the Time to Introduce Customers to New Products - the Internet significantly decreases the time it typically takes to introduce a product and inform customers of its benefits; the cycle time of traditional catalog-based product sales, with sales training, special promotions, etc., far exceeds the time it takes to introduce and communicate new content on the Internet.

Reduced Costs

Decreased Costs for Fulfillment - traditional manual ice.

(Continued on Page 25)
E-Commerce —
(Continued from Page 24)

administrative processes, such as order entry, accuracy checking, financial settlement (credit, billing and collections), warranty administration, back-order administration, and logistics (delivery) setup, to name a few, are relatively expensive (do you know your true costs?); the Internet (and platforms such as the Golf Super-Market and Golf Super-Store) may offer opportunities to significantly reduce the cost of performing these processes.

Decreased Costs for Content, and Marketing Materials - the current cost of development, printing, distributing, and maintenance of product information, technical bulletins, and marketing materials is a considerable business expense. These costs can be reduced through Internet-based capabilities for publishing and disseminating these materials to your distribution and superintendent buyers.

Decreased Costs for Customer Service - technology platforms such as the Golf Super-Market and Golf Super-Store provide the potential to off load some of the cost associated with customer service, and then to re-deploy those strategic resources.

If the Superintendent buys from the Golf Super-Market (exchange), who provides service and how is service provided?

For the pilot group of products, chemicals, the original manufacturer would ultimately stand by its products. That said, the Golf Super-Market (exchange) is not likely appropriate for all products. Suppliers must gauge the complexity of the product they wish to sell on the exchange, and its service requirements. Product complexity such as highly specific user needs, time-sensitivity, geographic concerns, and the necessary flow of goods and services to the buyer should be considered.

Some products of high complexity rely on close-in, hands-on, pre- and post- sale support including demonstration, training, education, consultation, and same day service. These may not be good candidates for the Golf Super-Market exchange, and likely lend themselves more to Golf Super-Store as a point of contact for service, as well as product support.

Pricing?

Pricing was proposed and presented at the meeting. Based on that feedback, the pricing was simplified as follows:

**For Distributors**

- Each Distributor storefront:
  - Represents a single selling party (one user responsible for setting prices, maintaining listings and processing orders)
  - Has a unique identification number and logon identity

- Has one geographic template which specifies where the storefront can be seen
- Has listings created and managed by the storefront owner (added, deleted and edited)
- Has no fulfillment services provided by XS

Note: After the pilot, distributors will have the option of using XS fulfillment services.

Store users pay an annual subscription fee depending on the size of the site, and a monthly maintenance fee. There are no per-transaction fees or other start-up costs.

- For each storefront, listing less than 1,000 items, the fees are as follows:
  - $1,950 annual subscription fee
  - $35 monthly maintenance fee
  - For each addition 500 items, the annual fee will increase by $200.

**For Manufacturer or Brand Storefronts**

The purpose of manufacturer storefronts is to provide manufacturers with the capability to promote their company and brands while at the same time providing seamless, click-through-to-buy functionality.

Manufacturers will have the ability to create an eDistribution network; that is, use the Internet to direct buyers to their participating full service distributors where they can purchase products under their usual price and payment terms. They have the added benefit of being able to place orders and get order confirmations 24x7.

Buyers will have the ability to quickly find their favorite brands, see current product literature, labels and MSDS's and to buy in one continuous process.

Once a storefront is enabled, it can also work to provide click-through-to-buy functionality to their banner ads on GCSAA.org.

Each manufacturer storefront comes with basic functionality and features described below. Additional features and functionality, including integration with current systems, can be added according to the manufacturer's needs and marketing strategies.

**From Each Storefront, Manufacturers Can:**

- Display a catalogue of products for sale, complete with logos and product descriptions.
- Show their branded product listings from an unlimited number of participating distributor locations or sell direct from their own warehouses. i Set-up their participating distributors by defining:
  - Participating Distributor contact information
  - Products to be listed according to existing distribution or agency agreements
  - Service area to be covered by each distributor according to terms in their existing distribution or agency agreements (buyers will only see distributors in their service area)

(Continued on Page 26)
Allow distributors complete control over pricing and terms offered to superintendents according to the terms of their existing distribution or agency agreements.

Allow superintendents to buy from any participating distributor in their area.

Capture real-time reports from all storefront activity.

Store users will pay an annual subscription fee, and a monthly maintenance fee. There are no per-transaction fees or start costs.

**Base Level Capabilities Include:**

- Up to 100 catalogue items (product and pack size) for each manufacturer storefront
- An unlimited number of distributor locations from which the catalogue items can be viewed and sold
- Product search capabilities for finding specific products are limited to search by brand name only.
  
  For base level storefronts:
  
  - $20,000 annual subscription fee
  - $300 monthly maintenance fee

As part of this service offering, XS Inc will provide 40 hrs of free consulting services to assess the operational fit, potential business model extensions, and propose future integration approaches.

Note: Additional fees for enhanced features and optional functionality will be negotiated separately. Consulting fees beyond the 40 hrs will be billed at $150/hour.

**What About Sales Taxes?**

For the pilot, functionality will be added that will enable each supplier to establish its own sales tax zones.

**What About Performance, Capacity, and Reliability?**

Technical due diligence performed by META Group indicated that Digex (the hosting service provider for XS Inc.) is a premier provider of performance and reliable hosting services. Recent statistics on volume capacity, scalability, and response to peak demands indicates that XS Inc. has the capacity to meet the demands of the Golf Super-Market.

Further Analysis: Throughout the pilot and continued build-out, scalability, performance, and capacity will be continuously assessed.

**What are the Objectives of the Pilot?**

The objectives of the pilot are to "soft launch" a real solution in the marketplace to:

- Experience first hand the functionality of Internet commerce;
- Determine the most compelling "value" drivers for both buyers and suppliers;
- Guide the development of future offerings to the broader membership (launch, learn, re-launch); and
- Decide if the GCSAA, as a trusted third party, can be of value in bringing the benefits of the Internet to buyer and seller members.

**Next Steps**

A number of activities will occur prior to the launch, as well as in the initial stages of the pilot. Many are in response to the April 17th meeting.

**Communication**

Communicate the results of the April 17th meeting to the suppliers not in attendance. Continue our analysis toward clarification and resolution of the identified issues.

**Pricing**

Assess and solidify pricing.

**Pilot Development and Testing**

Identify revisions to initial pilot.

Assess the feasibility of implementing these revisions for the pilot or for subsequent releases.

Clarify storefront capabilities and communicate these capabilities to potential users of this capability.

Continue pilot planning and development.

Develop a performance model to assess the pilot.

Perform testing.

Follow-up.

Host one-on-one follow-up discussions for clarification.

Schedule a second industry commerce meeting.

**Enrollment**

- Enroll suppliers.
- Continue enrollment of buyers.

**Pilot Launch**

Launch the pilot by mid to late May 2001, continuing to enroll throughout the pilot. As a result of modifications discussed during the April 17 meeting, the pilot launch date was pushed back from the original May 1 date.
IN MEMORIAM

Jeff Nourie, a 17-year employee of MTI Distributing, Inc., and a 2-year member of the Minnesota Golf Course Superintendents’ Association passed away suddenly on Tuesday, June 19, 2001.
Jeff will be missed by everyone at MTI, friends and customers alike.

***

EDUCATIONAL TRUST FUND

An educational Trust Fund has been established for Jeff’s children (Ryan and Leah). Their mother, Tammy Nourie, will be the trustee.

DONATIONS MAY BE SENT TO:

NOURIE MEMORIAL TRUST
PO. BOX 47542
PLYMOUTH, MN 55447-7542

NOTICE TO ALL MEMBERS

ALL FUTURE JOB POSTINGS, MEETING NOTICES AND MISCELLANEOUS ITEMS WILL BE SENT VIA E-MAIL.

IF YOU HAVE AN E-MAIL ADDRESS BUT HAVE NOT RECEIVED ANY E-MAILS AS OF YET, PLEASE E-MAIL scott@mgcsa.org TO GET ON OUR LIST.

MEMBERS WHO DO NOT HAVE A COMPUTER TO RETRIEVE E-MAILS WILL BE SENT JOB POSTINGS, MEETINGS NOTICES AND MISCELLANEOUS ITEMS THROUGH U.S. MAIL.

ASSURED PERFORMANCE

Banner MAXX®
Fungicide

Barricade®
Herbicide

Daconil®
Fungicide

FUSILADE® II
Turf & Ornamental Herbicide

Heritage®
Fungicide

Primo MAXX®
PLANT GROWTH REGULATOR

REWARD®
Landscape and Aquatic Herbicide

Scimitar gc
Insecticide

Subdue MAXX®
Fungicide

SYNGENTA PROFESSIONAL PRODUCTS
PO Box 18300, Greensboro, NC 27419-8300

Important: Always read and follow label instructions before buying or using these products.

Banner MAXX®, Barricade®, Daconil®, Fusilade®, Heritage®, Primo MAXX®, Reward®, Scimitar®, Subdue MAXX®, and the Syngenta logos are trademarks of Syngenta.
April 17, 2000 (Venice, Calif.) -- Struggling along at mile 25 of last October's Marine Corps Marathon in Washington, D.C., Ruth Gursky heard the organizers announce that anyone who didn't make the seven-hour cutoff time -- just minutes away -- wouldn't get a medal. So Gursky, a New York attorney in her mid 40s, summoned her reserves and picked up the pace -- only to find a big Marine blocking her path. "I wasn't about to let all my hard work be wasted," she says. "I said, 'Move it!' and pushed him out of the way." With an official time of 7 hours and 12 seconds, she got her medal.

The Marine wasn't the only obstacle between Gursky and that finish line. "I'm a little chunky," she says. "And I've had two knee operations." What's more, she'd been seriously injured twice during the past few years: once in a fall down subway stairs and once in an automobile accident.

But though she seems an unlikely candidate for finishing a 26.2-mile race, Gursky is among a growing number of neophytes who are swelling the ranks of marathoners. "The spectrum of ages and body types now entering marathons has definitely widened," says Ryan Lamppa, a researcher for the U.S.A. Track & Field Road Running Information Center. According to Information Center figures, the number of people completing marathons nearly doubled from 1989 to 1999, jumping from 250,000 to 435,000. Many marathons have now extended their cutoff times to seven, eight, and even nine hours so that people of all abilities can finish.

Still, whether it takes seven hours or nine, a marathon is no walk in the park. How do people like Gursky do it?

"It's not that they've stumbled onto some magical exercise potion. Rather, they're relying on some tried-and-true techniques that can help anyone struggling to establish and stick with an exercise habit.

For Gursky, one of the most important elements was having workout partners. Months before the Marine Corps Marathon, she joined Jeff Galloway's Marathon Training Program, which provides coaching and sets up group workouts around the country. Galloway, a former Olympian, promotes a run/walk approach to marathoning that, because it's easier on the body, has proven to be a good alternative for people who might not otherwise be able to go the distance.

"I couldn't have done it without the group," says Gursky, noting that there's more camaraderie than competition among the members. "They motivated me and I motivated them." Adds Lamppa, "Training groups are one of the biggest factors behind the marathon boom. I haven't heard of one training group that doesn't have a success rate of 90% or higher."

Indeed, reams of research shows that having buddies to work out with is a crucial element that keeps people moving. "Over and over again, studies have found that one of the factors influencing whether people will become active or continue being active is social support," says James F. Sallis, PhD, a professor of psychology at San Diego State University who studies exercise motivation. "Having people around to talk to while you work out and who are encouraging can be very motivating."

Exercise partners, Gursky found, also make it harder to blow off a training session. "This is a girl who never sees 5 a.m.," she says. "I cherish my sleep more than money, but I got up and out every morning to train because of the group." Indeed, while workout partners may be sympathetic to your struggles, they won't necessarily make it easy for you to give them the slip. "If you don't show up, they'll be calling and emailing you," says Victoria Seahorn, national director for Jeff Galloway's Marathon Training Program. "If you're going to have pressure, that's the best kind."

Another reason for Gursky's success is that her exercise group also provides coaching. Under the watchful eye of a coach, you're more likely to improve your technique than if you were training alone. And you're more likely to train sensibly -- which is especially important for beginners who are at particular risk for injury. Sallis' research, in fact, has shown that injuries are the number one reason people quit exercising. So anything that can keep you injury-free -- whether you're training for a marathon or simply trying to maintain a three-day-a-week cycling habit -- can make a big difference.

Having a specific goal can be helpful, too. Gursky's was that 7-hour, 12-second date with destiny last October, but a goal doesn't have to be quite as lofty as a 26-mile marathon. It could be anything from losing weight to getting strong enough to walk five miles in an hour. Yet it's also important to make your goal a moving target, says Sallis. "The danger is that once you reach the goal, you'll lose interest," he says. "Ideally, you'll use a goal to help you get started, then find something along the way that inspires you to make it a habit."

That, in fact, has been the case for Gursky. She still works out with her running partners, and instead of resting on her laurels, she plans to run the Chicago Marathon this coming October. "When I crossed that finish line, I was totally exhausted and totally fulfilled," she says. "I am total proof that anyone can do it."

(Editor's Note: Daryn Eller is a freelance writer in Venice, Calif. Her articles have appeared in Health and Cosmopolitan magazines and many other publications.)
The Evolution of the Golf Course Superintendent

Origins of the Game

Golf’s introduction to Scotland (between 1424 and 1457) probably came through the merchantmen that sailed into the great harbors on the east coast. Golf was so popular in the 15th century that the 14th parliament of King James III decreed on March 6, 1457 that "fute ball (soccer) and golf be utterly cryitdune," and "noch to be usit" because the game interfered with archery, an essential element in the defense of the realm.

When the invention of gunpowder at the end of the 15th century reduced the importance of archery, golf again became popular. The Scottish and English paintings and sketches from the early 18th century show golfers playing with maintained fairways and greens, which implies that the work of greenkeeping was well established at that time.

The Royal and Ancient Golf Society of St. Andrews was formed in 1754 and formalized the game by creating a small number of basic rules. In its most rudimentary form, the game consisted of a course, implements (clubs) and a ball. The balls and implements were fairly standard, but the courses varied significantly depending upon rainfall, wind, variety of grass, land features and the presence of grazing animals (the first lawnmowers).

The Early Greenkeeper

The Royal Burgess Golfing Society minutes indicated that in 1774, a boy was engaged as "our cady" and considered the first "greenkeeper" with a remuneration of six shillings per quarter year and a suit of clothes. From 1809 to 1820, a person was employed with the title of clubmaker and officer, as well as assistant in keeping the green. However, in 1866 a council made up of two members of each of five area clubs was appointed to take charge of the green and pay jointly a person "to make holes, look after the turf." A motion was carried that a professional golfer be employed as a servant of the club and the entire charge of the course be entrusted to him. Tom Morris was introduced and his duties explained.

Morris would keep the putting greens in good order, repair them when necessary, and make new holes. He would be allowed one man's labor for two days a week and it would be understood that he was to work under the supervision of the green committee. The newly appointed chief of the links was paid 50 pounds per year and 20 pounds for the upkeep of the links. Although Morris would retire in 1903 after 40 years as greenkeeper, the basics of some of his maintenance practices are still employed today.

Hutchinson explained in 1906 that the profession of modern greenkeeper was no easy one and not to be picked up lightly by a caddie or a professional player. He went on to say that it should be a profession unto itself. Hutchinson believed the greenkeeper should have an elementary knowledge of chemistry, botany, and be a man of acute observation.

As the popularity of the game increased, the rules became more formalized and so did maintenance of the course. And just as the game itself changed, so did the role of those in charge of the playing field. Maintaining a golf course in excellent playing condition while permitting continuous use by golfers in weather that changed seasonally and unexpectedly, demanded knowledge of turfgrass and effective management methods.

Greenkeepers in the United States were greatly influenced by the traditions of England and Scotland. While there is some indication that golf course construction in America was attempted in the early 1800s, the first real golf course was not constructed until the 1890s. However, the challenges of maintaining golf courses in the America were much different than in Europe, thus these professionals had to adapt to the conditions.

Technology, Research, Education, Community

Just as technology has had an impact on the playing equipment, golf course maintenance has been subject to technological advancements. Automatic, satellite-controlled watering systems have allowed superintendents to use water resources more efficiently, while improving conditions for golfers. Equipment such as triplex mowers, verticutters, aerators and lasers have positively affected the playing surface while causing little, if any, down time for facilities.

University and privately funded research have resulted (Continued on Page 30)
Evolution of Superintendent — (Continued from Page 29)

better turfgrass cultivars, environmental-friendly maintenance practices and improved golf course designs. The result is golf courses are better conditioned and can better withstand the effects of weather, traffic and disease than a few decades ago. Turfgrass research was limited until the 1920s when the USGA Green Section was established for that purpose. By the 1960s, most states were conducting turfgrass research. It was also during this time of impressive growth that the occupational title of "golf course superintendent" began to replace the term "greenkeeper."

Advances in education have had a great impact on the professional growth of golf course superintendents. Until the 1950s, it was common for the superintendent to spend 90 percent of his/her time performing maintenance duties. Today, that figure is nearer to 35 percent as budgeting, scheduling, personnel, research, design and planning activities each command attention. In order to perform those duties, aspiring superintendents could no longer rely solely on serving an apprenticeship as a stepping stone to the top position. Colleges and universities began offering golf course management curriculums featuring classes in agronomy, business management and communication. The first vocational course for greenkeepers was introduced in 1927 by the University of Massachusetts, which followed shortly with a two-year course of study. In 1957, a two-year course in turfgrass management was started at Penn State. During the 1960s and 1970s, numerous vocational and university turfgrass programs became available and today more than 100 colleges and universities offer two and/or four-year degrees.

A recent Golf Course Superintendents Association of America (GCSAA) study indicates that 95 percent of golf course superintendents have some post-high school education. For superintendents younger than 30, that number is just over 98 percent. Approximately 47 percent of the college degrees earned by superintendents are in turfgrass management, with 12 percent in horticulture, 10 percent in agronomy and eight percent in business administration. Continuing education is virtually a requirement for golf course superintendents in order to perform at a high level. Employees who administer the application of chemicals on a course are trained and licensed by various local, state and/or federal governing bodies.

Entrusted with administering a large portion of a golf facility's budget and managing its most valuable asset, the golf course superintendent has become an integral member of the management team. Many have assumed roles such as director of golf, manager of golf course operations, general manager, etc. In fact, a recent reader survey by Golf Digest listed the superintendent as the most important individual employee at a golf course, including the club/course pro, club/grill manager, starter and beverage personnel. As the game and business of golf has grown, so has the recognition of the superintendent as key to the enjoyment of the game and the economic vitality of golf facilities.

"Maintenance is more important to the golfer than design," internationally-recognized golf course architect Michael Hurdzan notes. "Given the choice between a well-designed course and a poorly maintained one, or a poorly designed and well-maintained one the golfer will nearly always choose the better maintained. Maintenance often has a greater influence than design on a course's difficulty and speed of play."

Though education, research and technology enhanced the trade, it was the creation of community that elevated the position of the superintendent. The creation of the USGA Green Section in the 1920 and the Golf Course Superintendents Association of America in 1926 provided a means to network and exchange information for the maintenance of golf facilities.

Organizational Structure

Because ownership and management structures differ from facility to facility, the golf course superintendent's role on the organizational chart will vary. As a general rule, the superintendent, the golf professional and the club/restaurant manager are members of the management team. Tenure, experience and expertise may elevate the superintendent to the general manager position, thus adding more administrative responsibility to his/her course management duties.

For golf courses owned and operated by a municipality, the size of bureaucracy can often determine the reporting lines. Often times, members of the management team will report to a community's director of golf operations, who in turn reports to an administrator such as director of parks and recreation. Within this structure, various committees, both oversight and advisory, may work with the management team members. This might include the Parks and Recreation Board, Citizens Advisory Committee, Green Committee, etc.

In a private ownership arrangement, a general manager or president who reports to the ownership typically oversees the management team. This structure is also found in management companies who specialize in golf course facility administration. The corporate structure usually has a management team reporting to a director/general manager who in turn reports to a regional director, who typically interacts with corporate headquarters. These management companies employ approximately 14 percent of all golf course superintendents.

In an equity ownership arrangement, such as a country club, members create various committees with rotating chairpersons to oversee various aspects of the operations. Golf course superintendents generally interact with a green committee and a green chairman that have oversight in

(Continued on Page 31)