



WELL KEPT SECRETS

By Rob Schultz

The serenity of Lawsonia, the unmatched difficulty of Americana's Brute and Briar Patch, the sweet smell of pines at Telemark, the panoramic, spine-tingling views from Peninsula State Park, the brutal, yet glorious 18th hole at the Springs.

These are a few of my favorite things.

Whenever I pick up one of the national golf magazines and read about the beauty of playing golf in the Smokies or the wonder of Michigan's gold coast, it sickens me to think that Wisconsin's resort golf courses must take a back seat to these places for the simple lack of a decent marketing approach.

Wisconsin is supposed to be a hotbed for tourism. Yet, the state does absolutely nothing to promote what I feel is one of its greatest assets. Sure, Michigan has a Jack Nicklaus course and an Arnold Palmer course to promote. But how many people know that Nicklaus helped Pete Dye design the Briar Patch in Lake Geneva; or that Dye is designing a beautiful new resort course in Kohler; or that Robert Trent Jones has designed one course and his son, Bobby, has designed two with a third on its way?

It's unfortunate that the University of Wisconsin bypassed renowned Florida architect Tom Fazio for its proposed golf course. That would have meant the state had three of the top architects in the world here to design courses that the public could play.

Still, this state isn't doing too badly. Wisconsin's resort golf courses are the Midwest's best kept secrets.

Some might say that's the way it should be: Leave Wisconsin's golf courses for Wisconsinites. They certainly would be one of the few amenities left here that haven't been trampled to death by our neighbors to the south.

However, that means many courses which I believe rate among some of the nation's best public and resort courses

won't receive the recognition they truly deserve.

I dare anyone to try to match the wonderful maintenance records of any of the state's public and resort courses such as SentryWorld and Brown County near Green Bay.

What golf courses in the Midwest can match the views from Peninsula? Or Lawsonia? It amazes me every time I travel to Green Lake to play that wonderful old course located within the American Baptist Assembly. With the gentle chimes from a nearby chapel always making such beautiful music in the background, I sometimes have to pinch myself to remember that I'm not vacationing in Valley Forge, where I spent many of my summers as a boy. Yet, who outside of Wisconsin and Chicago know about Lawsonia's illustrious history?

What resort courses can match the beauty and difficulty of the Briar Patch and the Brute of Americana? A former Playboy Club, Americana has everything a golf resort needs. It even has a location perfect for luring golfers from Chicago and Milwaukee.

Finally, and most important, what resort courses in the nation, let alone the Midwest, can match the greens fees around this state? Some state golfers grumble about \$30 fees at Sentry and Americana or \$15 fees at the Springs. Are they kidding? Golfers pay \$60 to \$70 to play golf at the Nicklaus and Palmer courses in Michigan and nobody is going to convince me those places are twice as good as any in Wisconsin.

Yet, few seem to care that Wisconsin's resort courses are on the verge of extinction. The buzz words from those who could save them continue to be: "Let's keep it a secret." But that also means the state's resort courses will have a tough row to hoe in order to make ends meet.

The Springs near Spring Green has been for sale for nearly six years. Despite carrying a modest price tag of

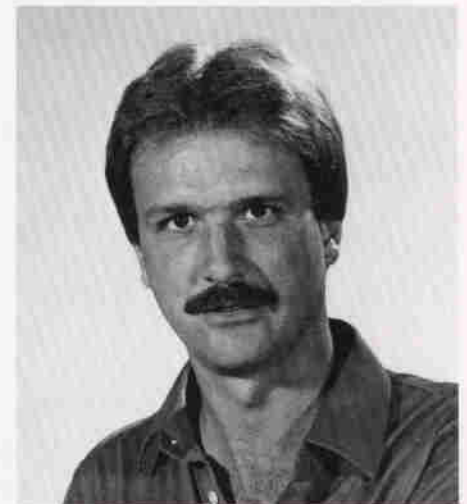
\$4 million (and that includes a ski hill and 2,500 acres of land), few have shown much interest. In the meantime, it must labor with a pro shop harbored inside a mobile home.

Nevertheless, the Springs is better off than Rainbow Springs, which continues to look more and more like a ghost town, and Telemark, yet another state resort forced to close its doors.

Maybe this state needs a golf sugar daddy; somebody who can build a resort, make it financially sound and bring in more golfers who, while here, will look around the state for other places to play. That's what saved Michigan. Maybe Kohler's River Run will be the answer in Wisconsin.

But instead of waiting around for Mr. Golfbar, the resort courses in this state should band together and create a solid marketing approach. Few ever follow the old adage: *You have to spend money to make money.* Golf course managers are famous for being tightwads. But in this case, maybe they should open up their pocketbooks a little bit more.

In fact, it may be a matter of survival.



Editor's Note: Bernard Darwin brought sports writing from jumbled figures at the bottom of a page in the London Times newspaper shortly after the turn of the century to a branch of literary journalism. Many believe him the first true writer of golf, as well, and among the very best of very many who have written about the game we love. Mr. Darwin once described writing about sports as a job "into which men drift." That may be true for some sports writers, but it cannot be said of our newest contributor to the GrassRoots, Rob Schultz.

A native of Oshkosh, Rob attended high school at Oshkosh North and graduated from the UW-Oshkosh in 1978 well prepared for a career in journalism and sports writing. Immediately after receiving his B.S. degree in journalism he went



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to work for the Cardinal Free Press in Carpentersville, Illinois. After four months in Illinois he accepted a position with the Green Bay News-Chronicle. His primary duties while there were covering the Green Bay Packers and playing as often as he could at Paul Delfose's Brown County Golf Course.

In December of 1980 Rob moved to Madison where he became the Special Sections Editor for Madison Newspapers, Inc. It took his supervisors about a year to realize that he belonged in the world of sports news and he moved from MNI to The Capital Times. He's been covering the

Packers for TCT for the past two years and has been their golf writer for the past four years. Rob and his wife Pat were married in May and now reside in Verona.

Rob feels a certain kinship with Wisconsin's Golf Course Superintendents. He helped pay his way through college by working summers at the Lake Shore Municipal Golf Course in Oshkosh, right adjacent to Highway 41. He is a member of the fraternity of "former golf course watermen" and recalls watering the old-fashioned way: with hoses. Fairway quick couplers are not foreign to him, either!

I've been reading Rob's columns on golf for all his time in Madison and can testify he is an excellent golf reporter. But I quickly realized that he is more than just a reporter. His sentences and paragraphs reflect a deep and abiding love of the game and he obviously derives satisfaction in capturing many of the sentimental and romantic feelings we all find in the game. And few things please him more than a trip around a golf course attempting to better his 9 handicap.

Rob is an inspired writer about golf and I think you are going to enjoy reading his columns in the months and years ahead.

MSM

WISCONSIN TURFGRASS ASSOCIATION SUMMER FIELD DAY

The 1987 edition of the Wisconsin Turfgrass Association Summer Field Day will be held on August 25th. As in the previous two years, Red Roskopf will be our host at his Camelot Golf Course near Lomira. Red, who chairs the WTA Field Day Committee, promises that this year's version will be bigger and better than ever.

Equipment and products important to the maintenance of golf turf will be available for close inspection. Factory representatives and distributor personnel will be on hand to answer questions. Once again, University of Wisconsin-Madison faculty will be presenting results and recommendations from their season's research.

Information regarding registration will be forthcoming from the WTA. Please reserve August 25th now for attending this popular event.

Lora Ripp Chosen To Receive WGCSA's James R. Love Scholarship



Lora M. Ripp, a senior in the University of Wisconsin - Madison's Turf and Grounds Management program, has been named recipient of the WGCSA James R. Love Scholarship for the 1987-1988 academic year.

In a letter to WGCSA members, Lora wrote:

"I am writing to express my sincere appreciation for your donation of my scholarship. As I draw closer to the end of my college career, I find a money contribution especially helpful so I may

concentrate on my studies and learning experiences. I am somewhat anxious to enter into the full-time working situation so that I may then help others out as you have helped me. Once again, thank you."

Sincerely,

Lora M. Ripp

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Make the Move to Perennials

By Dr. Lois Berg Stack

Annual flowers can't be beat for stunning color, uniformity and mass impact for the whole season. But good things have a price, and with annuals the price is high maintenance. Planning the beds and ordering the plants is just the start—you still have to prepare the ground, plant the seedlings, mulch, water, fertilize, weed, control diseases and insects, deadhead and finally clean up at the end of the season. And that's not the end; it starts all over again every spring.

You can reduce the number of annuals you plant (and the amount of labor involved) without giving up the color, by replacing some of the annuals with perennials. Continue to use annuals in the front half or two-thirds of your borders, and replace the annuals in the back with tall perennials. Or continue to plant annuals in the back two-thirds of the borders, and plant low-growing perennials in the front to form a permanent edging. There are several advantages to this process of converting parts of annual gardens to perennials.

Planting labor is certainly reduced. Perennials need to be planted only once, after which most are quite permanent. True, they need to be divided periodically to stay in bounds, but none of the perennials discussed in this article require division more than once in three to five years. And perennials are best divided either in early spring, before the spring planting rush begins, or in late summer.

Maintenance labor is also reduced, since deadheading perennials is very different from deadheading annuals. Most perennials flower for a rather discrete period of several weeks, and very few flower for the entire season. This means that rather than deadheading all season to promote more flowering, you simply wait until the flowering period has ended, and remove all the dead flowers at once. Other maintenance tasks can also be avoided through proper selection of perennials. Do not use plants that need annual

winter mulch, staking, constant pruning or pinching, or other special labor.

Through proper selection of perennials, you can virtually eliminate pest problems from your flower gardens. The perennials discussed in this article have very few disease or insect problems. In fact, there is such a long list of pest-free perennials that you can plant a great variety without running the risk of introducing insect or disease problems.

Although most perennials do not flower for long periods, many have excellent foliage all season. The perennials discussed in this article certainly fall into this category. The leaves of tall perennials can form an attractive backdrop for annuals, and the foliage of edging perennials can really tie a flower garden together.

Perhaps the biggest advantage of incorporating perennials into your annual flower gardens is that they can extend the flowering season of the garden. Some perennials, like bulbs and spring-flowering phlox, flower very early in the season, before annuals begin to put on their show. Other perennials, like ornamental grasses and chrysanthemums, flower late in the season, extending the garden's color well into the fall.

When to Start

There's no time like the present! Most perennials can be planted any time in the season from early spring until late summer. Avoid planting during the heat of midsummer, when newly-planted perennials can dry out before they establish good root systems. Also avoid planting too late in the season, because perennials need time to establish good root systems to survive the winter.

The perennials discussed below can all be planted in late summer with excellent results. Why not reduce your maintenance labor now, by replacing some high-maintenance annuals with lower-maintenance perennials this August?

How to Start

Remember that perennials, unlike annuals, will stay in place for many years. It is absolutely essential to provide a location with well-drained soil and a good moisture supply. Good drainage is particularly important for survival during the winter. A wet soil will heave during alternate freezing and thawing in late winter, exposing and killing the surface roots of perennials. A well-drained soil, on the other hand, reduces the probability of frost heave damage.

Purchase high-quality plants from a reputable nursery or greenhouse. For a quick effect, purchase one-gallon landscape-size plants or field grown clumps rather than the four-inch size that has become popular with homeowners.

Wait until after the midsummer heat, then plant on a cool, cloudy day if possible. Water thoroughly after planting, and mulch well. When the foliage dies back after hard frost this fall, cut back the plants to just above ground level. This first winter, add a loose protective winter mulch like evergreen boughs or marsh hay to the newly planted perennials. After their first winter, the perennials discussed below should be reliably hardy without any winter mulch.

What to Start With

Artemisia schmidtiana 'Nana', commonly called "Silver Mound", is a popular and dependable perennial grown for its silvery foliage. Its common name is very appropriate, as it forms a silver mound of soft, feather-like foliage 15-18" tall and 18-24" broad. It is an attractive edging plant for any flower garden. This plant has no serious pests, and if grown in a somewhat poor soil it will stay compact throughout the season, and not have to be divided more than every three to five years. If grown in rich soil, it tends to become leggy, causing the mound to fall apart by the end of the season.

Several species of ornamental grasses are available, varying in size, texture, color and flowering time. Try the large-scale *Miscanthus* grasses. *Miscanthus sinensis*, "Eulalia Grass," is a 4-5' tall clump grass whose leaves arch gracefully. It flowers from September to October, extending the garden's season of interest into the fall. There are several variations of this species. *M.s.* 'Gracillimus,' called "Maiden Grass," has narrow gray-green leaves. *M.s.* 'Zebrina', or "Zebra Grass," has

narrow, horizontal yellow bands about 2-3" apart on the leaves. *M.s. 'Variegatus'* is the "Variegated Eulalia Grass." Its leaf blades are striped lengthwise with white.

Any of the Eulalia Grasses would be excellent for the background of a flower garden, spaced 3-4' apart. The clumps establish easily, but are not invasive. Another ornamental grass is *Festuca ovina glauca*, commonly called "Blue Fescue." It is a small clump grass that forms a perfect 10" mound of distinctive blue foliage. With individual clumps spaced 10-12" apart, Blue Fescue is an excellent perennial edging plant.

For good color, low maintenance and high-quality foliage all season, you can't beat the *Hemerocallis* hybrids, commonly called "Daylilies." These tough plants will gracefully withstand any exposure from full sun to medium shade (they'll even survive in full shade, although they won't flower there). Their sturdy roots provide excellent erosion control. Daylilies range in height from one to four feet when in flower, with their yellow, orange or reddish flowers held above mounds of arching, grasslike leaves. Daylilies flower in midsummer, and are best transplanted every five years after flowering, in August or early September. Try a row of daylilies in the back of an annual garden, with clumps of April-flowering daffodils planted in between the clumps of daylilies—the daffodils provide good color early in the season, and the daylily foliage hides the daffodils' leaves later in the season.

The durable *Hosta*, or "Plantain Lily," is used as a specimen, as an edging plant or as a very tough, low maintenance groundcover. It is valued more for its foliage than its flowers. Leaf color may be pale or dark green, bluish, yellowish or two-toned. Leaf shape ranges from very broad to narrow and twisted, and texture may be smooth, deeply veined or puckered. Plantain lily has blue, lavender or white flowers, often fragrant, in late summer. The flowers are held well above the mound of foliage, which reaches one to three feet in height, depending on species and cultivar.

A drift of taller Plantain Lilies spaced 24-30" apart along the back of a shady annual garden would provide a perfect backdrop for impatiens or wax begonias. They are also a good companion for shade-tolerant bulbs such as daffodils, since the Plantain Lily foliage hides the bulbs' foliage as it dies back later in the season. *Hosta* clumps

should be divided every five to eight years, depending on vigor and spread.

Heuchera sanguinea, or "Coral Bells," is a beautiful perennial best used as an edging plant. Its scalloped leaves form a perfect mound 12-15" in height, and retain their excellent quality all season. The tiny bell-shaped pink, red or white flowers are held high above the foliage in airy clusters, lasting from June into August. Coral Bells prefer exposure from full sun to partial shade. Plant them 18" apart, and divide clumps every three to five years.

Iris germanica, the "German Iris," is an elegant June-flowering perennial. The unique flowers are available in blue, purple, white, yellow and bronze, and in all the subtle variations of those colors. Plants range in height from 10-36" and are among the showiest of all perennial flowers. The sword-shaped leaves are good quality for nearly the whole season. German Irises should be planted in August or early September. It is essential to plant the thick rhizomes at ground level (not deeper!) to minimize attack by the iris borer, an insect that penetrates the fleshy rhizomes. These penetration tunnels create an infection court for iris rot, which can kill the plants. German Iris should be divided every 3-5 years, in early fall.

A row of German Iris would be a good backdrop for any annual flower garden. Or, you might plant a few clumps of iris in the background, with each clump formed by three iris rhizomes planted 2' apart in a triangle. Plant a single specimen of *Gypsophila paniculata*, "Perennial Baby's Breath," in the middle of each triangle of iris. The iris will flower in June, while the Baby's Breath is small. The Baby's Breath will bloom from July to September, forming an airy 3' mound of tiny white flowers. With this technique, you can get two seasons of flowers from one space in the garden.

Iris sibirica, the "Siberian Iris," is available primarily in purple, blue and white, and ranges in height from 18-36". It flowers at about the same time as German Iris, but is perhaps not quite as spectacular. Siberian Iris has three advantages over the German Iris, however. It requires division less frequently, it is not attacked by the iris borer, and its narrow, arching leaves are of excellent quality the entire season. The slender rhizomes should be planted 1½" deep and two feet apart, in spring or early fall.

Paeonia lactiflora, the "Common

Peony," is a traditional June-flowering favorite. Colors include pink, red and white, with many bicolors. The Common Peony has three basic flower types: singles, doubles and Japanese hybrids. The doubles have the showiest flowers, but they are the least appropriate for a golf course, since the large, heavy flowers must be staked to keep them from toppling over during rain storms. The singles and Japanese hybrids are quite spectacular, and require less maintenance. The three-foot plants are shrub-like and have beautiful foliage all season, forming a good backdrop for annuals. Plant peonies in August or early September in a deep, rich soil with pink buds ("eyes") about 1½" deep. Peonies will not flower for two or three years, but they are permanent, and never need transplanting.

Sedum spectabile, the "Showy Stonecrop," is an 18-24" succulent perennial. It is available in various shades of red and pink, and produces 4-6" flat-topped clusters of star-shaped flowers from August to frost. Showy Stonecrop has excellent quality from early spring until frost. In fact, some landscapers leave the old flowers on the plants through the winter, for textural interest. Set plants 24-30" apart along the back of an annual flower border.

Stachys byzantina, "Lamb's Ears," is valued more for its foliage than its flowers. The 4" long leaves are densely
(Continued on page 26.)

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Golfers and Turfgrass Research

By Dr. David U. Cookson

We players are generally content to exercise our golfing passion on the ground and with the conditions presented to us by the green superintendent, complaining to the green chairman or the superintendent himself if things are not as we would like, but not particularly concerned about why a disease process has established itself nor what needs to be done about it. As club members, we are touched with the costs of improving or correcting turf problems as it affects our monthly dues, but on balance we do not concern ourselves with the long term or the big picture, but only with the immediate situations we observe at the time we play. For this reason, the focus of this issue of the newsletter is important, for the player as well as the superintendent, since basic research is the bedrock giving stability to efforts to continue our game on its future path with the same degree of success and sustenance that it has enjoyed heretofore. I believe it should be part of the

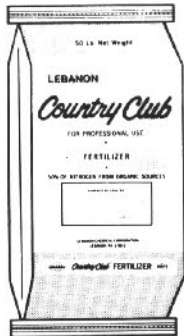
job description for the green superintendent and the green chairman to deliver this message to the player whenever the opportunity presents, so that Boards of Directors and individual golfers will be aware of the importance of turf research and support its funding when called upon.

As a physician, I know that medical progress is totally dependent on research efforts both in the understanding of the origins of the disease and in the need to define the best therapy to correct and prevent such disorders. The analogy for turf management is directly applicable, with the additional factor that advances must also be made in improving the nature of basic materials inherent to the game such as water sparing and disease resistant grasses. With the increased costs of dealing with turf diseases as well as environmental constraints involving water usage and the nature of some of our long established pesticides, herbicides, and other turf enhancers, re-

search efforts to deal with these continuing and increasingly formidable golf problems are mandatory and essential to allow golf to remain as it always has been and should be; accessible to all who want to play, healthful and enjoyable exercise and recreation, and responsive to the legitimate concerns of society.

My message then is twofold, first, that we as golfers must take a larger view of the future of the game, while continuing to indulge our current enthusiasm for playing, by underwriting and supporting the need for research when asked to do so. Secondly, green superintendents and those with daily contact and exposure to the research needs of turf grasses and turf management must take it upon themselves to educate those who will be asked to fund research as to the reasons and need for continuing support.

David U. Cookson



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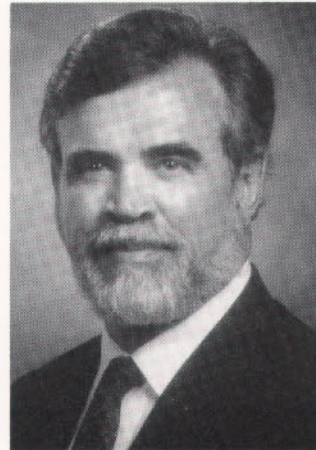
Made in Wisconsin

KOHLER OF KOHLER

John Michael Kohler
founded Kohler Co. in 1873.



Herbert V. Kohler, Jr., Chairman
of the Board and President,
Kohler Co.



1873 seemed an unlikely time to start a new business in America. A financial panic had begun in September of that year. It was followed by a depression that would affect the national economy for the next five years.

It was in that time of economic uncertainty that John Michael Kohler founded the Kohler Co., today the nation's leading manufacturer of plumbing and leisure products and a major manufacturer of engines and generators.

The Sheboygan (Wisconsin) Times of December 6, 1873, announced the formation of the new company:

"The undersigned, having purchased the interest of Mr. J.J. Vollrath in the Sheboygan Union Iron and Steel Foundry, have formed a co-partnership under the firm name of Kohler & Silberzahn, and will continue the business of iron, steel and brass castings in their various branches, and would respectfully solicit the continued patronage of the public, guaranteeing that their work shall be the best of its kind. Cast, cast-steel, and other plows are kept constantly on hand, and work of any kind in our line will be made to order."

John M. Kohler
Chas. Silberzahn

December 3, 1873

A native of the Bregenzerwald province in Austria, John Michael Kohler had come to this country with his family in 1854. After living briefly in Galesburg, Illinois, the family settled on a farm near St. Paul, Minnesota. The young Kohler remained on the family farm, attending school in the area until 1862 when he moved to Chicago. He became a salesman for a grocery house there and later sold furniture for a Chicago manufacturer. That job periodically took him to Sheboygan, a growing Wisconsin community on the Lake Michigan shoreline 55 miles north of Milwaukee. It was there that he met Miss Lillie Vollrath.

The two were married in 1871, and the next year Kohler joined his father-in-law's machine shop and foundry which produced agricultural implements for farmers in the area, castings for the city's furniture factories, and railroad "frogs," castings that guide a train's wheels when switching from track to track.

The company which Kohler and Silberzahn founded in 1873 employed 21 men in a tiny frame building. Although Sheboygan was hard hit by the depression, the firm moved ahead. Farm equipment and tools accounted for as much as 80 percent of the company's total sales.

KOHLER

Kohler and Silberzahn terminated their partnership in 1878, and Silberzahn sold his interest in the business to Herman Hayssen and John H. Stehn, German immigrants who worked for the company as machinists. Kohler became the senior member in the new partnership.

The business grew as additional product offerings were developed — feed mills, horsepowers, scrapers, circular and drag saw machines, hog scalders, feed troughs, and ornamental iron pieces that included hitching posts, cemetery crosses, urns and settees for lawns and gardens.

The development which was to have far-reaching significance for the company and its future in 1883, when the firm began making enameled ware and what were the first Kohler plumbing fixtures.

By the turn of the century, 98 percent of the business was enamelware products, and the workforce had increased to over 250 employees. Believing that Sheboygan, now a city of 15,000, was too congested, Kohler moved his company to an unincorporated village named Riverside, four miles west of Sheboygan.

Although the move was dubbed “Kohler’s Folly,” it proved advantageous. Employees built homes in Riverside, eventually renaming the community Kohler Village and creating one of the nation’s few successfully planned garden communities.

Incorporated as Kohler Co. in 1913, the company prospered, adding new products and employees. By World War I, Kohler Co. was known nationally as a plumbing products manufacturer.

This rapid growth can be attributed to strong leadership and product innovation, most notably the development of the one-piece lavatory, the built-in one-piece bathtub, and matching colors in vitreous china and enameled cast iron fixtures.

Kohler’s product line continued to diversify with the 1920 introduction of the electric plant, an engine-driven generator set then called the “automatic power and light.” It was a 1500-watt unit designed to serve the rural market. It delivered 110-volt DC current and was powered by a four-cylinder engine designed specifically for the generator and built in the Kohler factories.

Within a year, a booming electric plant market had developed in the British Isles, especially in historic castles, quaint country inns and elegant homes in the countryside.

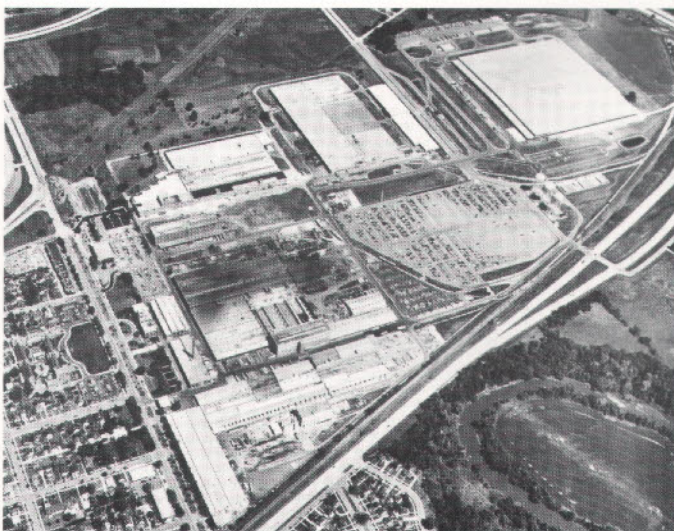
There were other significant installations, too, among them the summer White House at Custer State Park at Hermosa, South Dakota, where four Kohler generators kept the lights burning in 35 buildings including the main lodge occupied by President and Mrs. Calvin Coolidge.

Five Kohler electric plants accompanied Admiral Richard Byrd to the South Pole, providing power for radios, machine shops, equipment and housing for members of the expedition. Byrd’s historic trip presented the world with a dramatic example of the diversification of Kohler Co.

The company’s engine line was another evolution of its original product line. The company’s first effort in the horsepower business was something called the “horsepower,” a quaint machine it made in its small foundry and machine shop back in the 1880’s.

Simple in form and function, it consisted of a series of iron gears turned by as many as six horses hitched to a revolving shaft. The mechanical energy thus developed was transmitted by means of a universal joint and drive shaft to the farmer’s hay baler, feed chopper or pump. From this unpretentious beginning, Kohler has grown to a point where it is now one of the largest manufacturers of air-cooled, cast iron, four-cycle engines in the world.

In production since the introduction of the first



Kohler Co. corporate headquarters and principal manufacturing facilities are located on a 200-acre site in Kohler, Wis. The engine division is shown in the upper center of the picture.



Employees pose with their products — plows, silage cutters and other castings — in front of an early Kohler Co. factory. Note the plow mounted on the roof along with the rain barrels that provide fire protection.

“automatic power and light,” Kohler engines were used exclusively on Kohler generators until 1949 when they were marketed to other equipment manufacturers.

Today, Kohler engines provide power to markets worldwide. They operate coffee bean shredders in Mexico. They power fishing boats in the Philippines, log splitters in Switzerland, car starters in Minnesota, cranberry harvesters in Wisconsin, concrete mixers in California, and sweepers and other equipment in industries around the world.

But it has been the outdoor powered equipment market which has been the most significant of all, triggering a renewed corporate commitment to value, quality and innovation that resulted in the most advanced Kohler engine line yet — the Kohler Magnum.

Kohler Magnum engines, introduced two years ago, are designed to meet specific application and power requirements. Single- and twin-cylinder models incorporate low-silhouette, streamlined styling and a variety of innovative features that promote reliable performance, including:

- Inductive electronic ignition for dependable starting, even in cold weather or when the sparkplug is worn or fouled;
- Posi-Lock, the industry’s most reliable connecting rod cap;
- Oil Sentry™, which shuts down the engine or triggers a warning light when the oil level is low;
- High torque at low rpm to outperform competitive models;
- Consumer appeal in Magnum design to impart a smart appearance to engine-powered equipment;
- Heavy duty ball bearings for heavy loads.

For over half a century, Kohler engines have been pro-

viding reliable, dependable power to the gardening, professional turf maintenance, agriculture and construction markets. The Kohler Magnum combines Kohler’s tradition of excellence with a new emphasis on high technology in design and manufacturing.

On the heels of the successful introduction of the Magnum engine line in 1985, the Kohler Engine Division introduced vertical shaft, twin-cylinder versions in 16 and 18 horsepower in 1986, marking the division’s first successful offering of a vertical shaft product. Primary markets are in commercial turf and lawn tractor applications.

Competent design begins with computer-assisted design (CAD) systems which offer greater productivity, accuracy and capacity than previous methods. With the CAD system, Kohler engineers are able to respond to the design needs of original equipment manufacturers with computerized precision and reliability.

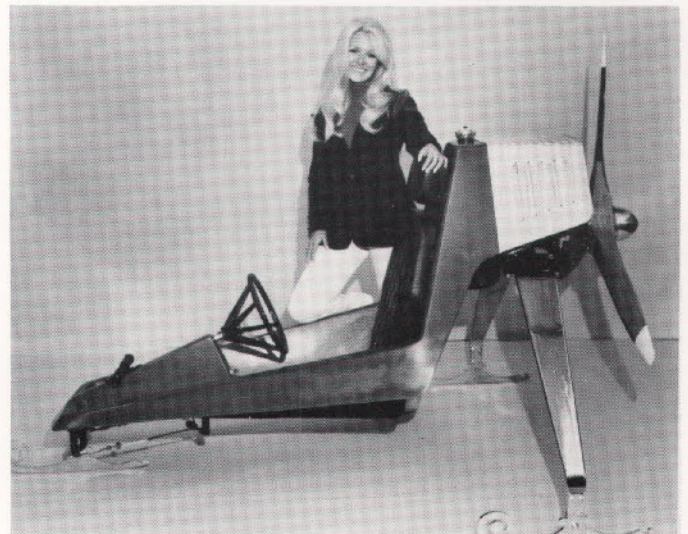
The specifications from the CAD station are transferred directly to the manufacturing area, where computer assisted manufacturing (CAM) converts design parameters into precisely manufactured parts. But the CAD/CAM techniques are just part of the Kohler engine story.

By using computerized inventory control techniques, Kohler has designed an entire manufacturing system which tracks quality from the time an engine is ordered until it is packaged for delivery.

Each engine is assembled using the computerized instructions created when the customer’s order is first entered into the system. After assembly, each engine is inspected, started and test operated. Following testing, the engines are painted, using a computer controlled robotic paint system. The result is a finish that is both striking and enduring. All Kohler Magnum engines carry a two-year warranty.

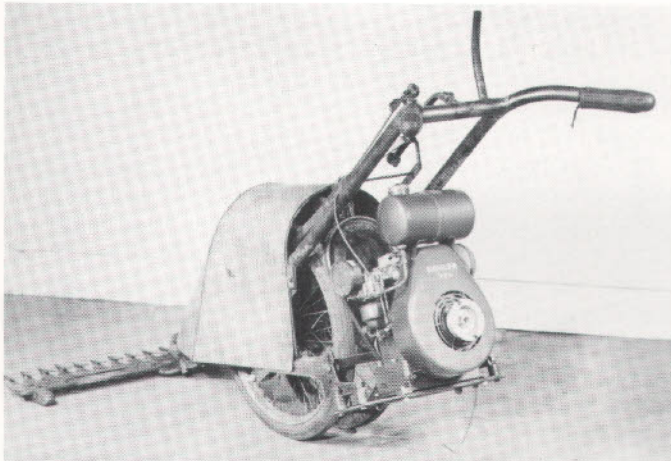


Kohler engines were used to power a homemade snowmobile and

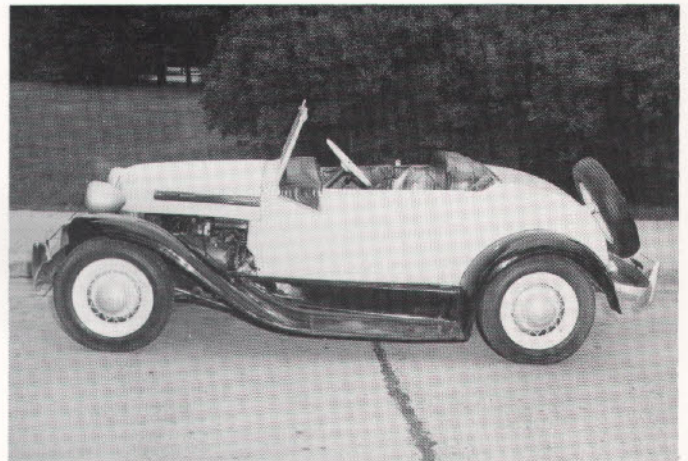


a sleekly crafted ice boat in the 1950s.

KOHLER



Other engine application pictures from the Kohler archives show a Jari sickle bar mower powered by a K-7 engine, and a prototype



sports car manufactured by J.C. Boarah Motors Sales of Flora, Ill, which was powered by a K-660S engine.

The Kohler standards of excellence are the result of the efforts of its employees. To demonstrate their commitment to quality and their pride in the engines they build, Kohler employees sign a pledge of quality. This pledge is backed by the ability of any production worker to "stop the line" if quality standards aren't met.

Kohler's commitment also extends to the support of its 10,000 dealers and distributors worldwide. Detailed parts and service manuals, computerized inventory control, and 24-hour emergency parts replacement and service training schools provide aftermarket support.

Kohler Co. today is led by Herbert V. Kohler, Jr., whose creativity and commitment to quality pervade all of its product lines.

A grandson of company founder John Michael Kohler, he is the fifth Kohler to head the firm.

Kohler was graduated from Yale University in 1965 with a bachelor of science degree in industrial administration. Prior to graduation he spent his summers working as a laborer or technician in most of the manufacturing divisions of the company.

He became a director of the corporation in March 1967; Vice-President-Operations in August 1968, and Executive Vice President in January 1971. He was elected Chairman of the Board in June 1972, and President of the company in April 1974.

Today, in addition to its leadership role in the production of engines and generators, Kohler Co. is the nation's leading manufacturer of plumbing and specialty products. With more than 5,600 employees in Wisconsin and 12,500 worldwide, it is also one of the oldest and largest privately held companies in the state and in the nation.

In addition to its corporate headquarters and manufacturing plants in Kohler, the company also has plants in Spartanburg, South Carolina, and Brownwood, Texas, to manufacture plumbing and leisure products, and a sub-

sidary operation in Mexico City which produces engines and generators.

Bold ventures are bywords of the Kohler tradition.

In 1981, the company reopened The American Club, once a home for immigrant employees and now transformed into a luxurious hotel and convention center. The American Club is the only hotel in Wisconsin to receive a coveted Five-Diamond rating of excellence from the American Automobile Association (AAA).

The Club's sister businesses include the Sports Core, one of the Midwest's finest multi-purpose health and racquet facilities; River Wildlife, a 600-acre wildlife and hunt-



The American Club village inn and conference center in Kohler is the only AAA Five-Diamond hotel in Wisconsin. It has 160 luxurious guest rooms, four sumptuous restaurants and an ambiance other hotels cannot match.