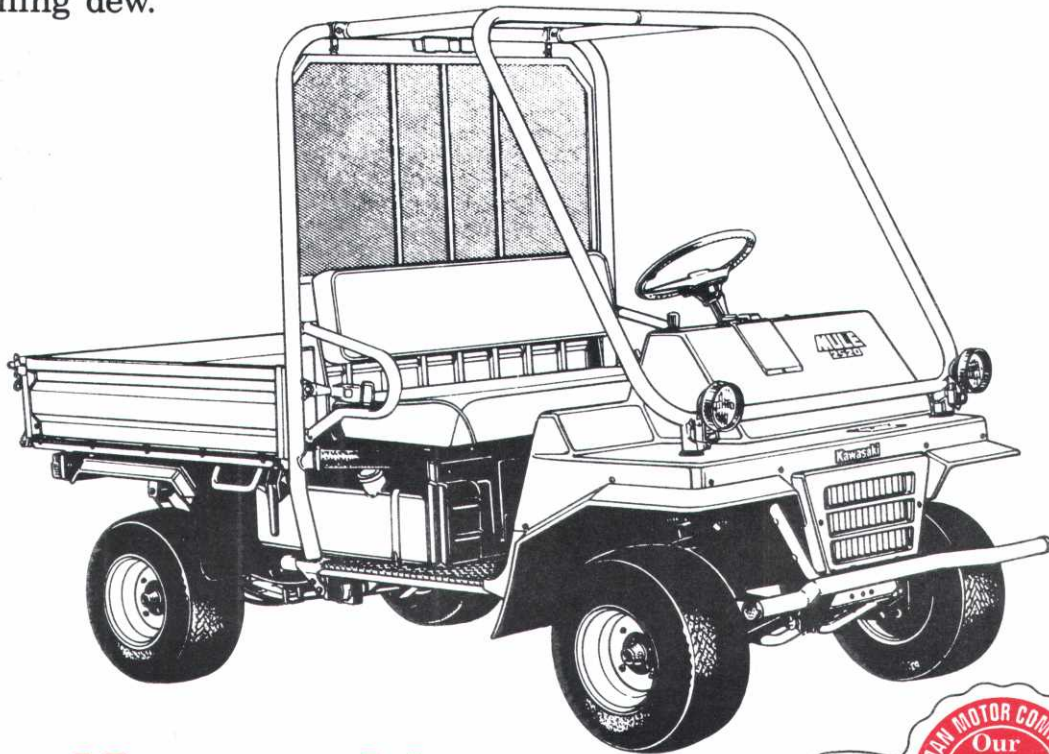


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From Your President's Desk

Professionalism



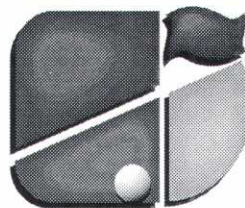
As the season gets fully underway, I once again realize that I am in the wrong profession. I should have paid more attention during my college science courses and became a meteorologist. You don't even need to be accurate with today's weather because, with current technology, the forecast, and I use that word only because that's what meteorologists call it, can be updated whenever necessary to correct flaws. The forecast at 5:00 isn't even close to the one at 6:00 let alone 10:00. But enough complaining.

I have been catching up on some reading lately during frosts and such and have come across the term professionalism quite frequently. This term seem to have many meanings to many people. Some use it to describe a person's appearance and others use it to describe a person's attitude. I would like to offer my take on the word.

To me the word professionalism is more about how we act than how we look. Don't get me wrong, I think appearance is important; after all, it is the first impression that you give a person. And when I say act I am not necessarily talking about how we carry ourselves but more how we interact. For this reason I link professionalism with how we treat others we come into contact with every day. Be that the one-time patron who has parked his cart on the collar of the green or the salesman calling on an appointment. We need to be conscious about how we treat all of the individuals we might encounter. Even if the we would like to flog the guy with the cart, we as professionals know that the proper course of action is to ask politely to move the cart and to explain why it is important. And even if you don't want to see that salesman who left a message, at least have the professional courtesy to call him back and speak with him. Being a professional is all about how we treat others, and how we want to be treated.

Special thanks go out this month to Dan Swenson and the staff at River Falls Golf Club for their hospitality. Although I was not able to play, my assistant did and informed me that the course was in excellent condition. Thanks. Next month takes us to Southbrook in Annandale with guest speaker Dave Oberle giving us a rundown on how the internet can make us more efficient and cut our operating costs. I hope to see you there.

-Paul Eckholm, CGCSA
MGCSA President



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UPCOMING MGCSA MEETING SCHEDULE

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June 21
Scholarship Scramble
Rich Spring Golf Course

August 14
MGCSA Championship
Interlachen Country Club

October 16
Tanner's Brook Golf Course

Fairway Grasses for Midwest Golf Courses

Diseases and Tough Climate Conditions Make Choices Tricky

By NICK CHRISTIANS, Ph.D.
Iowa State University

Kentucky bluegrass can produce quality fairways in the Midwest if it is not mowed too short.

Keep track of research.

Climates vary widely across the Midwest, complicating the choice of fairway turfgrass species.

New epidemics of gray leaf spot have weakened the popularity of perennial ryegrass, long a preferred fairway species in many parts of the Midwest.

Cultivars are available that accentuate the strengths of various fairway species.

In the cool, moist regions of Scotland where golf began, selecting a fairway turf species is not difficult. Fine fescues, bentgrasses and other cool-season turfgrasses are native there and very well adapted to the climate. They generally perform well at low mowing heights with minimal maintenance.

In the cold winters and hot summers of the Midwestern United States, however, grasses that are truly adapted to fairway conditions are rarer, and no single species stands out as the region's ideal fairway turfgrass.

Before the 1980s, Kentucky bluegrass (*Poa pratensis*) was the most-used species in Midwestern fairways. During the past two decades, many courses switched to perennial ryegrass (*Lolium perenne*) and creeping bentgrass (*Agrostis palustris*).

There is no clear choice for every Midwestern situation, however. The best choice depends on course budget, climate, water availability and other regional factors.

Kentucky Bluegrass

Kentucky bluegrass is one of the best-adapted, general-use turfgrass species used in the Midwest. It has excellent color and texture and forms a very dense turf. High-quality, affordable seed is readily available for many cultivars.

Long a preferred fairway species in much of the Midwest, perennial ryegrass performed poorly in 1998 after gray leaf spot disease struck many golf courses. Notice the healthy, disease-free Kentucky bluegrass sod around the sprinkler head.

Kentucky bluegrass's extensive complex of underground stems (rhizomes) gives it an outstanding recuperative capacity after divoting and other damage. Highly cold-tolerant, Kentucky bluegrass can be found throughout Canada and into Alaska. As a fairway grass, it is relatively inexpensive to maintain and is still the grass of choice on lower-maintenance Midwestern golf courses.

Kentucky bluegrass's relatively poor shade tolerance

can limit its use. Its biggest disadvantage on modern fairways, however, is its intolerance of low mowing heights. When mowed below 1½ inches, most cultivars lose density, and annual bluegrass (*Poa annua*) slowly becomes the dominant turf. The mowing height for modern fairways is well below this minimum height for Kentucky bluegrass, so old bluegrass fairways are often converted to more mowing-tolerant species.

Some factors that have pushed Kentucky bluegrass off fairways include the patch diseases -- such as summer patch (*Magnaporthe poae*) -- which produce a typical "frog-eye" pattern in turf. Other species are less susceptible to these diseases.

From north to south, and from east to west, climates vary dramatically across the Midwest.

Another problem is seeded Kentucky bluegrass' slow establishment rate. Spring-seeded Kentucky bluegrass establishes very slowly, and its seedlings perform poorly in summer. It is often not fully mature until August or later.

Cultivars developed in the late 1990s may bring a resurgence of Kentucky bluegrass use on fairways. Absolute, Award, Nuglade, Rambo, Rugby II, Total Eclipse, Unique and others are marketed for use on fairways mowed as low as ½ inch.

These new cultivars have looked promising in cooler regions, but they have yet to stand the test of time in the Midwest. Blends were established on many courses in the region in 1998 and 1999, and they'll be monitored over the next few years. At Iowa State University, we established a high-maintenance Kentucky bluegrass fairway trial at ½ inch in September 1998, followed by a nonirrigated trial at ½ inch in September 1999. These studies will require three to five years to complete.

Perennial Ryegrass

In years past, perennial ryegrass could hardly be considered a turfgrass, and certainly not a desirable fairway grass. Breeding and selection, however, have led to the development of more than 100 excellent turf-type perennial ryegrass cultivars.

These cultivars have excellent color, texture and density. Their growth rate and appearance are so similar to Kentucky bluegrass that the two are quite compatible in mixtures. Common types of perennial ryegrass are still available, but they are not suited to fairway use and should be avoided.

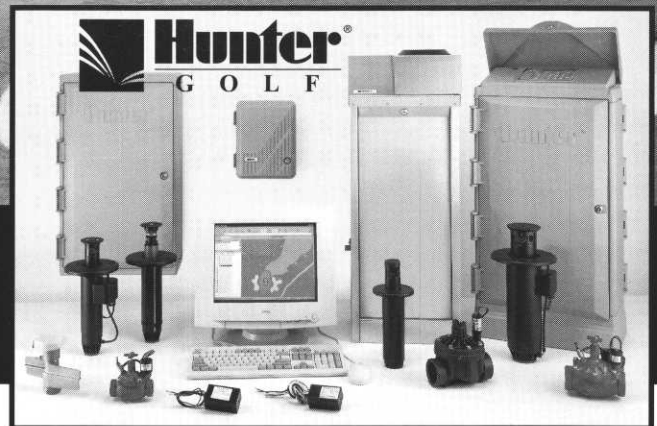
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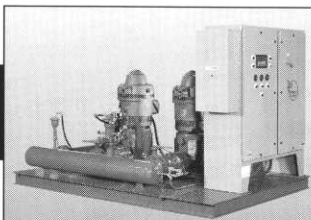


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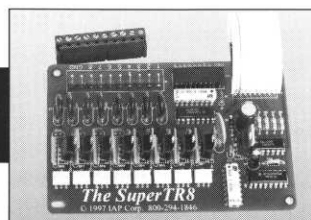
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Fairway Grasses--

(Continued from Page 5)

Perennial ryegrass is known for good wear tolerance, an important characteristic in fairways. The biggest advantages of perennial ryegrass, however, are its rapid germination and establishment rates. When damaged, perennial ryegrass can be re-established in a few weeks, whereas Kentucky bluegrass and creeping bentgrass may take months to bring back into play. Perennial ryegrass also has excellent tolerance of low mowing and is much more tolerant of fairway conditions than most Kentucky bluegrasses. It is also far less susceptible to the patch diseases.

Perhaps perennial ryegrass's biggest advantage is its tolerance of the herbicide ethofumesate (Prograss), which provides excellent postemergence control of many *Poa annua* biotypes. Kentucky bluegrass and creeping bentgrass are more sensitive to the herbicide, complicating *P. annua* control in these species. Perennial ryegrass is not damaged by ethofumesate at recommended rates, and it can be seeded into treated areas immediately after application. Ethofumesate on perennial ryegrass fairways provides the most successful control of *P. annua* of any method, short of soil sterilization with methyl bromide.

It doesn't look hardy in winter (or fall or early spring, for that matter), but zoysiagrass can survive cold temperatures.

Perennial ryegrass has shortcomings. The bunch grass has no rhizomes and no stolons, so recovery from divots is very slow. Extensive overseeding is a standard part of its maintenance. Its growth rate is similar to Kentucky bluegrass's through most of the season, but superintendents report that it grows rapidly in the spring and early summer. This can be controlled with a growth regulator such as Primo (*trinexapac-ethyl*), but this adds to maintenance costs.

Although patch diseases are generally not a problem, perennial ryegrass is much more susceptible to *Pythium* blight and red thread (*Laetisaria fuciformis*) than is Kentucky bluegrass. *Pythium* can be particularly devastating on ryegrass fairways in high-temperature conditions, and the cost of fungicides can make perennial ryegrass an expensive alternative to Kentucky bluegrass in warmer parts of the Midwest.

Another serious disease is gray leaf spot (*Pyricularia grisea*). This disease does not appear to be a problem on Kentucky bluegrass or creeping bentgrass, but in ryegrass, it can be worse than *Pythium*. In the Midwest, gray leaf spot has generally been limited to the southern, warmer sections, but in 1998, it destroyed many ryegrass fairways in Nebraska, Iowa and northern Illinois. This greatly increased expenditures for fungicides, and many superintendents in the region began considering alternatives.

Bentgrass is supposed to weather the cool season with little damage, but winter dessication by drying winds can dramatically injure fairways if irrigation is withheld during a winter drought.

Fortunately, the problem did not repeat itself in 1999. Only time will tell, however, whether gray leaf spot will be

a recurring problem in the central Midwest.

Winterkill limits perennial ryegrass use in the northern Midwest. For example, ryegrasses winter well in southern and central Iowa, but ryegrass fairways are often severely damaged in the northern counties' winters. In Minnesota and Wisconsin, perennial rye gets little use.

Although many superintendents regard perennial ryegrass as an excellent choice, winterkill and increased spending on fungicides may make other grasses more appealing.

Creeping Bentgrass

Traditionally, creeping bentgrass grew on very few Midwestern fairways because such large expanses of bentgrass were thought to be too expensive to maintain. By the early 1980s, however, player expectations had led to increasing maintenance costs on existing Kentucky bluegrass/*Poa annua* fairways, so bentgrass became a viable option. Today it is the primary fairway species on higher-budget courses in the region.

Bermudagrass can't handle cold winter temperatures very well.

Among cool-season grasses, creeping bentgrass is one of the best-adapted species, producing excellent fairways at a ½-inch height of cut. It is stoloniferous, and its recuperative capacity is excellent. Its texture and density are outstand

(Continued on Page 9)

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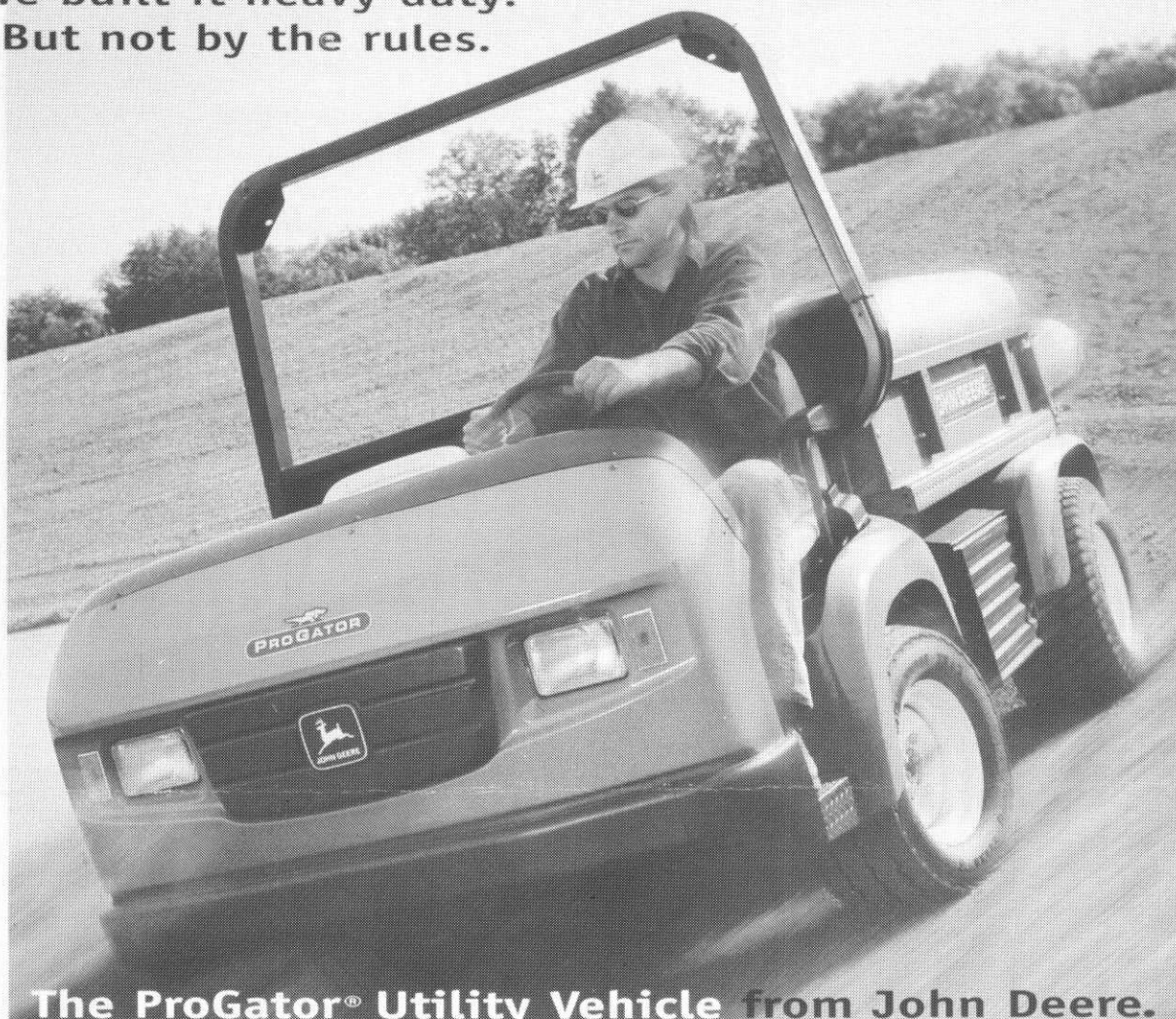
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Fairway Grasses--

(Continued from Page 7)

ing, and its color provides a beautiful contrast where darker-colored bluegrass grows in the rough.

Creeping bentgrass also provides an excellent playing surface, and one of its biggest selling points has been player acceptance. Many public courses that converted in the '90s advertise their bentgrass fairways to lure golfers who will pay a premium to golf on what was once the grass of private country clubs.

Creeping bentgrass has some disadvantages. Maintenance costs can be high because of its susceptibility to Pythium blight and brown patch (*Rhizoctonia soloni*). Clippings are usually picked up, which adds to labor costs, and extensive aerification is usually a part of standard maintenance. Thinning is common in cleanup rounds and in other heavily trafficked areas. Its cold tolerance is good, but it's very susceptible to desiccation in the dry, windy winters of the western Midwest. Its establishment rate is slow, particularly in spring, and fairways lost to desiccation may require months to grow back in, compared with weeks for perennial ryegrass.

Although its stoloniferous growth habit renders an advantage in recuperation from damage, a well-knit turf may surrender very large divots that require topdressing and seeding for rapid recovery. These divots give *Poa annua* a competitive advantage.

Poa annua is very competitive with creeping bentgrass at fairway mowing heights and may easily become the dominant species on older fairways in some regions. Ethofumesate can provide some control, but it can also damage bentgrass. Lightweight mowing, clipping removal, cultivation and other cultural practices to encourage bent and discourage *P. annua* can provide some success, but *P. annua* remains a fact of life on creeping bentgrass fairways.

Fine Fescues

The term "fine fescue" refers to a group of very fine-textured grasses in the genus *Festuca*. They include creeping red fescue (*Festuca rubra*), chewings fescue (*F. rubra commutata*), hard fescue (*F. longifolia*) and sheep fescue (*F. ovina*).

In the cooler, wetter regions of the world, such as the British Isles, fine fescues form a dense, uniform turf under low mowing heights and are often found in the species mix on golf course fairways. In the Midwest, their sensitivity to heat and drought, particularly at low mowing heights, allows little use for them on golf courses. All are bunch grasses, with the exception of the rhizomatous creeping red fescue. Yet creeping red fescue cannot match the recuperative performance of Kentucky bluegrass and creeping bentgrass.

A few cool locales in Michigan and Wisconsin boast fine fescue fairways, but in most of the Midwest, other species are a better choice. Their real Midwest niche is in unmowed roughs. This is particularly true in shade, although they are also adapted to full sun in much of the region. They provide

an attractive, low-maintenance alternative to Kentucky bluegrass roughs and are increasing in use each year.

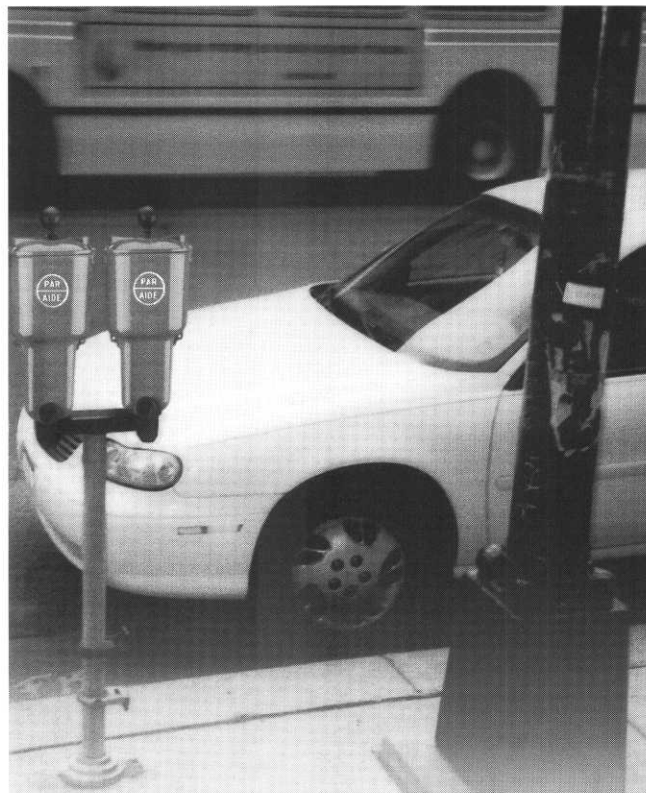
Annual Bluegrass

Annual bluegrass is such a successful weed that it is often maintained as the dominant species on golf course fairways. In many climates, it can provide reasonably good playing conditions. In much of the Midwest, it is a major problem, and if superintendents could kill it, they would. Midwestern superintendents often refer to their fairways as being a mix of *Poa annua* and another species, such as "bent/*Poa*" or "Kentucky bluegrass/annual bluegrass." Perennial ryegrass and annual bluegrass fairways are less common because of the effectiveness of ethofumesate against *P. annua* in that situation.

Poa annua presents many problems. It can easily be lost to winterkill, and it's susceptible to a variety of fungal diseases. In the spring it produces many seed heads that disrupt turf uniformity. *Poa annua*'s biggest drawback, however, is its life cycle. A winter annual, it germinates in late summer or fall, lives through winter as a mature grass, produces seeds in the spring and then simply dies in the heat stress of summer, as would be expected of a winter annual.

Some biotypes of annual bluegrass may also live through the summer as a weak perennial, but even these are easily lost in heat-stress periods.

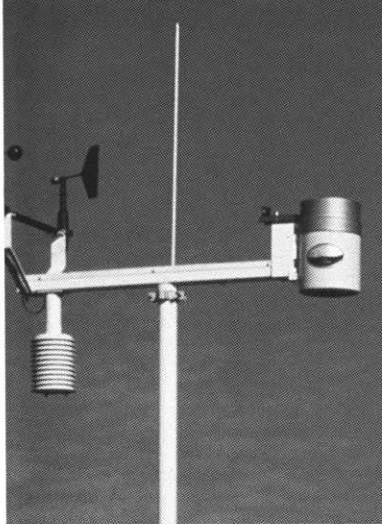
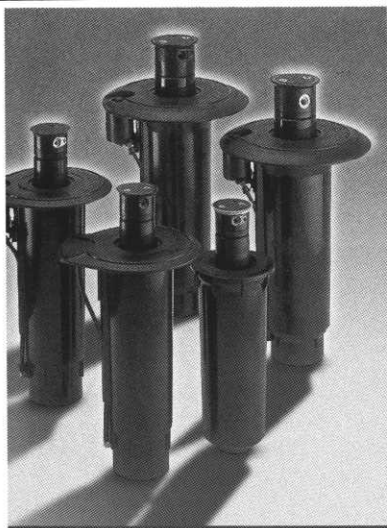
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