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New MacGregor TEE-SOLE and famous SPLIT/LEVEL SOLE
Are playing features that help you sell.

The TEE-SOLE Wood design will take the terror out of fairway wood shots...help you reach more greens in regulation. Turf drag on fairway shots reduces distance. So MacGregor made the sole of the new TEE-SOLE Woods smaller to reduce drag. (The face area and head weight have not been changed.) It's almost like hitting from a tee.

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As the sun swings north once more and the peepers in the swamps herald the rebirth of nature, many superintendents begin to figure out how much seed of various kinds they will need to repair the scars of winter and disease. They look at the budget and run their finger down to the item, marked “seeds.” Was enough leeway allowed? Is the price of bent up this spring? What kind of crop was produced?

In the seed business we can tell what has happened as of this date, but to predict what will happen three or four months from now—well, clairvoyants we are not. When these lines were written, the harvest had been virtually completed with losses far less than in 1968 when unexpected rainstorms soaked the windrowed grass. The subsequent sprouting ruined a large proportion of the seed and as a consequence, prices rose.

Blue Tag Certified Penncross bent for greens (Putting Green Quality) dropped about $2 a pound between November 1, 1968, and the same date in 1969. This is significant because there is no uncertified Penncross (and never again will be) and it is costing the grower more to produce this high-quality stock. It is difficult to interpret demand, but it appears that the need for this seed holds steady.

Merion Kentucky bluegrass exhibits the sharpest rise in prices from a year ago, especially in those classes that are “Poa annua free.” The sod industry is demanding this high-quality seed. With the heavy drain on available supplies, the price structure is affected. Most bluegrasses have held steady. In general the picture is good. There are plentiful supplies of most varieties and budgets should be able to cover whatever is needed.

Newer superior varieties still are in short supply and their cost will be high compared to Merion, common, Park, Delta, Prato and the like, particularly Fylking and Pennstar. Last year everyone was sold out of Fylking early in the season. This year the few thousand pounds of Pennstar were sold before the growers had finished cleaning the seed. As I see it, price is not going to stop many turfgrass managers from using the better varieties. With better performance of the grass and with better machinery to get the seed in contact with the soil (scarifier-seeders), one needs to use lower rates per acre to get satisfactory results.

The fine-leaf fescues took a jump clear across the board with not one declining in price compared to a year ago. Demand is strong and yields have suffered as a result of the anti-pollution measures taken against burning. Burning is the growers’ way of eliminating trash, insects, weed seeds and diseases. No one is quite sure as to what will happen if fields cannot be burned now and then.

The sturdy tall fescues are up significantly in price. I see a joint effect of reduced yields and heavier demand. Highways, parks and golf courses...
When buying for the golf course, there are two points on which every superintendent should be clear, no matter how the buying is done: 1) have legal authority to make the purchase; 2) be ready, willing and able to justify cost and material purchased within the allotted funds.

Putting material out to bid is not a common practice, at least not at private courses; however, it has some advantages. It is obvious that a savings can result by accepting the lowest bid. Less understood are some indirect advantages.

Large orders put to bid early in the season, or off season, are assured of prompt attention and delivery, sometimes at special discounts. (This also applies to non bid orders.) Some houses specialize in certain materials, and grouping of items in this category almost always results in low prices. The two big divisions are those which specialize in chemicals and fertilizers, and those which deal in equipment and sundry items.

Fertilizer trends

For several years there has been unprecedented expansion in fertilizer mining and manufacturing facilities. The main impetus came in the name of “Fight Poverty” and “Food for the Starving.” Now there is a surplus of food and fertilizer, both of which have been given away or sold at or below cost. A change is in the making. Production costs are up, labor demands higher wages, transportation costs may be hiked 10 to 11 per cent, money for plant expansion and maintenance cost more. The end result will be higher prices for nearly all fertilizers simply because no one can continue to sell goods at or below cost and stay in business.

An unfortunate situation is that which prompts a dealer to cut prices as a way to get more business. This works for a time, but it ends up with no one making the profit; they must stay in business.

Fertilizer users should be aware of the conditions which have led to such low fertilizer prices. By the same token we should not be surprised when prices begin to reach a more normal level—normal as related to costs and prices of other commodities.
HERE IS THE ANSWER to your problem of moving heavy materials around your golf course.

Champion Doo-All Trailers, equipped with 1-cu.-yd. hopper and interchangeable flat bed, can help you do a hundred jobs more quickly and efficiently.

With the hopper in place, you can haul sand, top dressing, or any bulk load to where it is needed on the course. Lift off the hopper, remove four bolts and put the flat bed on, and you have the perfect vehicle for those many hauling jobs (sacks, drums, benches, debris) that come up throughout the year.

TERRA-TIRES Protect turf from rutting . . . Big, easy-rolling Terra-Tires spread the load over a 48" width of ground. You get the work done when needed without added problems of turf damage or ruts.

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PART TWO

GOLFDOM continues its rundown on the most frequently asked questions about automatic irrigation

Automatic Irrigation: Ask the Experts

By the EDITORS and FRED V. GRAU

Some questions have been carried over from last month's article. Different manufacturers, however, have answered these particular questions. Again, the responses are solely the opinions of the individual manufacturers.

Question: Is an adequate source of water assured? Should we use city water, storage ponds or wells?
Answer: One of the most important factors to be considered in contemplating an automatic sprinkling system for the golf course is the water source, quality, the amount required and the cost.

Municipal water, when available, has the best assurances of a dependable supply and quality that does not need filtering. Cost in many cases includes the use of municipal water per 1,000 gallons or the cost of meter(s) or supply lines. Municipal water is usually delivered under pressure, which can reduce the pumping power cost to the golf course. In cases of high pressure, municipal water may eliminate pumps. The savings in initial pumping plant investment and power bills may offset the higher cost of municipal water.

Ponds or lakes are often most economical, particularly if well-located on the course and if the water can be easily replaced. Systems using pond or lake water carry the total cost of pumping plant and power, as well as screening or filtering of the water. Evaporation or seepage can increase cost, if replenishing costs are high. The cost of ponds and their maintenance is usually offset by the beauty and other factors that they add to the course.

In many areas, wells can be developed at one or more points on the course from which sufficient water can be pumped directly into the automatic sprinkling system. If the wells are properly cased and developed, screening or filtering may not be necessary. Good wells do not have a replenishment cost, but the pumps will require more horsepower than lake pumps, because of the extra power required to lift the water from the water table in the wells.

In choosing the best water source, many factors should be considered. The cost of pipe for the sprinkling system will be affected by the location of the water source. The center of the course or a location just off-center at the highest elevation can make a worthwhile reduction in main line pipe costs. Less pipe cost results in some cases where two or more water sources are used.

The quantity of water required depends on the acreage to be watered, the amount of consumption by turf under climatic conditions and evaporation losses. The total water requirements for maintaining good turf can vary from a maximum of two inches a week, in hot, dry desert climate to as little as one inch in northern, cool climates. The sprinkler system water requirements must be based on the maximum usage during the hottest, driest period of the year. The sprinkling system may only be operated during the night hours from the closing of play in the evening until the start of play in the morning—usually not more than 10 hours and in the case of lighted courses, eight hours or less. With the acreage determined, the inches of precipitation per week required and the hours per day allowed for watering, the engineer can quickly and accurately compute the water in gallons per minute required at the source.

(Buckner Sprinkler Company)

Next question: Will first cost be the last cost?
Answer: No, not quite. An automatic irrigation system, like any other mechanical piece of equipment used on a golf course, must be maintained.

Aside from the initial cost of building the golf course, an automatic irrigation system is probably

Continued on page 60
At last! A non-creeping Bentgrass that's easy to care for.

**HOLFIOR Colonial Bentgrass**

**CONSIDER THESE ADVANTAGES:**

It is non-creeping in contrast to the creeping bentgrasses. Its stems and leaves produce a dense turf with good texture. The tillers stand more upright with leaves which remain green all the way down to the ground. Avoid tufty appearance even when mowed short. Provides a uniform turf without ugly patching or puffiness.

Note the non-creeping growth characteristics of the Holfior Bentgrass above compared to the Penncross Bent below.

Want more information?
Write for Northrup King Turf Bulletin #3 on Holfior Bentgrass.

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**ASK THE EXPERTS**

Continued from page 59

the single largest investment a golf club will make. It stands to reason that a club will want to protect its investment with proper maintenance. For example, full-time mechanics are hired to maintain turf maintenance machinery that may only amount to one-third of the cost of an irrigation system. Similar attention should be paid to an automatic irrigation system. In other words, a part of the labor cost saved through automation should be diverted to maintenance.

(Toro Mfg. Corp.)

**Question:** Are present mains usually adequate or must all new lines be installed?

**Answer:** Present mains usually are not adequate enough, particularly where a quick coupler system is being converted to an automatic system. If the main is steel, as some are, the inside diameter size will have to be changed due to corrosion, increasing the flow loss. Also, new mains can usually be better placed and at the proper depth to accommodate a new design. In the overall picture, the main size is a very important part of a system, so the additional cost is more than warranted in our opinion. Also, manufacturers wish to give their products the best possible conditions under which to operate.

(Febco, Inc.)

**Answer:** Our answer, for the most part is no. If the golf course is not too old and the main lines are either asbestos cement pipe, cast iron pipe or steel pipe that has a cement mortar lining and is tar-coated or wrapped on the outside, then some sections of the pipe could possibly be utilized, but only if the pipe is of proper size to meet the demand of the engineered design of the new automatic system.

The following figures are taken

Continued on page 61

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**IN YOUR OWN BACK YARD**

Now possible with new 0217® Brand Fylking Kentucky bluegrass lawn seed or sod! Fylking forms a dense turf with the greenest green, beginning in early spring and lasting into late fall. It doesn't require special golf course care, yet thrives when cut low as 1/2 inch for your own putting green. A hardy bluegrass originating in Svalof, Sweden, Fylking is drought and winter tough, doesn't show traffic wear and possesses more resistance to leaf spot and stripe smut than most other bluegrass varieties. Proven in 12 years of international tests.

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