NEVADA TURF CONFERENCE FOCUSES ON DESERT NEEDS

The 1986 Southern Nevada Turfgrass Conference will take place Dec. 12-13 at the Palace Station Hotel and Casino in Las Vegas, NV. The conference is sponsored by Nevada Cooperative Extension, the College of Agriculture—University of Nevada Reno and the Southwest Golf Course Superintendents Association.

The conference addresses the problems of growing turfgrass in the desert. This year's program is designed to prepare the turf professional to meet these problems with practical, specific information on:

- · Turf disease control:
- · Turf weed control;
- · Pesticide safety;
- · Water management; and
- · Local research findings.

The principal speakers will be Dr. James Watson, vice-president, the Toro Company; Dr. Clyde Elmore, weed specialist, University of California; Dr. Phil Cobaugh, plant pathologist, Texas A & M University; Dr. Arden Baltensperger, turf specialist, New Mexico State University; Dr. Harry Smith, pesticide specialist, University of Nevada-Reno; and Dr. Dale Devitt, soils and water specialist, University of Nevada-Reno.

"In the past, the conference has attracted superintendents and turf managers from all over the desert West," says Bob Morris, conference coordinator. "Their problems are unique. That's why we organized a conference specifically for desert conditions."

A conference agenda, mail-in registration form and more information will be mailed this month. If you are interested in desert turf management, call (702) 731-3130 and ask to be put on the Turfgrass Conference mailing list.

Pesticide certification credits are available for Arizona and California participants. Continuing education credits (CEUs) are available for Golf Course Superintendents Association of America members.

E-Z GO RESTRUCTURES TO PUSH UTILITY VEHICLES

Determined to increase its sales support and overall distribution of utility vehicles, E-Z GO/Textron has promoted Frank Smith to national sales manager for turf, industrial and commercial vehicle sales and divided the country into three sales regions, each with its own regional sales manager.

Smith, who previously was responsible for turf vehicle sales only, will be responsible for all utility vehicle sales, as well as development of new products and a national distribution development program.

Bill Manning, Steve Cotton and Jim Simmons report to Smith. Manning is western regional sales manager, Cotton has the Southeast and Simmons has the Northeast.

Smith reports to J. Hampton Manning, vice president of turf, industrial and commercial vehicle sales.

HOT, DRY WEATHER REDUCES TURF SEED CROP

For three years in a row nature has caused consternation in the Northwest where most of the world's Kentucky bluegrass seed is grown. This year's crop is off by 40 percent. The culprit, according to Gail Jacklin of Jacklin Seed in Post Falls, ID, was extremely hot weather in June when most proprietary Kentucky bluegrass varieties pollenate.

Last year a disease called ergot damaged much of the Kentucky bluegrass crop. "Since we've had three poor crops in a row," says Jacklin, "there is no carryover." With a strong demand from sod growers and landscape contractors caused by new construction, supplies of most Kentucky bluegrass seed varieties will be exhausted before the 1987 harvest.

Fine fescue seed growers in Oregon are experiencing similar losses in their crops of creeping red and chewings fescues. "It's been too dry," says Tom Stanley of Turf Seed in Hubbard, OR. "We have had less than a half an inch of rain since April." Many crops are only half of what was expected says Steve Tubbs of Turf Merchants in Albany, OR. "In the past few weeks, some long-time fine fescue growers have filed for bankruptcy."

The perennial ryegrass harvest is 10 to 20 percent below projections. High demand from construction and severe drought damage in the Southeast may cause certain varieties to run out before next summer says Stanley. Carryover of perennial ryegrass from last year is also limited adds Tubbs. He recommends sports turf managers should buy their seed for the coming year soon if they want specific varieties of Kentucky bluegrass, fine fescue and perennial ryegrass.

The picture is brighter for creeping bentgrass and tall fescue. Production acreage for these two grasses was increased this year. As a result, both produced the biggest crops in history. Nevertheless, says Stanley, Penncross and Penneagle will remain on allocation due to a huge number of back orders. Tall fescues were least effected by the hot, dry weather. "Still, demand from drought-damaged areas for tall fescue seed is going to put pressure on the crop," says Tubbs.

Bottom line, according to Tubbs, is firm prices and tight supplies of most turf seed varieties during the next year. "Our distributors are calling us daily to check to make sure we can meet their orders," says Jacklin. "Anyone who has to have a certain variety of seed in the coming year should call their distributor in the next few weeks."



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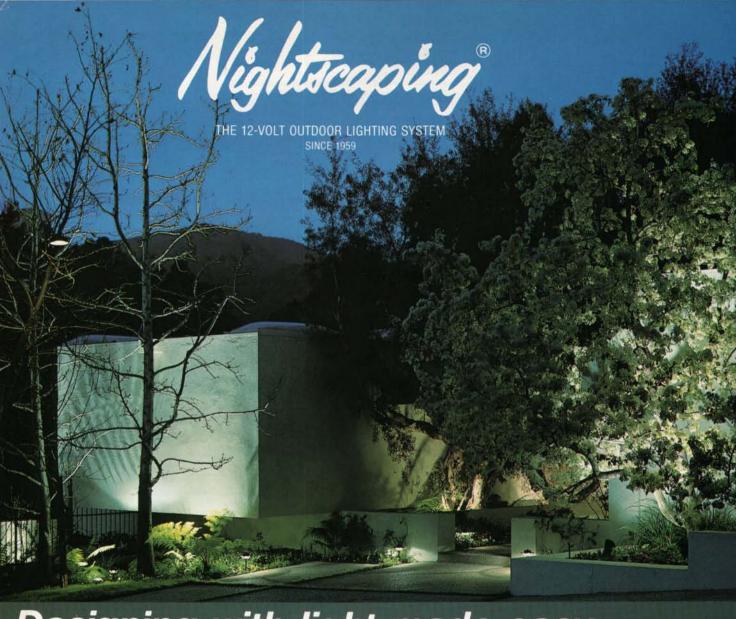
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VENTURI TO HEAD GOLF AT NEW ST. LOUIS RESORT

The names and the numbers associated with the Legends Golf Resort under construction southwest of St. Louis, MO, seem more appropriate for Boca Raton, FL, Palm Desert, CA, or Las Vegas, NV. Robert Trent Jones Sr. has designed the 27-hole layout for tournament and executive play. Ken Venturi, former U.S. Open champion and current CBS golf analyst, will direct golf operations and create the only permanent golf academy in the country at the Legends. The bill for the golf resort and convention center will total more than \$300 million by the time it is completed in 1988.

Construction of the Legends complex near Eureka, MO, is proceeding on schedule, including a \$55-million hotel, a spa and a large conference center. It will feature 27 holes of golf designed by Robert Trent Jones Sr., himself a legend in his field. An 18-hole championship course and a nine-hole executive course have been designed. The courses will wrap around the hotel.

Don Breckenridge, chairman and president of Breckenridge Development Corporation, the builder, said recently that he hopes the first golf course will open late in 1987 and be "truly playable" by mid-summer 1988. He added that big-time golf will be pursued once the course matures.

"The layout is designed for tournaments," Breckenridge told the St. Louis Post-Dispatch. "We have an isolated parking area for 1,700 cars for [PGA] Tour parking, and gallery seating is included in the course plans." The 18th-hole stadium will seat 15,000 around the green, "and Trent Jones will make most of the other holes good spectator holes as well."

Breckenridge revealed that his organization has already had discussions with the PGA Tour, Senior PGA Tour and Ladies Professional Golf Association about the possibility of tournament stops at the new complex.

'The regular tour will want the course fully developed," he noted, "so that would be at least three years. But we're as interested in the senior tour because it draws so well. The U.S. Open will take longer, but we are absolutely interested in having it.'

Memberships will be available for an annual fee of \$1,800 to \$2,000 and monthly dues of \$100. Breckenridge expects that the initial offering of 300 to the public, which will enable a golfer to join the resort and use the facilities, will go quickly. "Today, to join a club with a course of this caliber, it costs around \$20,000," he declared. "A lot more people have \$2,000 than \$20,000. We're building a fantastic course that the average golfer in St. Louis will be able to play."

Ken Venturi, former U.S. Open champion and now the golf analyst for CBS, will run the golf operation. He will bring in his own pros and it is said that he will be on site about four months a year. "Ken will operate the only permanent golf academy in the country," Breckenridge promised. "We'll teach at all levels - from four-year-old . . . to the man wanting to play the Tour. . . to 70year-olds. There will be packages including room and meals, and other packages for instruction only."

Six Flags Over Missouri, a major theme park, is located near the Legends site.

ARCHITECTS PREDICT **GOOD FUTURE** FOR MUNIS

Municipalities are building new golf courses at record pace according to Ken Killian, president of the American Society of Golf Course Architects (ASGCA), and will continue the boom throughout the next decade. ASGCA is helping communities considering a municipal golf course by providing samples of operating figures from existing courses and estimates of construction costs.

Killian claims municipal golf courses are no longer the "second class citizens of the golf world." He states some of the best new courses being designed are municipal layouts and that the trend will continue as more city and recreation department personnel recognize that such courses are appreciated by the general public and generate substantial income. ASGCA has examples from all parts of the country to prove it.

High interest rates choked development of muni courses for several years, says Killian, while the demand for golf facilities continued to grow. Lower interest and bond rates and the assistance of developers and other government agencies recently have started a game of catchup.

Developers are donating land for golf courses to meet greenbelt requirements and to serve as an attraction for companies and homeowners to locate in a community. Golf courses also provide solutions for water treatment and landfill agencies. New golf courses can utilize secondary treated effluent and also can camouflage a landfill when constructed above.

Killian expects this catchup period to last more than a decade. He encourages communities considering a municipal course to contact ASGCA, 221 North La Salle Street, Chicago, IL 60601. (312) 372-7090.

MIAMI DOLPHINS CHOOSE SURFACE FOR NEW STADIUM

Starting next August the Miami Dolphins will play at a new stadium, but they will be playing on the same type of surface. Like the Orange Bowl, the Dolphins' home field since the '60s, the new Dolphin Stadium will feature a Prescription Athletic Turf (PAT) surface.

Dolphin management signed a contract last month with Southern Turf Nurseries Norcross, GA, to install a PAT field before the 1987 season opener against the Chicag Bears on August 18. Joe Robie, owner of the Dolphins, has always liked the Orang Bowl field. The main reason he cites for building a new stadium is the lack of part ing at the Orange Bowl.

Dolphin Stadium will be the 17th PAT fiel

in the U.S.

FATHER OF SPORTINSTALL TO RETIRE FROM **MONSANTO**



When Dale Arrant retires this fall after 18 years with Monsanto's Astroturf Industries he will leave behind a legacy as the fathe of synthetic turf installation. Still relatively young at 57, Arrant made the installation of synthetic turf a science by developing equipment and methods specifically designed for its needs and characteristics

Arrant was named vice-president and operations manager of the only full-time synthetic-turf installation organization in the industry. He set about making the job easie by designing equipment that would make installation of the turf better and faster.

One of Arrant's more recent designs is a variation on AstroTurf's vertical drain through system to alleviate puddling. It per mits rain or melted snow to flow through perforations in a field's underpad. The wate flows horizontally between the pad and a non-permeable subbase to the sides of the field.

However, one of the Louisiana native's most innovative and important designs was never patented. "I built a glue-spraying machine that could roll ahead of a roll o turf, spraying down glue as the turf was un rolled," he reveals. "But I used it before ap plying for a patent, and the Patent Office said it was too late, because it had been in the public eye."

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A foot pedal controlled hydrostatic transmission affords variable mowing speeds as well as transport speed to insure maximum travel time between the job sites. The Hydro-Power 180 offers year-round versatility with a 2-stage, 73" snow blower and heated cab.

HOWARD PRICE 18155 Edison Avenue Manufactured by THRE FILLIPMENT Chesterfield, Mo. 63017



Soccer Park

continued from page 25

can't see water on the surface he keeps irrigating until he can. With sub-surface irrigation, if you wait until you see water on the surface of the soil, you watered too much, says Cotten. "The optimum wetness is called *field capacity*. That's when soil particles are just damp enough to stick together when formed into a ball. If water is coming to the surface from sub-irrigation, that means water has replaced all the valuable air in the soil pore spaces."

Cotten recommends installing moisture sensing devices called tensiometers 12 inches deep into the soil. Weather and soil conditions are so different, he states, that no single guideline can be set for how long to irrigate. "Part of the turf manager's art is knowing by observation when the field has been watered enough." says Cotten. "This skill is the same whether he uses surface or sub-surface irrigation." But, Cotten will make a recommendation based upon a tensiometer reading (when the tensiometer reading falls below 18 millibars, the soil is too wet).

To Clinton, the water and labor savings

were worth the risks. Submatic provided an on-site technician to oversee the installation and to teach a maintenance man hired by the city just for the soccer park how to operate the system.

The system for each field was installed, tested and operated long enough to bring the moisture level up to field capacity after the final ground preparation. The fields were sprigged with Midland bermudagrass and the systems were operated two to four hours daily until the turf became well-established. A longer, less frequent cycle was initiated following establishment in order to encourage the development of a deep root system. The systems are operated manually at the present time, but may be automated in the future, says Cotten.

"We can irrigate one field with just the pressure from the well pump, or two or more fields by using the system pump," says Roberts. In the future, the city can install a proportioner/injector to add the acid and liquid fertilizer to the irrigation water. If one field was used more than others, the amount of fertilizer to that field could be increased. An automatic controller connected to moisture sensors could be added to operate the system with minimal labor. Main-

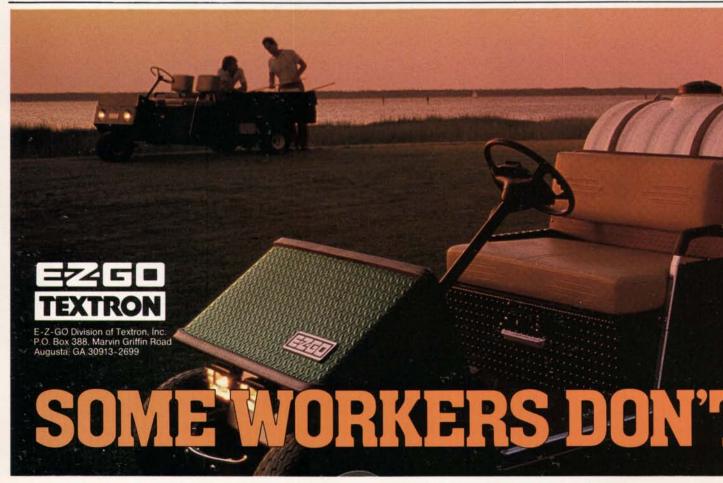
tenance would then be reduced to mowing and marking the fields.

Before Clinton can add an injection system or the weak acid solution it will have to install backflow prevention devices to make sure the materials do not enter the water going to the drinking fountains.

The season opened on the new fields in mid-September. "We're hoping to have the district finals within the next two years, boasts Holland. "Now, visiting teams like to play at Clinton and the coaches ask me how we did it with the oil business in such bad shape. While some clubs in our conference have lost up to 50 players, we gained more than 80."

New concession stands and rest rooms are now on the drawing boards. The Booste Club donated new bleachers for the fields as well as goal posts, nets and line marking equipment. But, most important of all soccer has caught on in a big way. "Varsity soccer is now a real possibility at the high school within two years," says Holland. "We' have a great team when it happens. Ou club teams in the 12-14 year old bracketook first and second place in the district last year on the old fields. Imagine how good they'll be on the new ones."

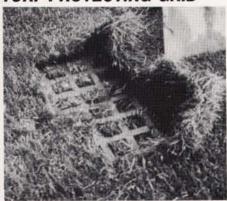
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ROOKIES

PRODUCT UPDATE

TURF-PROTECTING GRID



A system of interlocking grids can be placed over new sod, seeded areas or established turf to protect rhizomes, stolons and crowns from traffic damage. The grid is tamped or rolled into the turf area. In a few weeks, the grass conceals the plastic grids.

Since the grids are installed on the surface, no excavation is necessary. Mowers, carts and foot traffic are not hampered by the network of interlocking grids, once in place. Tests with Kentucky bluegrass and bermudagrass have been successful in maintaining grass cover in areas that suffered from compaction without protection.

CHEMPATH INC.

Circle 143 on Reader Service Card

NEW NITROGEN FERTILIZER

N-Sure is a liquid fertilizer containing triazone, a completely new form of nitrogen fertilizer. Triazone offers low burn, stability and controlled availability in one fertilizer solution for both southern and northern turfgrasses.

In field trials N-Sure caused little or no foliar burn and received high ratings for turf color and vigor. Triazone releases nitrogen more slowly than urea but not as slowly as IBDU. It volatilizes four times less than urea. Studies also found that the nitrogen in triazone is released uniformly over an eight-

week period. Applications of up to three pounds of nitrogen per 1,000 sq. ft. did not burn St. Augustine, Kentucky bluegrass and other common turfgrasses.

ARCADIAN

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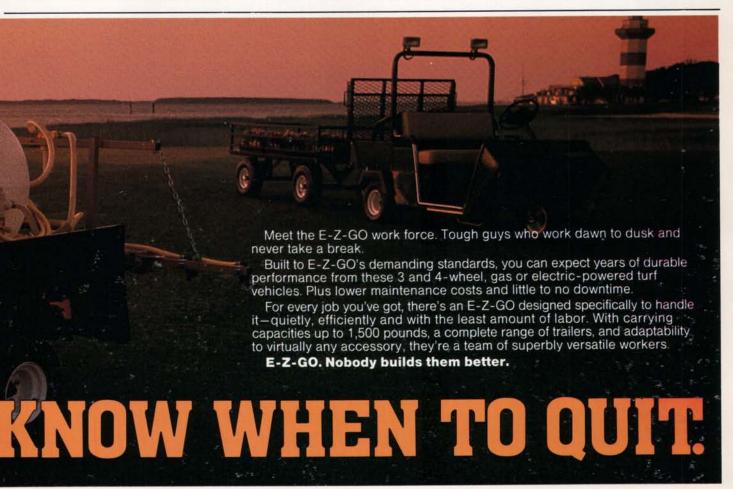
BROADLEAF HERBICIDE

Turflon II Amine is a newly registered herbicide for hard-to-kill broadleaf weeds in turf. By combining two herbicides, triclopyr and 2-4D, Dow Chemical Company has developed a postemergence herbicide which is effective on a broader range of broadleaf weeds in turf.

Rob Peterson, product marketing manager, says wider control of the product reduces callbacks and spot weed control, which translates into labor savings for turf managers. Turflon II is also non-volatile, reducing the chance of drift damage to desirable broadleaf plants.

DOW CHEMICAL COMPANY

Circle 145 on Reader Service Card



ROOKIES

PRODUCT UPDATE

SCOREBOARDS



A new electric scoreboard can complement a quality stadium field and add to team and fan excitement. A wide assortment of both outdoor and indoor scoreboards and timing boards is available from Nevco, a company with over 50 years' experience in scoreboard design and manufacturing.

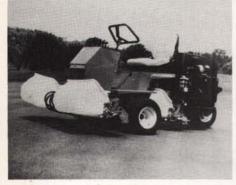
Football scoreboards include home and guest scores, time to play, period, ball on, down, yards to go and time outs left. A microprocessor control unit tells the scoreboard operator if he has made a mistake in entry and displays information before it is flashed on the board. The same portable control unit can be used to operate other Nevco scoreboards at the facility.

Scoreboards are available for all sports in five different colors. The units come with a one-year guarantee and free service contract for mail-in repairs.

NEVCO SCOREBOARD CO.

Circle 146 on Reader Service Card

DIESEL GREENSMOWER



Fuel efficiency and additional power are just two of the features of the diesel-powered riding triplex greensmower from Jacobsen. The Greens King IV Diesel is the first dieselpowered riding greens mower in the industry.

It has all the features of gasoline-powered versions, including full-floating and pivoting cutting units and nine-blade reels with power backlapping to keep the blades sharp with less effort. Dynamic braking slows the mower down when the operator lets up on the accelerator pedal. The weight of the

mower is evenly distributed through the frame and wide pneumatic tires.

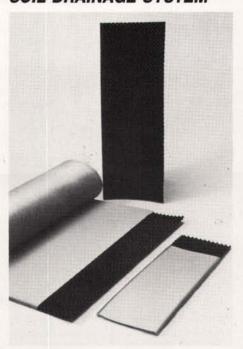
Jacobsen has two new optional attachments for the Greens King IV. The first is a Turf Groomer designed to promote faster, truer greens without lowering the cutting height. The second is an electronic performance monitor that digitally displays the engine speed, ground speed, and reel speed at the touch of a button. By mowing each green at the same speeds, a consistent cut is achieved.

A wide range of attachments and accessories is available to match individual applications, such as solid and grooved roller, brushes, spikers and vertical mowers.

JACOBSEN, DIV. TEXTRON

Circle 147 on Reader Service Card

SOIL DRAINAGE SYSTEM



An alternative to conventional aggregate drains for subsoil drainage is now available and cuts installation time by as much as 50 percent. The Hitek drainage system consists of a prefabricated polyethylene core wrapped in or laminated to a geotextile fabric. While material costs are about the same as conventional aggregate drains, savings in transportation, storage and installation make it more cost-effective.

The material comes in three thicknesses up to 1.6 inches and widths up to four feet. The cuspated high-density polyethylene core can withstand up to 10,000 pounds per square foot before crushing. A company spokesman said a few rolls of Hitek 40 will carry as much water as a conventional aggregate drain made with four truckloads of gravel - yet they will fit in the back of a pickup truck with roon to spare.

BURCAN MFG. INC.

Circle 148 on Reader Service Card

SYNTHETIC SOCCER SURFACE

After studying 28 soccer fields in England and Western Europe, Astroturf Industries has developed a new synthetic-turf surface called System-90 specifically for soccer, field hockey and lacrosse. The research indicated standard Astroturf was too "cushy" for soccer. The underpad was changed to provide firmer footing and more lively ball action.

The first installation in the U.S. will be at the Busch Soccer Park in St. Louis. The park, located in a flood plain, has five fields, and two will be converted to System-90. The surface also features a porous playing surface, underpad and asphalt subbase which drain into drain pipes. The fields carry a seven-year warranty.

ASTROTURF INDUSTRIES, INC.

Circle 149 on Reader Service Card

TURF GROWTH REGULATOR

The first growth regulators for hybrid ber mudagrass fairway turf and St. Au gustinegrass are now available from O.M Scott & Sons. These products slow the growth of turf for up to eight weeks and prolong and enhance greening for up to 12 weeks. The amount of clippings produced while mowing turf treated with the growth regulators is 75 percent less than fertilized turf without growth regulator.

The products increase the density o hybrid bermudagrass turf to provide bette playability on sports fields. Two out of three mowings can be eliminated during the eigh week growth reduction period. The manufac turer suggests two applications with the products from June to mid-August.

Two combinations of the growth regula tor with fertilizers will be available in limit ed portions of the South this year. One is for loam and clay soils and the second is for sandy soils.

O.M. SCOTT & SONS

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