Bright ideas for outdoor sports lighting

A football game under yellow lighting just isn't as nice as a game under white lights. That's why most fields are lit with metal halide lights, rather than quartz.

In fact, the Orange Bowl is the only major stadium which still uses quartz lights, according to Charles Lindstrom of Lindstrom Associates, Lincoln, Ill. "It's important to have several instantaneous-response quartz lights on a field, however, so people don't panic if the lights go off," Lindstrom told sports turf managers at the North Central Turfgrass Conference.

Lindstrom says it's important to take several things into consideration before setting lights up on a field.

- Ask a number of manufacturers to specify the photometries or lighting array. Photometries is the lighting level based on how many fixtures are used.
- Decide what wattage level light to use. Lindstrom recommends using 1500-watt bulbs for athletic fields and 1000-watt bulbs for tennis courts.
- Ask the manufacturer about design and placement of poles. Architects and engineers cannot determine this, since it is directly related to the photometries which varies between companies.
- Get specifications written out based on performance only. This will include the type of foot-candle level, energy consumption and best uniformity. Uniformity is defined by the brightest part of the field divided by the darkest part of the field.

When deciding how to light an athletic field, it's important to keep in mind what events are played on the field, how many spectators will be sitting in the stands, and whether it will be taped for TV. For example, professional boxing requires more lighting than any other sport because of the vast number of spectators in the audience.

Landscape Expo draws attendees from 36 states

Initial response to the second annual Landscape Exposition, March 3-5 at the O'Hare Exposition Center in Rosemont, Ill., has drawn interest on both a regional and national scale.

Attendee pre-registration already includes representatives from 36 states. They will come from as far away as Massachusetts and California.

Landscape managers from all corners of the industry will attend. The Expo will have more than 225 exhibitors and 30 conference sessions covering a variety of subjects. For a more detailed look at the Expo, which is sponsored by WEEDS TREES & TURF and LAWN CARE INDUSTRY magazines, see page 80 in this issue.

Magazine to start new feature on design

WEEDS TREES & TURF magazine is beginning a new monthly landscape design feature.

This section will consist of three to six color photos of outstanding landscape design/installation jobs completed by companies throughout the country.

WT&T is now accepting color slides of unique or award-winning projects from landscape contractors and designers. Slides will be returned, if requested.

Projects should be submitted in the following categories: use of annuals for spring or fall color; hardscaping (patios, pools); interiorscaping; creative use of shrubs (texture, shape); aquatic scaping; use of native plant materials (prairie, wildflowers); use of "hard" materials (benches, swings); nightlighting; creative use of trees (spring or fall color, shape, texture); fountain design and surrounding landscape; and winterscaping (evergreens, Christmas lights).

Entire projects, which might not fit into a category above, but demonstrate exceptional landscape design, will also be considered.

Each submission must be accompanied by a description of the project. It should be about one typewritten (double-spaced) page long and should include the following: client's name; designer's and installer's names; awards won; what the client wanted to accomplish; how the designer/contractor interpreted the project; problems; types of plants and hard materials used; cost; time it took; and date completed.

Please send entries to: Heide Aungst, WEEDS TREES & TURF, 7500 Old Oak Blvd., Cleveland, OH 44130.
TREES

New Jersey’s TREE program spruces up state’s highways

Despite some setbacks, New Jersey’s Turnpike Regional Environmental Enrichment (TREE) program won the 1986 National Arbor Day Foundation award for the best state highway concept.

The goal of the five-year project, which was begun in 1985, is to plant three million trees along the 142-mile toll road. The project’s aim is to establish enough trees to screen out the industrial sites lining the turnpike.

But most of the seedlings planted in 1986—about 40,000—died from the summer’s devastating drought. Some trees have had trouble surviving in the poor soil which was brought in as fill when the state built the turnpike.

"It was designed as a five-year project, but with the drought, it may be a 20-year project," says Jack Salveson, director of the TREE program.

To combat the problem this coming summer, Salveson has struck a deal with American Cyanamid, manufacturer of Aquastore, a water-retaining polymer. The company will work directly with the TREE program on test sites involving shrub rooting, tree propagation and bare root seedling transplants using Aquastore.

Another company, Conard-Pyle, will also work with the project in continued on page 14

ATHLETIC TURF

NTSC finds new home at the USDA

The National Sports Turf Council (NSTC) finally has a place to call home. The NSTC is now headquartered at the USDA's Beltsville Agricultural Research Center in Maryland.

An agreement reached between the groups calls for the Beltsville station to give the NSTC an office, phone, secretarial help, and use of research plots until the council is financially able to support itself. An executive director will be named later this year.

"I see our major role over the next year in pulling together the information available on sports turf and determining research needs and priorities," says the USDA's Jack Murray, who is currently overseeing new headquarters. "We're excited about it."

Murray says the new headquarters will function as a center for information distribution. Research will concentrate on making public park and school system fields safer for young athletes.

The NSTC will continue to work closely with related groups such as the Sports Turf Managers Association, the NFL Players Association and PGMS.

"Fred Grau deserves credit in that he has taken a lot of the load and will continue to do so," Murray says. Grau serves as chairman of the NSTC.

Information on safer sports turf can be obtained by writing to: NSTC, USDA/ARS/BARC, Building 001, Room 333, Beltsville, MD 20705.

"1-2-3," an article describing pesticide safety "by the numbers," is a regular department of WT&T.
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**TREE** from page 11

- planting demonstration sites of hardy flowering roses on rights-of-way and off-turnpike property.

The TREE project began with more than 6,000 trees being planted: evergreens for year-round color, deciduous for fall color and red oak, the state tree.

But the project has already run into some roadblocks other than the drought.

“We have the growing capacity; it’s getting the cooperation,” Salveson says.

Lack of cooperation of property owners has been a major setback to the project. Most of the property within view of the highway is privately owned. It’s up to the owners to buy the seedlings and plant them.

The state forester offers 1,000 seedlings for $70 and will come in and plant them. But in the midst of the project was a debate over widening the turnpike, which created concern among most property-owners adjacent to the highway.

Salveson is already dreaming up other practical beautification projects, like using state prisoners to plant shrubs in areas directly along the highway, where trees might present a safety hazard.

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**ASSOCIATIONS**

**PLCAA installs Old Fox’s Wilkinson**

Dr. Jim Wilkerson of Old Fox Lawn Care, E. Providence, R.I., has been installed as president of the Professional Lawn Care Association of America. Russell Frith of Lawn Doctor becomes vice-president, and Paul Moore of Lawn Green is secretary-treasurer. Board members include J. Martin Erbaugh of Lawmark, Dr. Roger Funk of The Davey Co., Jim Mello of Nice’N’Green, David Sek of Monroe Tree and Lawntender, and Joe Windland of Tru-Green.

Ron Giffen, retired vice-president of Lesco, Inc., has been honored by being named Lawn Care Industry's 1986 "Man of the Year." The PLCAA has also awarded Giffen an honorary lifetime membership for his years of valuable service to the industry.

Last year's PLCAA show, which was held in Baltimore, Md., set records for both attendance and exhibitors: 158 exhibitors and 1,703 lawn care operators showed up. PLCAA executive vice-president Jim Brooks says the educational program at the show was more sensitive to issues facing the industry.

Brooks received positive feedback on speeches by Dr. Elizabeth Whelan and PLCAA media consultant Ford Rowan, which put the industry's problems into perspective and gave some insight on dealing with them, especially the media.

The 1987 PLCAA convention and trade show will be held in San Antonio, Tex., November 12-15.

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**CORPORATIONS**

**Clayton & Dubilier buys O.M. Scott**

A New York-based company that specializes in leveraged acquisitions will soon do just that to O.M. Scott & Sons of Marysville, Ohio.

Clayton & Dubilier will purchase Scotts and its sister company, W. Atlee Burpee, from the ITT Corp. for $150 million.

"No cash has changed hands, so their influence hasn't been felt yet," says Ron Gagne, director of lawn care services at Scotts. "We don't expect any changes until February, at least. They paid a lot of money for Scotts, so it doesn't seem reasonable that they would pay that much and then cut us back."

Scotts president and chief execu continued on page 18
THE BEST OF TIMES/THE WORST OF TIMES......Shaun Gayle, defensive back for the Chicago Bears, told the North Central Turfgrass Exposition (NCTE) that the best field the Bears played on last season was the natural turf at Tampa Stadium...The worst was the artificial turf in the Hubert H. Humphrey Metrodome in Minneapolis. "It has seams this wide," Gayle said, holding his hands an exaggerated two feet apart. Could that be why the Vikings beat the Bears? "I can't remember that far back," quipped Gayle. Now, about those artificial fields: "We would prefer an indoor facility with natural turf," he continued. "But I don't know if anyone's thought of that yet..."

SPEAKING OF THE NCTE......It was revealed at the NCTE that the University of Illinois-Urbana has the oldest continuous research plots in the country. The Morrow plots date back to the late 19th century. The plots are on the United States historical landmark register. An undergraduate library was built underground so as not to disturb the plots.

ARTFULLY ACCOMPLISHED......Ciba-Geigy, manufacturer of the fungicide Subdue, herbicide Pennant and insecticide DZN, was featured in the December issue of US Air magazine. But the article wasn't about chemicals or landscaping. It was about corporate art. Ciba-Geigy has a collection of 540 works of art, mostly abstractionist, displayed at its headquarters in Ardsley, N.Y. (The agchemical division is based in Greensboro, N.C.) The company started the collection in 1959. Today the collection has been in more than 10 public exhibits.

B.U.G.S., BUT NO BUNNY......The Biological Urban Garden Services, a news and information service for the organic landscape maintenance industry, has been formed to assist members in gathering and exchanging information on a variety of topics affecting the organic landscape industry. By means of a newsletter, members will be able to ask questions and discuss each other's problems, successes and failures. For information about B.U.G.S., send $1 dollar for postage and handling to Biological Urban Gardening Services, P.O. Box 76, Citrus Heights, CA 95611-0076.

SUMMER EXPERIENCE......The Los Angeles County Department of Arboretum and Botanical Gardens is offering paid internships emphasizing practical horticultural experience for the summer of 1987. Students enrolled in botany, forestry, horticulture or related courses are eligible and should apply by March 14, 1987. Students will be assigned to one of three public gardens in the Los Angeles area during the 10-week program, which provides hands-on training in nursery management, equipment maintenance, plant propagation, pruning and irrigation installation. Send a resume, three letters of recommendation and a letter describing qualifications to Janice Golden, Department of Arboretum and Botanical Gardens, 301 N. Baldwin Ave., Arcadia, CA 91006.

CORPORATIONS from page 14

Geneticist making strong turf claims

A Canadian geneticist claims his new slow-growing grasses can stop weeds from germinating. Turf industry experts are skeptical.

Jan Wiejer of the University of Alberta claims his fine fescues, bluegrasses, wheatgrasses and others are sturdy, need little care, and grow two to 6½ inches a summer.

A September 15 Newsweek magazine article reported Weijer's claims. Weijer told Lawn Care Industry magazine that his fine fescues could replace many of those currently on the market. He intends to market 30 to 40 grasses. With the help of a market research study from the university, he plans to introduce two in the near future.

But many turf industry experts disagree with Weijer's claims that his grasses, which are still restricted to Alberta, will adapt to other climates.

"We've had these things come along before, and their adoption is always limited," says Doug Brede, research director for Jacklin Seed Co., Post Falls, Idaho.

"I have a hard time believing any slow-growing grasses from the mountains of Alberta are going to grow well in Cleveland, Santa Ana, and Atlanta. This is not going to be a big factor for the fine turf market in the United States."

PESTICIDES

EPA decides not to ban alachlor

Instead of banning the use of alachlor, the Environmental Protection Agency, after a special review, has opted for limitations to minimize continued on page 21
Alachlor, a herbicide for use on crops and woody ornamentals, is produced by Monsanto under the trade name Lasso.

The EPA says that benefits from using the chemical, which has been shown to cause cancer in laboratory animals and possibly in humans, outweigh risks.

New EPA requirements stipulate that only certified workers can apply the chemical, and that the product must remain enclosed during mixing to reduce exposure.

The agency also lifted its ban on aerial spraying of alachlor under the condition that no ground workers remain in the area as "flaggers" to signal cropdusters.

Banning the chemical would have cost farmers between $500 million and $760 million in increased weed control costs and declining crop production.

Estimated sales of the chemical for 1986 are $300 million, or a quarter of Monsanto's agricultural chemical sales.

Concern still exists over the presence of alachlor in public drinking water. The EPA is expected to propose a maximum contaminant level for the chemical under the Safe Drinking Water Act. The agency estimates that residues from alachlor use could cause cancer in two persons out of a million.

**INDUSTRY**

**Ford reorganizes tractor operations division**

With the new year, Ford Motor Company moved to restructure Ford Tractor Operations and New Holland, Inc., into a worldwide unified operation. Coinciding with the restructur- ing, the company reorganized the tractor operations from a Ford division to a subsidiary, Ford New Holland, Inc., to be run by Robert F. Moglia.

According to the company, the move represents an attempt by Ford to broaden its role in the competitive agriculture and industrial equipment industry.

Three major product components will comprise the new organization: Tractor Operations (FTO), New Holland and Diesel Engine Operations. Tractor Operations produces a variety of agricultural and industrial tractors.

New Holland makes harvesting and haying machinery, along with industrial equipment. Diesel Operations manufactures engines for New Holland machinery, Ford trucks and a number of other manufacturers.

Tractor and diesel operations will be headquartered in Troy, Mich., in the present FTO facilities, while corporate world headquarters will be consolidated in New Holland, Pa., later this year. The parts depot and branch sales office will remain in Troy.

Sales and marketing of Tractor Operations and New Holland will be based in New Holland.

**RESEARCH**

**Nematodes can determine toxicity of chemicals**

Nematodes seem to be developing a Jeckyl and Hyde complex lately. The tiny round critters, best known for their relentless attacks on agricultural crops, have a good side, too, researchers have found.

In addition to their recently discovered appetite for grubs, nematodes may also be useful in determining the toxicity of hazardous chemicals.

A Georgia Tech University research project found that reactions of nematodes and rodents were remarkably similar when exposed to eight different metals. The results led the researchers, doctoral student Phil Williams and his advisor, Dr. David Dusenbery, to believe that nematode tests could reduce the necessity for more expensive rodent tests in the future.

Many questions remain unanswered. As a result, the two have applied for a federal grant to study possible differences in tolerance levels between rodents and nematodes, along with other possible variables.

Preliminary research was conducted through a grant from the National Institute of Occupational Safety and Health.

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continued on page 24
Since nematodes live in a number of habitats, they may be useful in determining contamination both on land and in water. Because they are easier to grow and control, nematode testing is also easier and less expensive to conduct than those using fish and insects.

While Williams says the nematodes would not be used to replace rodents completely, they “can be useful in streamlining the testing process.”

PEOPLE

GCSAA associate director embarking on new course

James G. Prusa, GCSAA associate executive director and director of education, will leave his post to concentrate full time on an independent business venture this year. Prusa planned his departure for the beginning of this month, shortly after the completion of the Phoenix show.

James Prusa
Bob Coyner
Bob Earl

Nelson Colvin has been elected 1987 president of the California Landscape Contractors Association. Colvin is vice president of California Landscape, Inc., Canoga Park, Calif.

Lesco has named Bob Coyner product manager for spreaders and sprayers. The company has named Bob Earl director of stores for Lesco Service Centers.

Darcy Loscutoff
Tom Stanley
Tom Rivers

Jay Glatt, of Turf-Seed, Hubbard, Ore., has retired as vice president and general manager, which he held for eight years, to concentrate on his filbert farm. Darcy Loscutoff takes over as general manager. Tom Stanley was appointed sales manager, which includes advertising.

Rain Bird Sales, has appointed Tom Rivers Northeast second Mid-Atlantic district manager for the Turf Division. Also, Keith Shepersky has been appointed product

continued on page 28
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Bud Camp has been named senior sales representative for the Midwest division of Lebanon Chemical. Lebanon also announced the following staff changes: J. Mark Nuzum was promoted to manager/agronomist of Lebanon's Tidewater AgriCorp subsidiary. Kevin C. Hoffman was named market development coordinator at Lebanon's headquarters. Timothy C. Layman was named sales representative for Lebanon's Division 34.

Patrick A. Harrigan has joined Outdoor Equipment Co. as sales representative for turf products. He will be responsible for central Illinois and northern Missouri.

Wayne Ennen, international sales manager for Chevron Chemical, was elected chairman of the Western Agricultural Chemicals Association Board of Directors. Ken Smith, district sales manager for the Wilbur-Ellis Co., was elected vice-chairman, and Jack Leach, assistant regional sales manager for Stauffer Chemical Co., was elected secretary.

Jacklin Seed Co. has named Dr. Douglas Brede research director. Brede had been an associate professor of turfgrass management at Oklahoma State University prior to joining Jacklin.

Fermenta Plant Protection announces the following staff changes: J.N. Butler has been named Southern area sales manager. Joseph A. Ignatoski was appointed Northern area sales manager. George N. Chism has been appointed Western area manager.

W. Donald Sifton has been named divisional project manager for Assert and AC 263,499 (Pursuit) herbicides for Cyanamid International Agricultural Division. Sifton joined the company in 1978.

Hunter Industries has named Jay Inglis technical services manager. The company also appointed two southern California sales representatives. Joe Silva will be regional manager for Los Angeles, Orange, Kern and Ventura.
Get the thatch out before you fertilize

Don't fertilize the thatch

Turf experts agree that, after a hard winter, excessive thatch must be removed in order to have a healthy turf in the spring and summer. Nutrients are merely absorbed into the thatch and don't reach down into the roots if the thatch build-up is not removed.

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Bob Brophy

Environmental Industries adds company to maintenance division

Environmental Industries, Inc., will add Botanical Concepts to the Interiorscape division of Environmental Care, Inc., the parent company's maintenance division.

Botanical Concepts, based in Colorado Springs, does interior landscape contracting, including design, installation and long-term maintenance for a variety of facilities. Botanical's founder, Debbie R. Drury, will continue in a management role.

According to Bruce Wilson, president of Environmental Care, the addition will enable the division to increase its market share of the interior landscape business in the Colorado Springs area.

Environmental Care also provides exterior landscape maintenance and mature tree care services. Other divisions in the parent company operate landscape construction and tree growing services.

Changes in geotextile industry for Du Pont and Nicolon

The Du Pont Company has completed the sale of its worldwide business for "Reemay" spunbonded polyester and the United States-based business for "Typar" spunbonded polypropylene to the InterTech Group affiliate Reemay, Inc.
Included in the sale were manufacturing facilities at Old Hickory, Tenn., associated product patents, technology and inventories. The European-based business and manufacturing facility for “Typar” was not included in the sale.

InterTech will retain most of the 375 Du Pont employees of the Old Hickory plant.

In addition, the Nicolan Corporation expanded and redesigned its line of “Armorform” revetment forming fabrics and is now offering it through the newly formed firm Texicon, with offices in Atlanta and Cleveland. Texicon has been appointed the exclusive U.S. representative for the products.

The new firm was established by fabric industry veterans Donald C. Dominske and Bruce Lamberton, formerly with Intrusion-Prepakt.

**CHEMICALS**

**Riverdale gets label for post-emergency**

Riverdale Chemical Company, Chicago Heights, Ill., has received EPA issuance of a product registration for Weedestroy Tri-Ester, a three-way, post-emergence selective broadleaf herbicide.

The product contains esters of 2,4-D, meprop and dichlorprop, and is made for use on golf courses, parks, rights-of-way, sod farms, ornamental turf lawns and other non-crop areas.

According to the company, the herbicide resists washing from plants, has a greater herbicidal activity than the amine form, and can be used during cool weather, either later or earlier in the season.

**GOVERNMENT**

**FDA lax in checking food for pesticide traces**

According to a report from the General Accounting Office, the Food and Drug Administration rarely tests domestically grown food for pesticides, and stops the sale of the tainted food even less, the New York Times reports.

The GAO report stated that because the agency cannot monitor all food possibly containing illegal amounts of pesticide residues, it relies on spot testing of no more than one percent of domestically grown agricultural products as a deterrent.

In addition, those found to be selling tainted products are rarely penalized, the report continues.

The GAO report recommends that FDA create guidelines for testing and suggests the agency petition Congress for the authority to slap perpetrators with civil penalties.

FDA does not have legal authority to hold domestic food while court action is being taken to remove it from the market. The agency relies on slow and expensive criminal suits against growers.

FDA has yet to take action on the report, according to the agency.

**INDUSTRY**

**Seed contractor markets improved varieties**

Cascade-International Seed Company, a new seed contractor based in Tualatin, Ore., plans to be a primary contractor and marketer of a number of improved seed varieties.

The company, a subsidiary of Jonathan Green & Sons, Farmingdale, N.J., will supply the parent company and other companies, and market Jonathan Green’s new varieties. Those varieties include Mesa turf-type tall fescue and Destiny Kentucky continued on page 36

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Seed Markets from page 32
bluegrass, produced by Jacklin Seed. Other new varieties and releases include Allaire turf-type perennial ryegrass, Azetec turf-type tall fescue and Lexington Kentucky bluegrass. More varieties, mixes and brands are planned for future release.

The new company is run by seed industry veteran Irv Jacob, who started in the industry in 1960 at age 14. Jacob is noted for negotiating contracts with railroads for shipment of seed in boxcars, which helped reduce shipping costs and increased annual ryegrass usage in 1984 and 1985.

CONFERENCES

Good forecast coming from International Fair

Word from the 14th International Garden Trade Fair, September 28-30 in Cologne, West Germany, is that improved lawn maintenance is becoming big business on an international scope.

Increased demand was seen in both the domestic and export business by 26,000 visitors from 67 countries.

RESEARCH

Cloning takes step toward turfgrass use

A researcher with the Institute of Food and Agricultural Sciences (IFAS) has developed a seed clone dehydration technique using the forage orchardgrass and grape which brings the possibility of improving "nature's time capsule" a step closer.

"We've been able to create plant clones for some time, but we hadn't been able to figure out a way to make them stop growing until we were ready to plant them," says developmental biologist Dennis Gray.

Gray, who does research on somatic embryos, or plant clones, out of IFAS's Leesburg, Fla., Agricultural Research and Education Center, says the findings carry far-reaching implications.

He discovered that by drying the tiny plant clones, a portable synthetic seed system is created which growers could apply for practical planting.

The dehydration research is the first of its kind done successfully. Despite low germination rates, Gray hails the research as a "breakthrough in synthetic seed research."

Though his research will be directed mainly toward agronomic applications, Gray says the research will eventually grow into the turfgrass and landscape markets in some way.

By means of cloning, researchers will be able to develop a seed that is the elite of a species. Logical applications for the technology would be in turfseed development.

"Synthetic seeds bypass sexual reproduction," he explains. "We'll be able to choose the best plants to clone, and we'll be able to commercially propagate hybrids and genetically engineered plants."

Exhibitors displayed products ranging from greenery to garden furniture. Firms displaying lawn care equipment reported better sales than last year, aided by new product introductions and an increased foreign attendance, which often rose above the 40 percent mark in this exhibit section.

New lawn mower models featured reduced noise emission, low oil-temperature operation, and engines running on no-lead gasoline fitted with catalytic convertors.

The 1987 show will be held September 6-8, running concurrently with the International Trade Fair of Sporting Goods, Camping Equipment and Garden Furniture.

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