ATHLETIC TURF

Toronto decides to go with artificial turf

Despite a strong push by grass backers, the Toronto Stadium Corp. has chosen to use an artificial surface in its new dome stadium. The Toronto dome will be the first in North America with a retractable roof.

Because of the roof's retractability, turf scientists agree that growing turf inside a dome is possible. Jim Watson, Ph.D., vice president of the Toro Co.; Bill Daniel, Ph.D., inventor of Prescription Athletic Turf (PAT); and Steve Wightman, sports turf manager of Denver's Mile High Stadium, addressed grass supporters and the Toronto Blue Jays' management earlier this year in Toronto.

The Stadium Corp. chose artificial turf despite a strong public support for grass. The *Toronto Star* asked readers to vote on the two surfaces. The results showed 4,515 people in favor of natural grass to 34 in favor of synthetic.

A confidential report by the Stadium Corp. stated that they chose artificial because:

- "To grow grass require a daily minimum of 50 percent of available daylight. This represents approximately, on average, six to eight hours of light per day."
- "The grass may not be able to withstand and recover from a series of back-to-back baseball and football games."
- "The natural grass systems require that the stadium not be used for other purposes immediately following the football season when time is required to remove the turf, and before the baseball season when time is required for resodding. There would be a minimum loss of a potential 25 revenue-generating days/year with a P.A.T.-type natural turf system. This would result in a projected loss over the first 14 years of approximately $8.7 million."
- "The estimated cost premium of natural vs. artificial turf over the first 14 years of stadium use is approximately $22 million."
- Plywood or another similar material must be placed over the natural grass to mount most non-sporting events. In the opinion of trade show experts, this would render this project a "second-class trade show facility" and would completely undermine its ability to attract world-class events.
- "There are major operational risks in installing a natural grass system in the Dome stadium. Such an installation would be unprecedented and there are no assurances that the grass would be in a suitable condition for opening baseball games. As no satisfactory warranties or guarantees are available, the Stadium Corporation would be required to assume the full risk for the major liabilities involved."

The testimony of Watson, Daniel and Wightman disputed many of the claims. Lighting depends not only on duration, but intensity of light. PAT marketers say turf would fare well with 35 hours of light per week.

Wightman can convert Mile High from baseball to football in 13½ hours. "We have overnight versatility and yet we have not sacrificed the safety and playability of the field," Wightman said.

Cost is another matter of interpretation. The Stadium Corp. included in its figures a 12-acre nursery at a cost of $700,000. Sod could be grown at existing sod farms or nurseries and brought into the stadium.

Also, a new study by Robert Baade, a Lake Forest (Ill.) College economics professor, says that new stadiums produce few financial benefits for communities. Instead they "realign" economic growth.

Despite a vote of 4,515 to 34 by *Toronto Star* readers, the Toronto Stadium Corp. will put in artificial turf.

SEED

New bluegrasses replace two old Scotts' varieties

Two new varieties of Kentucky bluegrass developed by O.M. Scott & Sons—Coventry and Abbey—will begin replacing Bristol and Victa varieties, respectively, this year.

Coventry, under development since 1970, is an improved variety made from a cross of Gnome and an unreleased Scotts selection. In Scotts' tests, it has shown good shade tolerance and disease resistance. It will replace Bristol, introduced in 1976.

Abbey, developed at the company's Marysville, Ohio, research site, is adapted for both sun and shade. It can be used in a wide range of geographic locations. Abbey replaces Victa, a patented variety introduced in 1973.

Other recent seed introductions from Scotts include Ovation perennial ryegrass and Chesapeake tall fescue. Ovation, developed by Momersteeg International in Holland, was a top performer in recent national winter overseeding trials. Chesapeake, developed from four clones, three of which originated in Atlanta, has shown excellent heat and drought tolerance in Scotts' tests, lowering irrigation needs.

RESEARCH

A healthy lawn works like a sponge

The thicker the lawn, the more water it absorbs, according to research done by Penn State University turfgrass professor Thomas L. Watschke, Ph.D.

This absorption ability helps chemicals do their job, Watschke says.

"High quality turfgrass sites significantly reduce the total runoff," Watschke says. After more than a year's testing, sodded plots had 15 times less runoff than seeded ones. "This indicates that the surface soil structural effects (on seeded surfaces) do not correct themselves quickly," Watschke notes.

The 1,300-square-foot plots were so sponge-like that even under three-inch-per-hour simulated rainfall, not more than a half-gallon a minute came off the plots.

Watschke added that thatch or a large-pored layer of decaying grass on top of the soil provided a buffer to the "inflitration rate characteristics of the underlying soil," helping to reduce runoff.

LAWN CARE

Is chemical lawn care a risk to pets?

It's not uncommon to hear of bird kills from the misapplication of pesticides. But such negligence can also kill larger animals such as dogs and cats.

Dennis Blodgett, D.V.M., Ph.D., of Virginia Tech, says it's rare, but possible to kill animals with lawn chemicals. "In reality, if you dilute and apply chemicals correctly, you won't cause a problem," Blodgett says. "Walking through a yard, the animal won't pick up much because of the footpads."

Birds are more frequently poisoned because they mistake chemical granules for seeds, Blodgett says. Eating a grub killed by an insecticide won't cause a problem.

Dogs and cats are hurt by chemicals when the true cholinesterase enzyme in the nervous tissue is deactivated. The enzyme, which is also found in humans, acts on insecticides in the body and the activity drops off. Organophosphates and carbamates can inhibit cholinesterase in the nervous systems.

Cholinesterase will regenerate in the body, but when regeneration is slower than exposure, the animal is in trouble.

Owners often expose their animals

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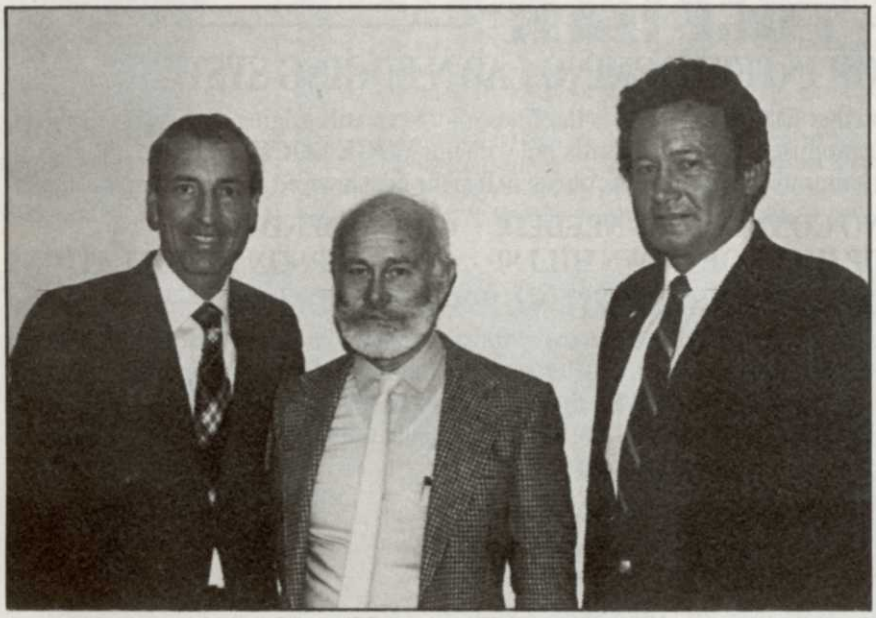

New Musser directors

New directors of the Musser International Turfgrass Foundation, gathered at the GCSAA show in Phoenix earlier this year, are shown above. Left to right, they are Mike Bavier, CGCS, Illinois; Peter McMaugh, Australian turfgrass specialist; and Tom Burrows, CGCS, Florida.

1-2-3

The first time pesticide users actually come in contact with pesticides is at mixing. Therefore, caution must be exercised right at the outset to ensure caution against possible accident situations.

Four steps to mixing safety are pointed out by Bert L. Bohmont of Colorado State University in his book "The New Pesticide User's Guide." They are:

1. Always read the label and be careful to properly dilute the pesticide. Make sure you're working with the proper equipment, that you're wearing protective clothing, and that first aid equipment is available.

2. When handling hazardous pesticides, never work alone.

3. Be sure to mix chemicals in an outdoor or well-ventilated location. Do not position your body over the seal or the pouring spout. Never tear open bags; under certain conditions, dusts and powders can billow up in large concentrations.

4. All quantities of the active ingredient should be measured accurately. Measuring containers and weighing scales should be kept where mixing is done. Measuring containers should be thoroughly washed and rinsed after each use.

"The New Pesticide User's Guide" is available through Reston Publishing, 11480 Sunset Hills Rd., Reston, VA, 22090.

"1-2-3" is a monthly department devoted to handling pesticides "by the numbers."

to chemicals with flea collars, flea dips and injections. But a lawn care chemical could push the animal over the limit.

"As a lawn care person, you could spray and decrease the animal's cholinesterase level only 10 or 15 percent, but you could be the culprit and you'll get blamed for everything," Blodgett warns.

If this happens, Blodgett says the lawn care worker needs to find out how much the owner exposed the animal to other chemicals.

Cats are more susceptible than dogs to chemicals because of their grooming habits and because the enzymes in the body don't handle insecticides as well as dogs.

Problems rarely occur from a normal lawn treatment. The only real problems happen with an incorrect dilution which causes run-off into puddles that the animal drinks from.

To avoid animal poisoning, Blodgett recommends:

- Never apply pesticides if pets are in the yard. Simply refuse.
- Tell the client to keep pets out of the yard until the application is dry.
- Empty and turn over all feeding bowls, water dishes and bird baths.
- Water in granules thoroughly.
- Avoid the creation of run-off puddles.
- Avoid application of insecticide formulations near bird feeders.

You can tell if a pet is poisoned by symptoms such as vomiting, diarrhea, tearing eyes, constricted pupils, salavation, difficult breathing and uncoordination. Symptoms must occur within 24 hours of a lawn treatment to be related.If a poisoning occurs:

- Call a vet and/or poison control center. An injectable drug may be necessary.
- If the vet is not available, and the pet was exposed through the skin, bathe the animal in soap and water immediately. Rinse thoroughly.Be sure to wear protective gloves and an apron.

If the animal ingested the toxin, give it water or milk mixed with one teaspoon to two tablespoons of three percent hydrogen peroxide. Dosage depends on the animal's size. Do not use this treatment in severely depressed animals. Do not use if ingestion is past two hours.

You can also give a dog activated charcoal which can be bought over the counter. Always go by the children's dose on the bottle.

Blodgett spoke at the Landscape Expo in Chicago, Ill.

PARKS

Vandalism a problem for park managers

Jeff Bourne, chief of the parks bureau of the Howard County Department of Recreation and Parks, really knew how to get the people attending his vandalism session at the Landscape Exposition worked up. He just asked them what vandalism problems they had. Bourne did not have to say much after that.

The problems included graffiti, widespread trash, missing signs and a number of other annoyances. But what the vandalism caused most was frustration."People won't use the park if it isn't looking good," commented one attendee. "(The vandals') presence inhibits attendance at the park."

One attendee, who's company does landscaping for a housing development, noted that because of vandalism, when he requested funding for more shrubs, he got an answer like "What's the point? They're going to be torn up anyway."

His solution has been to charge res-

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idents at the development for the repairs if they are caught. Usually it is one of the children doing the damage. Bourne's statistics bear this out. The age group most responsible for the damage is the 17-22 year old, mostly in the lower end. And the damage takes away both time and money (about one or two percent of an annual budget) from the landscapers.

"It's a crime," said Bourne. "Criminal activity of a segment of the population that uses our facilities, and it should be treated as a crime." Bourne suggested getting offenders to do community service work in repairing the damage. "Try to get the kids to devote energy to other projects," he explains. A personal interest in the appearance of the park will make the kid less likely to vandalize again.

An attendee from a university said proper planning could reduce vandalism and general destruction. For colleges, he suggesting using large walks, and where shrubs were destroyed by traffic, using Washington Hawthorne as a sharp deterrant to traffic.

For more on park upkeep, watch for the October issue of LANDSCAPE MANAGEMENT.

PEOPLE

Woman super makes the books in Ohio

When WEEDS TREES & TURF ran an article on women golf course superintendents last December, we received a number of letters from women who had been overlooked. One woman, Jean Esposito, ran Hinkley Hills, a public course right down the road from our offices.

Now Esposito has made Ohio golf history by becoming the first woman president of the Northern Ohio GCSAA chapter. The chapter of 270 (only two members are women) elected Esposito vice president last November. She became president when the previous president took a job in California.

Esposito's parents Donald and Beatrice Krush built the course on a family farm in 1964. It is still a family-run business. Esposito's husband works as her assistant, while her sister manages the clubhouse.

CONFERENCES

Expo plans to draw 20,000 attendees

The fourth annual International Lawn, Garden & Power Equipment Expo next month will draw more than 20,000 participants, according to the public relations agency handling the event.

Almost 260,000 square feet of exhibition space has been sold for the Expo, to be held in Louisville, Ky., July 27-29. Thirteen football fields would not fill that much space.

Howard K. Smith, one of America's most distinguished broadcasters, will be headline speaker. Singer Wayne Newton, a top Las Vegas entertainer, will also give a performance.

For more information, call (800) 558-8767. (In Kentucky or outside the continental U.S., call (502) 582-1627.)

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