By RON DODSON

uperintendents are increasingly aware of the environmental issues involved in managing their golf courses. They are faced with decisions regarding pesticides, water quality and conservation and turf management to name a few. But do they ever have time to stop and watch the birds?

Every golf course has them. Some have more exotic birds than others, but you'd be amazed what flies through the golf course, uses its resources, its very life depending on the course's open space and habitat. Some species live on golf

### MAINTENANCE GOLF AND THE ENVIRONMENT

# Audubon Int'l launches project, urges supers, 'Look skyward'

year. Some use the habitat for nesting, some merely make a seasonal pass through.

Each year, more than 250 species of birds migrate from Mexico and Central and South America to breed in the United

courses all year, some for only part of the States and Canada. These neo-tropical migrants follow the sun through the seasons. The majority of other birds also migrate, though they don't travel as far as the tropics. Each year, they fly hundreds of miles from breeding ground to wintering sites within the United States and



Get the team that stands strong against summer stress complex - Terra® Aliette® T&O and Terra® Thalonil<sup>™</sup>. This partnership provides the one-two punch you need to protect turf inside and out. It starts with the systemic action of Aliette T&O. Since it's translocated throughout the plant, turf gets top to bottom protection against Pythium blight and root rot. On the outside, Thalonil sticks to the job of keeping turf safe from brown patch, dollar spot, leaf spot, snow mold, algae scum and many other diseases. Plus, university tests across the country have proven that there is no difference in performance between Thalonil

and the other national fungicide brand. And, since there is multiple site activity, there is minimal risk of resistance. Together, Terra Aliette T&O and Terra Thalonil put control of summer stress complex in the bag. It's the pair that'll fit your turf disease program to a tee.



P.O. Box 6000 Sioux City, Iowa 51102-6000 1-800-288-7353 www.terraindustries.com



Canada. Many waterfowl and songbirds orient themselves using the stars; hawks and owls follow land forms and waterways. Some birds return to the exact same spot, year after year.

Habitat along a migratory route is one of the most critical needs of migratory birds. With suitable habitat that offers food, cover and water, birds can survive the journey. Because most golf courses supply those necessary requisites, how superintendents manage their properties can dramatically impact survival of migratory birds.

Project Flight Plan is a new initiative of Audubon International's Audubon Cooperative Sanctuary System (ACSS) to foster migratory bird conservation across North America. During 1998, the ACSS will focus on providing its members with Continued on next page

### YES! I pledge to make a Flight Plan and undertake at least one project to help migratory birds in 1998. I will receive a "Project Flight Plan" decal for my window to advertise my commitment to protect migratory birds. FLIGHT PLAN PROJECTS Check at least one for 1998 Plant a native tree(s) Plant ruit-bearing native shrub(s) Add/Maintain a bird feeder. Mount and monitor next boxes Plant a hummingbird or songbird garden Leave fields unmown for ground-nesting species during nesting season: April 15 to August 1 Limit mowing to every one to three years in fields Leave standing dead trees and decaying logs to promote beneficial insect activity and provide nest cavities Connect existing habitats to create habitat corridors Naturalize part of the property Expand existing habitat Add/Maintain clean water source for birds. C Enhance river or stream corridors with a buffer of vegetation. Keep a bird inventory Conduct a breeding bird survey C Reduce/Eliminate known hazards Other projects: I need help to determine or develop an appropriate project. Please call me at: \_\_\_\_\_ Signature Name Address (Street Address) (City) (State) (Zip) Return to The Audubon Cooperative Sanctuary system c/o Audubon International 46 Rarick Road Selkirk, NY 12158 ACSS Member: QYes QNo Golf Course School Backyard Corporate/Business GOLF COURSE NEWS

Aliette is a registered trademark of Rhône-Poulenc.

C Thalor

Aliette T&O

#### REGRETINISTER XVVAC

MAINTENANCE

## Boca Rio GC uses new technology to solve drainage problems

#### By TERRY BUCHEN

B OCA RATON, Fla. — We have all had it drilled into our heads, from educators and experienced superintendents alike, that drainage is the most important aspect of growing good, quality turfgrass. The equation is further complicated when trying to drain a golf course that has little or no elevation change, as is found on many courses in the Southeast United States.

But a relatively new drainage technique is proving worthwhile on many courses in that region.

Illustrating the success of the method is Matthew R. Quinn, superintendent at the Boca Rio Golf Club here.

Boca Rio, built in 1960, has little elevation change and is surrounded by a canal drainage and irrigation water system around its borders.

"We had to come up with a better way to drain some of our bunkers and a few fairways, so we have experimented and tested a turf drain siphoning system that is working great so far," Quinn said. "This type system will not relieve water to an elevation higher than where is was collected, as obviously you would need a pump to do that. However, the siphon system will transport water through higher elevations as it goes to a lower point of elevation."

Quinn has experimented and is currently testing this system in a greenside bunker, where crews have installed the plastic pipe covered with a geotextile cloth.



"X" marks the spot where the drainage grate is covered with a geotextile filter cloth.

The course has a permanent installation hook-up to its irrigation system so that the system can initially be primed and flushed if it ever becomes contaminated with any dirt or debris, he said.

ON THE GREEN

"Shooting traditional grades is not needed," Quinn said, "as we only need to shoot the elevation difference

Siphon drainage 8-by 1-inch pipe is installed vertically in the trench.

between the points that we are going to install the collection drainage basin and grate, and the point that we are going to relieve the water."

These systems are designed primarily to enable the course to install seepage drainage. With seepage drainage, depth is more critical than volume.

The objective with the siphon system is to allow people to drain the profile to a depth so that they create storage areas for the next rainfall. By lowering the water table in between rainfalls, the system creates a storage area for future rainwaters, Quinn explained.

The turf drain siphon system has no moving parts once it is primed, he said. After the initial priming, all valves are opened manually except for the pressurized valve attached to the irrigation system. From this point on there are no floats, pumps, and valves and like a gravity system it is very easy to maintain.

"We have high expectations about this system and feel confident that it will work on our relatively flat golf course," Quinn said.

# Carolinas supers cited for leadership

KANSAS CITY, Mo. — Six golf course superintendents from North and South Carolina received awards from Bayer Corp., Garden & Professional Care (GPC), during a ceremony held Oct. 2, at Kiawah Island Golf and Tennis Resort in South Carolina.

The program, sponsored by Bayer Corp., rewards superintendents in the Carolinas for participation and leadership in local golf course association, continuing education including the attendance of workshops held by the Golf Course Superintendents Association of America (GCSAA) and other associations, as well as for environmental stewardship.

Award-winning superintendents were

Terry Carland of Etowah Valley Country Club; Mark Burnette, Myers Park Country Club.

Also, Bill Maynard of Champion Hills Country Club; Keith McKenzie of Sapona Country Club; Mike Claffey, Cape Fear Country Club; and David Downing II of Wild Wing Plantation.

"We essentially look for golf course superintendents who consistently set an example of what a superintendent should be," said Jeff Vannoy, Bayer sales representative and program coordinator.

Candidates for the award were nominated by the distributors with whom they do business.

The awards ceremony was part of a three-day outing at Kiawah Island.

### Audubon International's Project Flight Plan

#### Continued from previous page

information and projects to enhance habitat for migratory birds. Projects can include planting native trees, adding a bird feeder, leaving fields unmown for groundnesting species, leaving standing dead trees and decaying logs to promote beneficial insect activity and nesting cavities, and keeping a bird inventory.

You don't have to be a superintendent or member of the ACSS in order to pledge support. No matter where you work, or what your job is, you can contribute to this effort. Just "pledge" that you will undertake at least one project to help GOLF COURSE NEWS migratory birds in 1998.

Start by copying and filling out your pledge card Flight Plan and send it to the ACSS. In return, you'll receive a Project Flight Plan decal to advertise your commitment to protecting migratory birds.

Spring is around the corner and feathered travelers are heading your way. Invite them to stop along the way and take a rest. Superintendents and golfers are in a perfect position to take advantage of a natural opportunity. Don't miss the chance to take your eyes off the turf and look skyward. Take a little time to stop and watch the birds. Curalan controls most turf diseases, and no other treatment is as effective on dollar spot as Curalan. It can provide up to 28 days of control, which could be four times longer than competitive treatments. And the new EG formulation comes in a water-soluble bag that's convenient, easy-to-use, and has less risk of applicator exposure. Find out more about the fungicide that always hits the spot. Call BASF at 1-800-878-8060.

There are some

spots even Curalan

can't prevent.

