



IPM IN ACTION

Golf course owners, designers and superintendents know that true Integrated Pest Management means you work within natural parameters.

AT COLLIER'S

Why plant tropical ornamentals in arid climates? Why spend thousands of dollars on integrated pest management systems that solve some problems but create new ones?

It's a gradual conclusion in a sport that has been judged as much by the rolling, green "perfection" of the terrain as by the challenges of the course. Now, native plants, pest-resistant turfgrasses and customized cultural or pest control practices are more accepted by management and some golfers.

These practices have been known to increase the environmental compatibility of a golf course as well as save money.

The IPM team at Collier's Reserve knows the ins and outs of the practice that has as many definitions as it does supporters.

The country club/residential community in southwest Florida has earned a special place in IPM history as golf's first Audubon International Signature Cooperative Sanctuary. As such, Collier's design, construction, management and overall phi-

losophy was developed in close relation to the Audubon Society's Principles of Sustainable Resource Management.

Model sanctuary course

Collier's Reserve is owned and developed by Collier Enterprises. Arthur Hills designed it, and popular and progressive superintendent Tim Hiers, CGCS, is the superintendent of the five-year old, 6,800-yard course, which is a beautiful blend of native vegetation and lower-maintenance turf strains.

Rather than fight with the elements of nature, the Collier's crew uses the science of IPM and the conservation of natural resources.

Much of the reserve is set aside as a wildlife sanctuary for foxes, bobcats, otters, bald eagles, woodpeckers and many other animals. Every crew, building and management practice focuses on the environmental integrity of the land and the conservation of natural resources. This comprehensive, ground-up approach distinguishes Collier's from other maintenance procedures that were popular 20 to 30 years ago.

All irrigation heads, for example, are "site specific," which means water is used only where it is essential to sustaining turfgrass. Following this practice saves water and electricity, and reduces the ger-

'Two for one' tree planting

The Collier's IPM program is well documented, and very thorough. Cultural practices include aerifying fairways to maintain the right amount of thatch for turf health and pesticide effectiveness. While many programs stop with turf or pest management, this one also includes provisions for efficient power usage, water conservation, equipment choice and maintenance, employee training and recycling. Even a policy to plant two trees for every one removed.

mination of unwanted weed seeds in native areas.

The difference is in the planning

"What makes us distinctive as a golf course is that we planned on leaving a lot of native area," says Bill Davidson, assistant golf course superintendent at Collier's. Irrigated turfgrass take up less than 76 acres around the course. Native vegetation is limited to the periphery. It complements the course, and adds beauty and challenge to the game. It also saves time, money and resources by requiring less maintenance.

A preventive control program maximizes turf health and minimizes the need for fertilizer and disease control.

"We do a lot of monitoring," says Davidson. "Our philosophy is to avoid broad insecticide applications and treat only what we need to treat."

For example, careful vigilance for mole cricket nymphs enables early treatment



Davidson: saves time and money on maintenance.

and reduces overall pesticide applications.

"I can't tell you how many tanks of soapy water I have mixed up to check the mole cricket population," says Davidson. The water disturbs mole crickets and causes them to flee to the surface.

When pests exceed their IPM tolerance levels, crews use the least amount of chemicals to get the job done. Sometimes, this means

using biological controls—such as parasitic nematodes—to attack mole crickets.

"To keep mole crickets within the treated areas, I'm looking to buy a mole cricket mating call box," says Davidson. "It plays a CD that's supposed to attract 95 percent of the mole crickets to within seven feet of the box."

New product trial

In the summer of 1996, Collier's participated in a trial run of a new kind of pest control, from the *spinosyn* class. Now

known as Conserve SC Turf and Ornamental insect control, the product combines the efficacy of synthetics with many of the benefits of biological control.

The product is reported to control cutworms, sod webworms, armyworms and many other pests, for up to two weeks of control.

At the same time, it offers a "Caution" signal word, and was registered under the Environmental Protection Agency's Reduced-Risk pesticide program. The process means the product has less impact on the rest of the environment than most other products, according to DowAgrosciences.

"It has effective control for the small amount of material you need to use," says Davidson.

The challenges facing the golf course superintendent in this environmentally-conscious time will continue, despite the Green Industry's record or compliance and concern for the great outdoors.

Integrated Pest Management, in one form or another, will continue to expand the superintendents' tools for practical turfgrass management. □

