Kloska had a couple of other concerns: very dry weather and water quality.

“We used to use drinking water to irrigate, but that got to be quite expensive, so we installed a reverse osmosis water treatment plant.”

It takes saltwater out of his well, runs it through the system and gives him irrigation quality water. He can make 400,000 gallons per day, but there is a drawback. “The water is so clean, it has virtually no ions.”

Kloska was concerned that, without a lot of recharge in his pond because of the drought, and using treated water, he might have problems. He explains, “At the lowest level, grass functions via ionic exchange, so there could be problems if you have water that has no ions. Fortunately we also recycle lots of water here, so we pick up some N along with some other nutrients before it goes back into the pond, where it blends with the reverse osmosis water.”
On-going Management is an Educational Experience

Is on-going TifEagle management different from caring for Tifdwarf? These superintendents smile and call it an educational experience. Prentis Knotts says he’s not married to any particular fertility program, but has found that liquids seem particularly well-suited to TifEagle because of its tight texture. Knotts also planned for more aerifications when he wrote his operations budget.

“Instead of three, we’re going to do five. We contract it out, so it’s not a big labor issue for us. Most superintendents in this area will aerify and top dress three to five times anyway, regardless of whether they have 328, Tifdwarf or TifEagle. I’ve always topdressed frequently. And I believe in verticutting and aggressive aerification to keep new growth going all of the time.”

Rob Giampietro agrees, “Fertility is a challenge. In fact, the less nitrogen the better. We feel that spoon-feeding is much preferable to going out and dumping a lot of N on our greens. Once we switched to foliar applications, the TifEagle just got better and better.

“We also purchased a slicer, which we run just ahead of our walk mowers. We poke through the sod layer, down about 2 to 2-1/2 inches deep, to create channels for water, fertilizer, root growth and oxygen. This is perfect for a resort like ours, because play can go on as usual.”

The Innisbrook game plan is to spike their greens three times per month combined with weekly verticuttings and hydro-injections.

Kloska reports that he was also already managing his Tifdwarf fairly intensely, so his TifEagle didn’t alter his management practices all that much.

“It requires more grooming and more topdressing at certain times of the year, but we’re almost on the same program as before. Maybe if you were transitioning from 328, you’d have to change your cultural practices, but for us it was no big deal.

“We do use walk-behind spreaders and bagged and dried sand when we topdress now. It’s vital to keep machinery off of greens as much as possible during our busy season. We also previously used walk-behind mowers only in season (winter), and triplex mowers out of season (summer). Now we’re using walk-behind mowers all year long. I highly recommend this. You have to give a little to get some back.”

Kloska continues, “Bottom line, the things I can do with TifEagle I could never do with Tifdwarf. We cut our greens once a day. Rarely do we get into double cutting.

“Our membership does not like greens that are extremely fast. If our greens are 8-1/2 to 9-1/2 tops and are consistent every day, they are happy. If I rolled the greens to make them faster, they would kill me. Rolling greens dramatically changes the putting surface day to day.

“You are either going to roll three or four times a week and keep them like that, or you’re not. Rolling makes them fluctuate too much. Consistency is the big issue here. My greens chairman has consistency and playability on the top of his list.

“That’s our main goal. That’s why we topdress once a week. We use a water injection aerifier every week or two to keep them consistent. And we keep our mowing height consistent throughout the season. Our members absolutely love the TifEagle. In fact, we rebuilt our croquet court with it.”

Mowing heights for Prentis Knotts at Cypress Run have varied. “We went down to just below 1/8 inch during the later stages of our grow-in. No doubt we were a little aggressive in the beginning considering we were going to overseeding. So we went back up to 5/32 inch. We overseeded with a combination of poa trivialis and colonial bent grass — a 60-40 ratio. It was very successful. I saw very little grow-in transition problems.

“We also think we’re going to have a good spring transition. Our standard mowing height right now in mid-March is 5/32 inch and we don’t plan to change until after the transition. Probably we’ll go back to 1/8 inch. It’s on its way right now — probably 50-50 due to some very warm weather. I expect by the end of May we should be completely through transition and nobody will even know it happened.”

Knotts is happy. “We called Barbaron to have them take a look at a few things, and to take a look at the development of our TifEagle. We wanted an architect’s impression as to where we were. They responded by letter that our greens were in perfect condition based on their age.

“At first we did have a few thin areas relative to some shading. TifEagle, like other bermudas, does not like shade. It’s best to be committed to having no shade anywhere on your putting surfaces at any time of the day.

“For example, our 5th green used to have a little tiny oak tree behind the green which threw a little blob of shade on the green about the size of this desktop. That was the only thin spot on the green. So we removed the tree, and it recovered instantly. It’s just amazing how much difference full sun makes.”

In a follow-up conversation with Prentis Knotts in late August, he reported that on a recent visit of the USGA Turf Advisory Service, John Foy advised him that his TifEagle was in outstanding shape. “We found our root depths to be five to seven inches, and this was in the ‘dog days’ of summer. Needless to say, our members are extremely happy with our new putting surfaces.”

Management Challenges Worth It

Rob Kloska is up front about the extra work his TifEagle requires. “You have to have the dollars in your budget if you’re going to manage TifEagle. Do the numbers. You’ll have more aerifications and more grooming. And you’ll have to watch your N levels and deal with thatch.

But your members will love it. I wouldn’t change this grass for anything. I’m happy. Our membership is happy. If I have to put in an extra few hours to make sure they’re happy, it’s well worth it.”

SAM WILLIAMS
Sam Williams Advertising
For the Georgia Seed Development Commission
Fix ‘em both with Illoxan®.

Unlike old fashioned herbicides, which killed goosegrass but left ugly brown patches in their wake, Illoxan is smarter. It gives you fast, reliable goosegrass control, from one-leaf to one-tiller stages, all throughout the season on established turf. It’s also gentle on bermudagrass. Yet no matter how hot and damp conditions get, you won’t get ugly brown patches. No sir. And once Illoxan has dried, it won’t be affected by rainfall or irrigation: a big advantage in certain parts of the South. Got goosegrass? Get Illoxan. The only thing it leaves behind is a smile.
USGA Adds Agronomist for Florida Region

The USGA has hired a new agronomist for Florida, Todd Lowe.

Lowe received his bachelor of science from the University of Florida in 1995. He graduated from Clemson with a master of science in August, 1998.

At Clemson, Lowe worked closely with an old Florida friend, Dr. Bert McCarty. While at Clemson, he worked as a graduate research assistant/technician conducting turfgrass weed research and screening pesticides for use on turfgrass and ornamentals.

He constructed and maintained turfgrass research plots, including a 12,000 sq. ft. TifEagle green, maintained the turfgrass plots, and supervised three to five students yearly. Also while at Clemson, Lowe co-founded the Clemson University Turf Club/GCSAA student chapter. He has published six refereed manuscripts, 13 scientific abstracts, seven university extension articles and eight golf course trade magazine articles.

Lowe worked at the Walker Golf Course at Clemson University and coordinated its ACSP program. In addition, he also worked at Plantation Country Club in Ponte Vedra for eight years. He plays golf and he also enjoys hunting and fishing.

Lowe is currently setting up his office in Englewood, but he can be reached through e-mail at tlowe@usga.org, or call the Florida Green Section office in Hobe Sound at 561-546-2620 for his phone number.

SHELLY FOY
USGA Green Section
Florida Region
Four brands. One source.

Your Textron Turf Care And Specialty Products Dealer.

One source for the most consistent, precise mowers in the game. One source for the world's most popular, heavy-duty turf vehicles and finest aerators. One source for parts, service and certified mechanics. Cushman. Jacobsen. Ransomes. And Ryan. The top brands from one source. Which means one call or one trip is all you'll have to make – whatever your need. Rest assured, we're the ones who'll go the extra mile for you.

Tresca Turf & Tractor:
4827 Philips Hwy., Jacksonville, FL 32207
904-448-8070
3930 N. Orange Blossom Tr., Orlando, FL 32804
407-291-1717
www.tresca.com

Kilpatrick Turf Equipment:
7700 High Ridge Rd., Boynton Beach, FL 33426
561-533-1450
1620 Trade Center Way, Naples, FL 34109
941-594-1958
www.kilpatrickco.com

Golf Ventures:
15790-1A Chief Ct., Fort Myers, FL 33912
800-481-8911
2101 E. Edgewood Dr., Lakeland, FL 33803
800-330-8874
www.golf-venture.com
Within five minutes of stepping out of my truck, I observe a familiar silhouette perched on a pine tree branch, "Is that a bluebird?" I ask George McBath. Sure enough, as we approach we see not one, but three eastern bluebirds intermixed with a flock of birds.

The birds are in an island of pine trees, adjacent to the parking lot where we stand, and the bluebirds are checking out a cavity in a large snag. Since it's the end of October these birds are not looking for a place to nest, but probably a warm, protected place to roost for the night, as the cooler fall weather draws nearer.

I am a research biologist for the Avian Research and Conservation (ARC) Institute, Inc., a non-profit scientific organization I co-founded in 1997. For the last three years, I have been working to reintroduce eastern bluebirds and brown-headed nuthatches to Everglades National Park.

This morning, George and I are at the Lely Resort Golf and CC to meet with Shane Bass, superintendent of Flamingo Island GC, one of three courses at Lely Resort. Shane is planning on putting up bluebird nest boxes on his golf course and, if enough bluebirds are found on his course this spring, he is interested in donating bluebirds to the ENP reintroduction program.

By the end of the day we will visit five golf courses in Naples that have good bluebird habitat and a nestbox program,
and are interested in participating in a program where golf courses donate bluebirds to the ENP reintroduction program.

In southern Florida, one can hardly utter the words “bluebirds” and “golf courses” without bringing up the name of George McBath. For the last seven years, George has been constructing nest boxes for bluebirds and other cavity-nesting species and placing them on golf courses throughout southern Florida (see The Florida Green - Winter 2000).

At last count, about 1,100 of his nest boxes are set up on over 35 golf courses in southern Florida. The nest boxes have helped several golf courses become certified in the Audubon Cooperative Sanctuary Program. George agreed to introduce me to golf courses that have his nest boxes and help me gain support for the bluebird donor program.

Because of their striking color, bluebirds are enjoyed by birders and nonbirders alike. Bluebirds were close to extinction by the mid-1900s because of habitat loss, the use of insecticides (e.g., DDT), and forest management practices.
that removed snags, which bluebirds need to nest.

However, since the 1960s bluebird populations have increased over most of their range because of strong public support. The popularity of nest box programs has played an important role in their recovery.

Florida is the only state where eastern bluebird populations have continued to decline. As the human population in Florida has increased, space for bluebirds and other wildlife has been sacrificed. In Florida, bluebirds require open pine-forest habitats that are found on drier, upland sites - the same areas favored by developers.

Perhaps the greatest loss of pine forest habitat has occurred in southern Florida, particularly the east coast. Forests that used to stand along the Atlantic coastal ridge from Ft. Lauderdale to what is now ENP are mostly gone - obliterated in the 1900s to pave the Miami/Fort Lauderdale megalopolis. Today, ENP contains the only significant remnant of that pine forest and even that area was mostly clearcut in the mid-1940s, before it was designated a National Park.

Habitat destruction of this magnitude has its costs. Four pine-forest bird species have disappeared from southeastern Florida: southeastern American kestrels, red-cockaded woodpeckers, brown-headed nuthatches and eastern bluebirds. One other species, the hairy woodpecker, is very rare. All are cavity-nesters, and their dependence on snags and pine forest habitat make them especially vulnerable to habitat destruction.

Unfortunately, this pattern is being repeated on the southwest Florida coast, in Naples and Fort Myers. Already, breeding southeastern American kestrels have disappeared, red-cockaded and hairy woodpeckers are rare, and populations of bluebird and nuthatches have undoubtedly declined.

With so much attention given to wetlands in southern Florida, most people are surprised to hear that the only known vertebrate species to have disappeared from the Everglades ecosystem are pine forest birds. I began studying these birds in 1994, mostly focusing on eastern bluebirds and brown-headed nuthatches.

One result from my early studies was that the pine forests in ENP appeared suitable for bluebirds and nuthatches. These forests, after being clearcut in the 1940s, were now approximately 60 years old and appeared similar to areas of pine forest in Big Cypress National Preserve, where bluebirds and nuthatches were common.

However, because of the long distance between the ENP pine forests and the closest bluebird and nuthatch populations to the north, it seemed unlikely that either species could recolonize ENP without the help of the species that did them in - humans.

In fall of 1997, I initiated a two-year reintroduction project to develop translocation techniques to restore populations of eastern bluebirds and brown-headed nuthatches to ENP. The challenge was significant because most reintroductions with birds have focused on raptors and upland game species, like bald eagles and wild turkeys. Techniques for our “little-dickey” birds were lacking.

During the two years, 15 bluebirds and 20 nuthatches were removed from pine forests in Big Cypress National Preserve and taken to ENP. In general, pairs of bluebirds were held for one to three weeks in large aviaries and nuthatches were held for one to three days in smaller aviaries before being released.

In most cases, we moved a breeding pair and released them early in the breeding season so that they would have a chance to breed. Overall, our techniques...
were effective, bluebirds and nuthatches nested and produced young in each year and we now had a small population of both species.

After the success of the first two years, the goals of the reintroduction program shifted from developing translocation techniques to moving birds or, as we like to say, from development to production.

Even though our first efforts were successful, the small number of birds in ENP were vulnerable to a variety of catastrophes. A hurricane, tropical storm, or even a cold, rainy winter could erase the progress we had made.

I proposed moving 20 adults of each species in each of the next four years. At that rate, the total number of translocated birds would equal 100, a number suggested by some individuals that is needed to establish a self-sustaining population. This past year, we moved 17 adult bluebirds (and 10 nestlings) and 14 nuthatches to ENP and the population has swelled to 28 bluebirds and 39 nuthatches.

With the help of golf courses, I hope to increase the number of bluebirds that are moved to ENP this spring. Using bluebirds from golf courses will help us reach our goal of 100 birds more quickly and improve our chance of success.

Also important is the fact that continued funding for the reintroduction program is tenuous, because wetland and hydrology projects remain the priority of federal agencies. Now is the time to make this extra effort to insure the success of the program.

Only 10 years ago, an idea like this would probably not be possible - perhaps, even laughed at - because golf courses have historically been perceived as environmentally unfriendly. That perception, however, is changing as golf courses increasingly make conservation a management priority.

The driving force in this management shift, according to Shelly Foy of the USGA Green Section, is the Audubon Cooperative Sanctuary Program, which promotes environmental stewardship and provides a framework for golf courses to achieve that goal.

It's impressive to hear that activities like prescribed burning, planting na-
time to educate your members/golfers, what have you really gained? The bottom line is don’t assume that your golfer/members know that you care about the environment, tell them. Yes, I know that there are a few people who could care less, but I assure you there are even more that do care.

By now, everyone has received the new certification handbook for the ACSP for Golf Courses. This updated certification handbook took almost a year to complete, and I can assure you it was well thought out. The response has been positive from those that have reviewed it, and I am confident that it offers an improved framework for applying for certification. Craig Weyandt, Superintendent at the Yacht and Country Club of Stuart, Rob Kloska, Superintendent at the Jupiter Island Club, John and myself were part of the working group to update this certification handbook. We are all pleased with the result. Bottom line: Open the book and get started on certification!

Audubon International’s web page has been given an entirely new look. There is a lot of useful information available, so check it out at: http://www.audubonintl.org.

Welcome to USGA Green Section, Todd

The USGA, (and certainly John and I) are pleased that we have hired a new agronomist for Florida, Todd Lowe. Todd, his wife Stephanie, and 2-year-old daughter Kayla, live in Englewood. A lot of you may know Todd’s dad, David, who was superintendent at The Plantation at Ponte Vedra for many years.

While working on his master’s degree at Clemson, Todd coordinated the ACSP program for the university’s golf course.

Sometimes it is hard to believe that John and I have been with the USGA for 15 years. A lot has happened for our family since we moved to Florida in 1986 with our then 2-week old Hunter.

We have been blessed with three children, Hunter (15), Elizabeth (13), and Thomas (2). Two things have been constant for us in the past 15 years: the support and friendship of the golf industry in Florida, and the support and friendship of the USGA. Both have been very good to us.

We know that both will be constants for Todd and his family as well. John and I encourage you to get to know Todd and welcome him as you have us. He passed the Foy Family test with flying colors by jumping in and helping fix dinner, and he never batted an eye when Thomas joined us at the dinner table in the buff.

Todd, Kayla and Stephanie Lowe, additions to the USGA Green Section family in Florida, will make their home in Englewood

tive terrestrial and aquatic vegetation, and preserving large patches of natural habitat have been incorporated by some golf course architects and superintendents to make their golf courses as compatible with the natural environment as possible. I hope this donor program further demonstrates the contribution that golf courses can make to the environment: not only by providing a green refuge for native plants and animals, but also by participating in management activities away from the golf course.

Eight golf courses in the Naples area have expressed interest in donating bluebirds (see sidebar). My goal is to remove one or two pairs of bluebirds from each golf course this spring. I expect these birds to be replaced quickly by individuals who didn’t have a place to breed previously (floaters). Bluebirds are territorial during the breeding season and will defend their home space aggressively from other bluebirds.

Bluebirds will be captured in late February or early March, when pairs initiate breeding behavior, using a large (30 x 25 ft) net designed to catch birds, a live lure bluebird, and a pair of speakers to play the bluebirds’ song on either side of the net. When the pair responds to the invading lure bird and speakers, they will become trapped in the net. Once removed, they will be taken to ENP and placed in an aviary and released within a few weeks.

We may also capture pairs later in the breeding season while they are nesting. In that case, the pair and their nestlings will be taken to ENP and released when the young can fly on their own. After release, we will monitor their activity with the help of radio transmitters and hope they try to nest in the park.

I look forward to this cooperative effort between golf courses and the reintroduction program and anticipate a mutually beneficial relationship.

For more information on the bluebird donor program, contact Gary Slater at ARC Institute, Inc., 15551 SW 104 Terr., #813, Miami, FL 33196; mail: glslater@yahoo.com.