### **STEWARDSHIP**



*The Twin Eagles Golf Course in Naples was one of the first to install floating mats of aquatic plants.* 

# Floating an Idea for Nutrient Removal

### By Joel Jackson

Ever since Shelly Foy wrote about her field trip to Naples a year or so ago, I have been intrigued by the invention of Steve Beeman of Beeman Nursery in New Smyrna Beach. The idea is simply a floating island of aquatic plant material that can be used for aesthetic purposes and, more importantly, nutrient removal from lakes and ponds. With the topic of water quality in rivers, bays and estuaries on the front burner these days, this new concept has significant merit in helping to improve the situation.

For some years now, the terms "buffer zones" and "no mow zones" have leaped into our vocabulary to describe high-cut borders around golf-course water bodies. While the research mentions varying distances (10-30 feet) that these borders should extend from the water, many clubs are reluctant to grow such gnarly grass more than a few feet beyond the water line.

There are littoral shelves in water hazards with emergent and submergent aquatic plants to filter any nutrients coming off the golf course, and they do work and help in the total effort. But many clubs like the look of a clean shoreline.

Enter the floating mat idea.



There are an infinite number of mat configurations to be had including shape and plant varieties. Note the contrasting shorelines in the background – one with shoreline plants and one without.



Close up of the dense root system from just one floating plant pot that is efficiently removing nutrients from the water.

The mats can be customized to any size and shape and a variety of aquatic plants mixed and matched to create attractive and very efficient nutrientfiltering islands. They can be located and anchored anywhere in the lake for visual appeal and efficiency. These islands offer cover for small fish and animals, which in turn attract larger fish and birds.

If large buffer zone or shoreline plants are not an option, take a hard look at this new method of using aquatic plants to improve water quality by removing nitrogen and phosphorus. These floating mats can also be used in retention ponds and lakes in the development and not just limited to the golf course.

### ACSP FOR GOLF COURSES

## **Dispelling Common Myths**

There are a number of "myths" and misconceptions that we hear from people from time-to-time about the Audubon Cooperative Sanctuary Program (ACSP). What follows is a short list of these common myths along with the correct information in response to each of them.

### • Myth #1: Being in the ACSP is too difficult, and it's too tough to get certified.

It is not difficult, and you may already be taking actions that can lead to certification. Often, members look at the entire certification process instead of simply taking it one step at a time. Focus on fulfilling the Site Assessment and Environmental Plan. When a member gets through that first step, rather than worrying about all of the steps at once, they will be more likely to become invested in the program.

# • Myth #2: Our course won't be able to join or work towards certification; we don't have the staff, money, or time.

Any existing golf course can join and work towards earning the Certified Audubon Cooperative Sanctuary designation. A course doesn't have to have lots of acreage or habitat to get certified — it just has to practice good environmental management, and we're here to help. Likewise, ACSP certified golf courses range from small nine-hole facilities and lowerbudget public courses to country clubs, high-end resorts, and PGA Tour facilities.

### • Myth #3: We're not ready to go the distance — i.e., the certification material must be sent in all at once and be perfect in order to get certified.

The ACSP is not like a test and your certification request is not like a paper handed in to be graded. Instead, we work with you to find ways to meet certification guidelines based on the unique strengths and weaknesses of your site. We're here to help, not create roadblocks. • Myth #4: Due to our golf course policy, there is no way we could ever have children tour our golf course or put up nest boxes or naturalize all our shorelines, etc., so we cannot get certified.

Out of all the Standard Management Practices that Audubon International would like to see on every certified golf course, we know that some may not be applicable to a given situation, especially in the Outreach and Education category. That is why the ACSP is a flexible program. If there are any questions about suggested or required projects, please contact us.

### • Myth #5: There is no way we will ever be able to afford a new irrigation system/ \$40,000 recycling equipment wash pad/ have an aerial photograph taken of the course/etc., so we cannot get certified.

These are a few of the many projects that we have heard people tell us they need to complete to get certified. This is simply not true. Once again, if there are any questions about suggested or required projects, please contact Audubon International. We can also send you a list of the Standard Management Practices that we prefer to see on every golf course.

### • Myth #6: An environmentally managed golf course is a brown golf course.

We understand that in order to have a playable course, chemicals will be used—we do not require that you stop these practices outright. Rather, we can help you manage a playable course with as little chemical input as possible. Working on certification in the ACSP can help you reduce the amount of chemicals needed and reduce the adverse environmental impact from their use and application (i.e., runoff and water quality). Likewise, 54 members of the ACSP and the Audubon Signature Program were ranked among America's 100 Greatest Golf Courses by Golf Digest in 2002. The list's top ten included six ACSP participants, two of which are certified.