

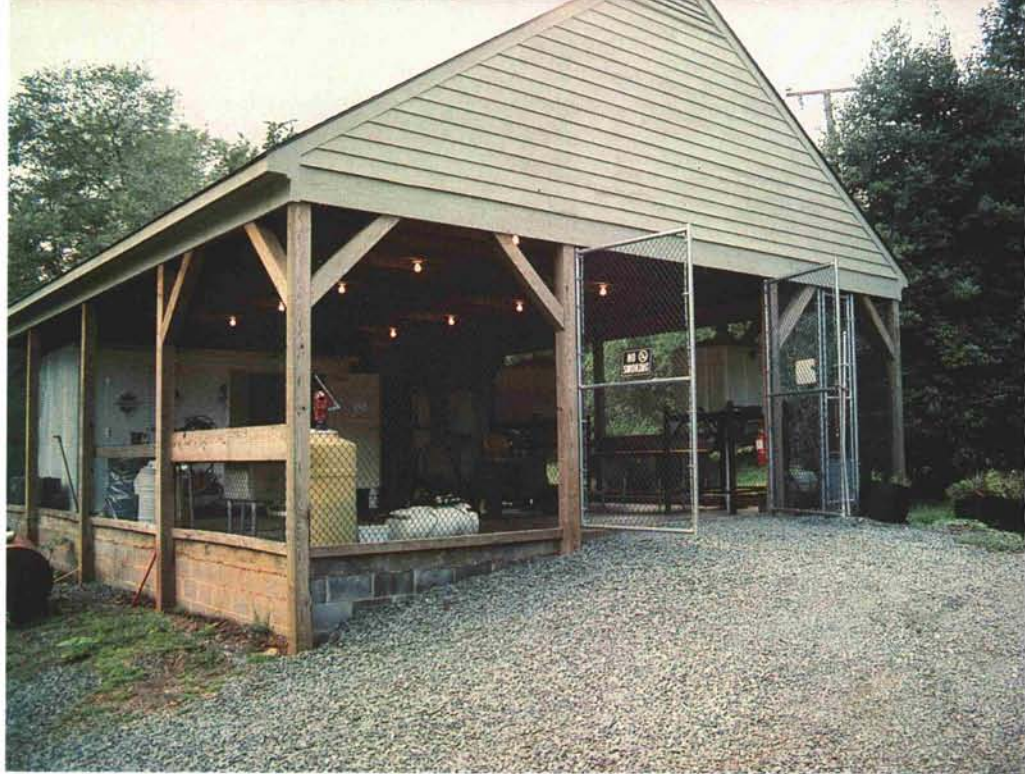
4. Are any future improvements/refinements planned?

A. Yes. A separate area for non-selective herbicides is planned. Winter weed control is important on the bermudagrass fairways at Farmington Country Club and easily facilitated using Roundup. Storing this rinse-ate separately should minimize accidental turf damage.

5. Any words of advice when considering building such a structure?

A. Just one. If anyone considers such a structure, double-check weight and clearances of the prefabricated chemical storage buildings. You do not want to deal with partially dismantling a wall to make something fit. You might even plan for extra room . . . just to be sure.

In summary, Dick Fisher, the staff, and membership at Farmington Country Club took an intelligent and proactive approach to both removing chemicals from their employees' workplace and reducing the potential environmental impact of using chemicals on their property.



*The chemical storage and handling facility at Farmington Country Club provides a dedicated area to handle pesticide applications.*

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# A SUMMER ASSIGNMENT

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by **JAMES E. SKORULSKI**

Agronomist, Northeastern Region, USGA Green Section

**T**HERE ARE 36 GOLF COURSES that have been fully certified in the Audubon Cooperative Sanctuary Program (ACSP). Unfortunately, there are many more golf courses participating in the program that have yet to fulfill the requirements needed to gain certification. Most are familiar with the program's worthy objectives to improve and protect wildlife habitat, increase awareness about environmental issues, and encourage a more active role in golf course conservation practices. It is hoped that this program will help instill a philosophy whereby golfers will be more willing to accept a slight reduction in manicuring for an opportunity to reduce pesticide use. However, nearly 50 percent of the golf courses participating in the program have

yet to complete a resource inventory report, which is the basis for the entire program.

Obviously, there are many reasons for this procrastination, and if you are one of those who fall into the inactive category, I am sure your excuses are as legitimate as any others. A lack of time is a frequently used excuse. How does a busy golf course superintendent find the time to meet the objectives and pursue ACSP certification? Charles Passios, CGCS, Golf Course Manager at Hyannisport Club in Hyannis Port, Massachusetts, has found a solution. Charlie utilized a summer placement student, Mark Lucas, of Purdue University, to help Hyannisport Club become the first ACSP certified golf course in New England. Mark, a dual major in both Agronomy and Environmental Sciences at

Purdue, realized the potential opportunity and was very willing to take on the project as his placement assignment.

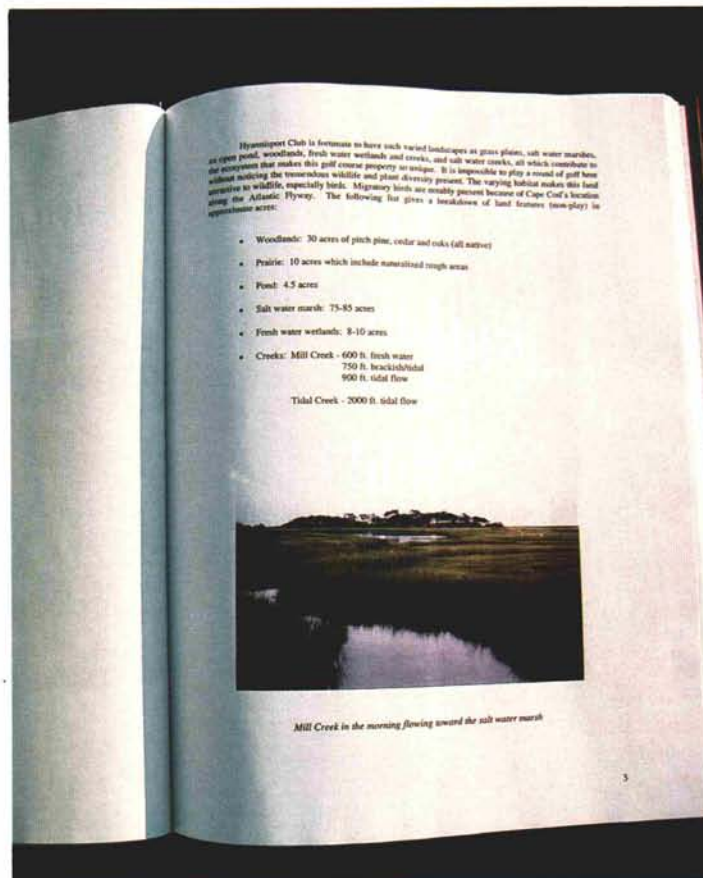
The program was set up so that Mark would complete his regular duties on the golf course each morning and then, with Charlie's guidance, devote the remainder of his time documenting the various habitats found throughout the property and the plant and animal species observed in these areas. Wildlife cover, food, and water enhancement programs completed by the Hyannisport Club, in conjunction with the Audubon Society of New York State, were described, mapped, and photographed on a hole-by-hole basis. The extent of membership and public involvement with the projects was documented, and future goals for wildlife



and habitat management were also listed. Finally, the success of objectives developed for pest management, water conservation, water quality, and facility management were documented, and goals for further improvement in these areas were outlined.

The written information, photographs, and maps were then compiled in a hardcover book and presented to the Audubon Society of New York for certification purposes. The publication provides clear objectives and lists future projects as a guide for the Hyannisport Club to further improve environmental aspects of the golf course operations and the property. The program has provided an excellent educational opportunity and experience for Mark, and at the same time has helped the Hyannisport Club obtain certification with ACSP.

The value of utilizing summer placement students for regular maintenance activities is recognized by superintendents throughout the country. Con-



Information in the project book included drawings and photographs that documented the various wildlife habitats throughout the golf course.

sider expanding the responsibilities of your placement students through activities associated with the ACSP. The environmental awareness of the students, staff, and the golfers can only be broadened, and at the same time the objectives of the ACSP can be fulfilled. Obviously, there are not many placement students with majors in both agronomy and the environmental sciences. However, the students can still be extremely helpful with developing resource inventory reports, and can become involved with projects concerning golf course pest management, water conservation, and water quality management.

Mark gained experience that will last a lifetime, and it will help him better meet the new challenges that occur as the industry evolves. The opportunity is available for placement students to become involved with the ACSP. Use this opportunity to the benefit of both the students and the golf course.

## FLOTATION DEVICES

by **PATRICK GROSS**

Agronomist, Western Region, USGA Green Section

**S**UPERINTENDENTS CAN BE considered pond scum and often take the blame when golfers can't see their golf ball at the bottom of a pond because the water isn't crystal clear. Algae and other aquatic weeds are not only a nuisance for golfers, but also are problems for superintendents. The main culprit in many of these lakes is filamentous algae. These floating mats make the water visually unattractive and cause serious problems with the performance of the irrigation system. Dave Rosenstrauch, superintendent at the Orinda Country Club, tackled this challenge on his 5½-acre irrigation lake by using a revolutionary *flotation device*.

Several different treatments had been tried in the past to eliminate the algae, in-

cluding applications of copper sulfate, dyes and shading agents, aeration, and microbial products. None of the methods was totally successful, and they seemed to be treating only the symptoms and not the cause of the problem. What was needed was a way to remove nutrients from the water that were acting as a food source for the algae. Dave decided to try a product called Nutri-Pods, a new method that includes the use of aquatic plants to naturally remove nutrients from the water. This technology was developed by Dave Murray, a limnologist and president of the Limnion Corp. in Bayview, Idaho.

The Nutri-Pods are round underwater greenhouses constructed of aluminum, polypropylene, and fiberglass mesh that contain the aquatic plant coontail (*Ceratophyllum*

*demersum*). The coontail out-competes the algae by removing nutrients from the water, and the Nutri-Pods keep the plants contained and prevent them from growing out of control. The pods are manufactured in different sizes (3 feet and 6 feet in diameter) to accommodate lakes of various depths and sizes. They float in the water and are kept in place by a concrete anchor attached to a rope that runs through a PVC pipe in the middle of the pod. A float at the end of the rope marks the location of each Nutri-Pod. The number of pods needed per lake is largely dependent on the nutrient load and the size of the watershed. Roughly one pod per surface acre is recommended; however, 11 of the 6-foot-diameter Nutri-Pods were used in the lake at Orinda Country Club.