

The Best Turf Tips of 1995

Contain It, Store It, Recycle It

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THE EVIDENCE is becoming clear that when pesticides and fertilizers are properly applied to turfgrass, their potential for movement through the soil and into groundwater is minimal. Thatch is showing to be a very effective sponge in absorbing, tying up, and, ultimately, degrading chemicals that might otherwise migrate into groundwater. This is good news!

Nonetheless, golf course superintendents need to be diligent and careful in all aspects of chemical usage on the golf course. One opportunity for movement of chemical-containing water into groundwater or surface waters occurs when spray tanks are filled, rinsed, cleaned out, and prepared for the next spray. Most often, this task is performed on some type of paved surface near the maintenance area.

As the golf course superintendent at the Farmington Country Club, in Charlottesville,

Virginia, Dick Fisher, CGCS, recognized the need to better manage the handling of chemicals in their workplace. Their solution included the following:

1. Relocating stored chemicals and spray equipment away from the employees' workplace by establishing a completely separate chemical storage and handling area;

2. Developing a safe area to fill their sprayers and mix the chemicals, and;

3. Collecting, storing, and reusing the water used to rinse and clean the spray equipment.

In essence, they now collect, contain, and recycle all of the water used in their spray program. No water runs off onto the soil or into any body of water. Their new structure is a self-contained chemical storage, handling, and recycling area.

How does it work? The following are the steps they follow in a normal spray application.

1. Two sprayers, one for greens and another for fairways, are stored in this building.

2. When the need exists for a chemical application, the spray technician fills the spray tank half full of water.

3. The products to be applied are added to the spray tank.

4. Rinseate from previous sprays, which is stored in overhead tanks, is then added to the agitating solution.

5. The spray tank is then topped off with additional water and is ready for use.

After returning from the spray assignment, the technician:

1. Rinses the sprayer and cleans out the tank.

2. This water is funneled through one of two covered floor inlets (one for fungicides and another for herbicides). In this way, the fungicide and herbicide rinseates are reclaimed separately.

3. An automatic floor pump, essentially a sump pump, moves this dilute solution to an overhead storage tank. This rinseate is easily accessible for the next application.

With this system there is no runoff. Nothing leaves the site. While this may not be a perfect system for all golf courses under all circumstances, it works for Farmington Country Club.

What are some of the most-asked questions about this system?

1. Cost.

A. This facility cost \$57,000. This included \$20,000 for a pre-engineered, self-contained chemical storage structure.

2. Were any problems noted when using the rinseate?

A. Rinseate water is only tankmixed and applied on fairways and roughs. The stored solution is so dilute that no problems have been seen.

3. What happens if or when the overhead rinseate storage tank becomes full?

A. The excess rinseate solution is sprayed in the roughs.

Elevated rinseate storage tanks hold rinseate to be used in the next application.



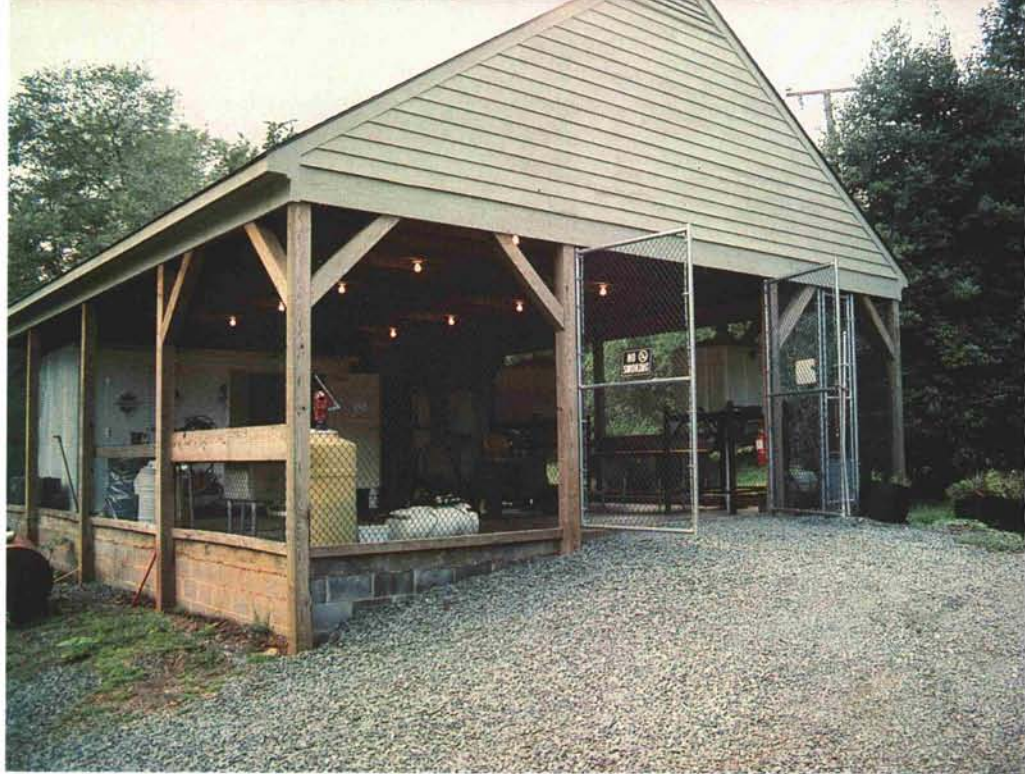
4. Are any future improvements/refinements planned?

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.

A SUMMER ASSIGNMENT

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THERE 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