Transitional Management For Northern Grasses

Autumn's shorter days and cooler temperatures bring fewer golfers out on the courses, but this is the beginning of another critical time for superintendents: the transitional period.

"The worst is over, but transitional management for northern grasses such as bluegrass, bentgrass, perennial ryegrass and creeping red fescue is important," states Todd Cutting, TUCO Agricultural Chemicals technical field extension representative. "Proper cultural management practices during the transitional period (early September to freeze-up) pay off next spring in terms of fewer disease problems, healthier turf and earlier green-up."

This period poses a dilemma for the superintendent. On one hand, he must maintain a good golfing surface through the late season. On the other hand, he shouldn't do anything to cause excessive growth which can increase turf's susceptibility to diseases and winter injury.

"Many superintendents start off with exceptionally good disease control programs, but tend to slack off during the transitional period," notes Cutting. "The available labor supply dwindles as students return to school, the budget is nearly depleted and winter is fast approaching. However, what you do in the fall determines what you get next year."

To maintain good surfaces for fall play while preparing the turf for winter and ensuring healthy turf for the spring, Cutting recommends the following steps:

1) Continue the fertility program to maintain adequate grass growth for good playing surface while not causing excessive growth.

"During the transitional period, turf begins replenishing depleted growth reserves by storing carbohydrates and sugars in its roots and begins making tillers instead of leaves. Tiller production is greatly increased by raising the supply of nitrogen, phosphorus and potassium," explains Cutting.

Cutting recommends using a balanced fertilizer containing 1/2 lb. nitrogen in early September. Nitrogen supplies nutrients for root growth and provides for dark green color in early spring. The more root growth that occurs in autumn, the greater tillering that can occur in early spring. Potassium helps prevent winter damage, regulate water retention and increase turf's hardiness to heat, cold and drought.

2) Maintain watering program to ensure good surface playability while encouraging root development. "Overwatering interferes with root development and can cause lush growth which increases the plant's susceptibility to disease and tissue freezing. Excess water also favors development of common fall diseases such as leaf spot and dollar spot," notes Cutting.

3) Continue disease control program to reduce the numbers of overwintering sclerotia for dollarspot and spores for leaf spot, and also early snow mold. Cutting recommends two applications of Acti-dione RZ - the first in late October and the second in mid-November. This fungicide contains the antibiotic Actidione and PCNB.

"Acti-dione knocks down any diseases that are actively working, and the PCNB component provides a fungistatic barrier which prevents diseases from spreading," says Cutting. "PCNB is broken down by bacteria in the soil. Because these organisms become inactive at temperatures below 50 degrees F., PCNB remains in the thatch layer and suppresses disease activity until spring. Acti-dione RZ used on a regular basis establishes a barrier that continually suppresses the germination of fungal inoculum."

4) Dormant fertilize when the grass is done growing. Depending on the course's location, Cutting recommends applying fertilizer which contains 1-2 lbs. nitrogen in late October to early December before snowfall.

By incorporating these transitional management tips into your disease control program, you can achieve disease-free turf as well as early spring green up.