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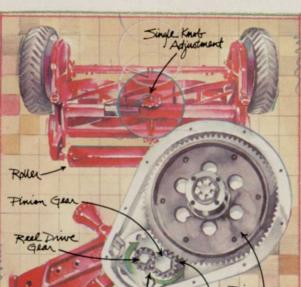
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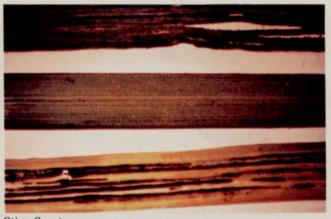
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### LANDSCAPE MANAGERS QUIETLY INCORPORATE TURF DISEASE GAINS





Fusarium Blight



Pythium Blight

Stipe Smut

Advances in turf disease control have taken place so slowly that progress made by landscape managers and golf course superintendents has gone unnoticed. This progress is as much adaptation of cultural practices and new turfgrasses as it is the release of new fungicides.

Disease control is without a doubt one of the most complicated areas of landscape management. Even the pathologists don't totally agree with each other. Rather than seeking simple solutions, landscape managers have evaluated entire maintenance programs to reduce disease incidence. They are more careful about excess nitrogen, mowing heights, irrigation schedules, and turfgrasses used. Diseaseprone turfgrasses have been slowly replaced by renovation or overseeding with resistant turfgrasses. The use of turfgrass mixtures over monocultures alone has solved many disease problems.

Thatch control, improved drainage, and well-timed irrigation added to other maintenance practices discourage disease. Fusarium Blight and Pythium Blight have been reduced significantly by changes in cultural practices. The severity of other diseases has been reduced also.

"Fungicidal control still represents the most common and effective means of producing a rapid solution, especially on golf courses," says Phil Larsen, professor of plant pathology, Ohio State University." Once the symptoms of turf disease appear, it is often impossible to provide short-term remedies required by resorting strictly to cultural practices and reestablishment with disease resistant turf cultivars."

#### Diseases

Weeds Trees & Turf asked a number of turf pathologists to comment on the severity of turfgrass diseases. We asked them to separate serious, long term diseases from less critical, short-term ones.

B.G. Joyner, director of Chemlawn's Plant Diagnostic Laboratories, Worthington, OH, identified the following as long-term diseases of cool-season turf: Fusarium Blight, Stripe Smut, Pythium Blight, Helminthosporium Melting-Out, Yellow Patch, and Fairy Ring. Short-term diseases selected by Joyner are Rhizoctonia Brown Patch, Dollar Spot, Helminthosporium Leaf Spot, Powdery Mildew, Red Thread, Rust, Snow *Continues on page 26* 

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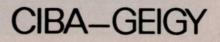
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Kather A Caller A



#### Molds and White Patch.

Larsen ranks Dollar Spot, Pythium Blight and Brown Patch as serious on bentgrass and Red Thread and Pythium Blight as serious on perennial ryegrass and fine fescue. He sees Fusarium as the major Kentucky bluegrass disease with Leaf Spot and Melting Out as other major problems on bluegrass. Larsen points out his results are for the North Central United States.

There are 14 diseases of consequence in cool-season turf. If you think you have a disease problem, you can consider these diseases first and chances are you'll find the disease organism. It is very unlikely you'll be confronted with an oddball disease like C-15 Toronto bentgrass decline, unless of course you have Toronto bent in the Chicago area.

We could write pages on how to identify a particular turf disease. Instead, contact local extension or your fungicide distributor for exact identification. Manufacturers have excellent charts showing disease symptoms.

The serious warm-season diseases, according to Joyner, are Centipede Decline, Fairy Ring, Brown Patch, Nigrospora Stolon Rot, Pythium Blight, St. Augustine Decline, and Spring Dead Spot. Nematodes are related to diseases in warm-season turf.

#### Cool Season Diseases Severe, Long-Term

Fusarium on Kentucky Bluegrass Stripe Smut on Kentucky Bluegrass Helminthosporium Leaf Spot on Kentucky Bluegrass

- Dollar Spot on Kentucky Bluegrass and Creeping Bentgrass
- Rhizoctonia Brown Patch on Kentucky Bluegrass, Perennial Ryegrass, and Creeping Bentgrass
- Pythium Blight on Perennial Ryegrass and Fine Fescue
- Red Thread on Perennial Ryegrass and Fine Fescue Yellow Patch

#### Fairy Ring on Creeping Bentgrass

#### Less Severe, Short Term

Powdery Mildew on Kentucky Bluegrass and Fine Fescue Snow Molds on Common Grasses Rust on Kentucky Bluegrass and Creeping Bentgrass White Patch on Tall Fescue Short term, warm-season diseases include Dollar Spot, Gray Leaf Spot, Helminthosporium diseases, and Rust.

Brown Patch and Pythium are effectively controlled with fungicides in the South. More information is needed on the other diseases says Joyner. The only control for St. Augustine Decline is resistant varieties of St. Augustine.

#### **Cultural Practices**

"There is no doubt preferred cultural management procedures can reduce the need for fungicide applications to control some of the diseases," Cornell turf pathologist Dick Smiley says. "But management and use considerations do not always enable idealistic procedures to be used. For example, if red thread on perennial ryegrass is a problem primarily because the turf is deficient in nitrogen, the solution is straight forward. Either a fertilizer or a fungicide can be applied to solve the problem. However, overstimulation with nitrogen may increase the tendency for severe Pythium outbreaks. Or, if red thread is a problem because the soil and air temperatures are low, the control approaches are narrowed to fungicides."

The logic can be complicated to solve a disease problem. Landscape managers have chosen in many cases to eliminate diseaseencouraging conditions where possible to reduce the complexity of a disease problem. Then, if weather or use conditions force a disease problem, the solution is less complicated.

Alteration of cultural practices can reduce disease incidence and the need for fungicide applications. Larsen recommends thatch removal, aerification and adequate but not excessive fertilization to encourage good plant health which enables the plant to resist disease under normal conditions. "Providing proper air movement and soil drainage to reduce atmospheric moisture and surface water are very effective in suppressing disease severity for summer diseases such as Pythium blight, brown patch and dollar spot."

"Turf should be watered thoroughly to promote good plant

#### Warm Season Diseases Severe, Long-Term

Centipede Decline Rhizoctonia Brown Patch Nigrospora Stolon Rot Pythium Blight St. Augustine Decline Spring Dead Spot

#### Less Severe, Short Term

Dollar Spot Gray Leaf Mold Helminthosporium Diseases Rust

growth but the timing should be such that it will not cause free water to collect on leaf surfaces for prolonged periods which would promote fungal growth," Larsen says.

"In instances where there are chronic disease problems over a period of years and good cultural practices do not provide satisfactory results, I believe establishment of disease-resistant cultivars is a practical, long-term, cost effective solution. Unfortunately, we do not have disease resistant cultivars available for all disease problems."

Joyner points out renovation may be needed for reasons other than disease. It also solves excessive thatch, large damaged or dead areas, poor or compacted soils, drainage problems, and other problems related to less advanced turfgrasses.

Whereas a maintenance contractor may occassionally work with a disease problem, golf course superintendents would find it hard to imagine a course without some disease problems. Cultural practices, disease resistant turfgrass cultivars, and new fungicides have made the greatest impact on disease control.

Extended effective life of fungicides and blending different fungicides are providing longer control of a wider range of diseases.

Except for the occassional fluke, landscape managers have a good handle on turf diseases. They have wisely put to use new fungicides and new improved turfgrass cultivars, in addition to improving cultural practices. The complicated problem has been solved to a great degree. WTT

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Renovations

Roun

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This Oakmont, PA-landscape brought a muchneeded formality to the residence's entranceway. GWSM, Pittsburgh, PA, designed the stone entrance court to direct the guest's eye towards the front door and away from the kitchen entrance. The screening effect of hemlocks worked very well towards this end.



Schlick Landscaping, Huntington, NY, had a scant 10 weeks to complete this elegant pool and cabana in Oyster Bay Cove, NY. Schlick performed all carpentry, masonry and landscaping (planting, grading, irrigation, and sodding), while, as the general contractors, coordinated the duties of numerous subcontractors.



This deck and flagstone patio with gazebo in Fairfax Station, VA, was designed to accommodate several hundred people (in conjunction with the pool area). Parsons and Wewerka Landscape Contractors, Woodbridge, VA, eliminated steps in the patio area and designed the flagstone walks to carry the overflow of people.



**Green Brothers Landscaping Co.**, Smyrna, GA, show how judicious use of dwarf and cascading plants can expand a small area. The novel use of plantings and addition of a brick patio created a number of conversation areas in the backyard of the Atlanta, GA-home.



**Effective night lighting** is one feature of this Theodore Brickman Co., Long Grove, IL, landscape that enabled it to pick up an NLA award. The entertainment area was designed to accommodate 60 to 80 people yet stress privacy and low maintenance.

### AWARD WINNERS PROVIDE SOLUTIONS FOR EFFECTIVE RENOVATION

The challenge is to make better use of outdoor space by converting decorative landscapes into useful ones.

Updating or renovating existing residential landscapes is helping landscape architects make up for lost new construction business. This condition was reflected in the 1982 residential landscape awards.

Housing starts remain stalled below the one million per year mark. The number of new residential landscape jobs has decreased slightly from 1981. Landscape contractors have compensated for lost new construction with creative renovations.

The following winners, selected from Associated Landscape Contractors of America (ALCA) and National Landscape Associatio<sup>•</sup> (NLA) contests, are renovations.

"Renovations are a more vigorous part of the landscape business," says Denny Church, D.R. Church Landscape Co., Addison, IL. Church was the chairman of the NLA competition. "Competition was very stiff. Entries that used to win awards are now being thrown out."

Dr. William Gould, another NLA judge and professor of horticulture at the University of Maryland, reflects on the competition, "There is more updating of established landscapes where owners want to be outdoors and don't have a patio or pool. The challenge is to make better use of outdoor space by changing decorative landscapes into useful space."

A recent NLA survey revealed its members have successfully increased residential landscape renovations as they have lost new construction. More than half of NLA members increased residential renovation, says NLA Director Ray Brush, compared to a third increasing commercial renovation work.

Emphasizing maintenance has also replaced some new construction business.

Church and Gould offer these tips to future award winners. "Conical evergreens are overused," says Gould. "However, more contractors are including plant material that stays within bounds without excessive pruning. The use of lower maintenance plants is a great step forward."

"The economy has forced an emphasis on low maintenance plants," Church said. "Continuity was the big factor in the competition where an existing landscape was updated." You can't throw out the old plan. You have to work with it when you make improvements. "Borrowing ideas from other landscapers is common," says Church. There is no need to reinvent the wheel every time if you have an effective solution to a common landscape problem.

The potential for renovation far exceeds new construction. The vast majority of residential landscapes lack imagination. Homeowners may not realize the potential their property has for natural impact. The award winners presented here may lend effective solutions to landscape renovation problems in your area.

#### Site: Evanston, IL

#### Landscaper: Theodore Brickman Co., Long Grove, IL

In renovating the landscape at Evanston, Theodore Brickman Co. was charged with designing an entertainment area to accomodate 60 to 80 people with low maintenance and privacy as top priorities. The client had recently added a garden room extension for entertaining, which was surrounded on three sides by adjacent houses. "One of our first jobs was to screen out the houses by planting 12- to 15-foot white pines and river birch trees," said Landscape Architect Craig Anderson. "That gave us a framework of privacy."

The lawn in the small backyard was removed. In its place ground covers, perennials and rhododendrons were planted. "Once they're installed they come up every year with very little maintenance," noted Anderson. He added that while ground covers are very useful in small, intimate areas such as backyards and courtyards they can be misleading in terms of maintenance. A lot of maintenance is required until they fill in and **then** the maintenance needs decrease.

To extend the usefulness of the garden, night lighting was installed. "In our climate, five months out of the year you are not using the garden, it's strictly visual," said Anderson. "Lighting lets you enjoy the night, particularly after a snowfall and it was great for entertaining." The lighting was done in three different ways. About 30 ft. above ground the canopies of the trees were uplit. Little pockets of light were achieved with mushroom lighting and uplights on the ground that featured the river birch trees were also used.

Anderson noted that with high interest rates, renovation landscaping is becoming a bigger trend. He pointed out that in landscapes that were designed a long time ago, the little trees have become major elements in the garden, the lawn is established but all the detail plants that are now 20-30 years old no longer serve their purpose. The de-*Continues on page 30*  tail plantings is the area that is most often ripe for renovation. Additionally, one good way to gain entry to renovation jobs, according to Anderson, is to make contacts with custom builders and architects who specialize in those types of jobs. **Site: Oakmont, PA** 

#### Landscaper: GWSM, Inc. Pittsburgh, PA

The five-acre Oakmont, PA residence had been developed with the use of master plan since 1975. The owner had very strong feelings about how each piece of landscaping would affect his vistas. "The front of the home needed formality to draw the guests into the entrance," said GWSM's Dan Di-Mucci. "Even working with the master plan, it took a while to come up with that idea and suggest it to the owner."

Previously the entrance was a rectilinear patio of quarry tile in front of the facade and the plantings lacked continuity. GWSM decided to inject the plantings with added seasonal change. Rhododendrons, azaleas, dogwood and some later blooming deciduous plants were specified. Originally, a guest's eye was directed to a portico off to the side and not the main entrance. "We used hemlocks in various sizes to totally screen out that portico and redirect the visitor to the entrance circle." said DiMucci.

The contracting was begun in October and lasted for six months. To eliminate possible bad weather delays the client (himself a general contractor) built tents and stocked them with portable heaters to continue the paving in poor weather. The paving was done by five men (plus a foreman) while the planting required four men.

#### Site: Atlanta, GA Landscaper: Green Brothers Landscaping Co. Smyrna, GA

The owners of this Atlanta residence are amateur horticulturists who didn't want their plantings to be hidden below the steep grade that cuts through the yard. Allen Struletz of Green Brothers, had the task of opening up and unifying the long and narrow space. His solution achieved this, while leaving the plantings accessible to the owners and creating a site that would include a greenhouse that was to be built later.

Crosstie planters were used to raise the plantings on the lower portions of the site to a level where they were visible from the house. The raised planters opened up the space so that the land area that had previously disappeared from view down the steep hill behind the house was now visible. A stepping stone pathway winds through the property in a serpentine fashion, tying together aspects of the design from the private conversation area near the house to the children's play area and to the back of the landscaped area.

The combination of dwarf plantings and cascading plants softens the retaining walls, and the flow of circulation adds an illusion of space to a small area. The choices of plant materials were in keeping with the owners love for flowers. In the planters and the open area, combinations were used of dwarf nandina, carissa holly, daylily, azalea, variegated liriope cotoneaster and forsythia. For the shady spots, Struletz chose variegated holly fern, aspadistra and clevera.

#### Site: Oyster Bay Cove, NY

Landscaper: Schlick Landscaping Inc., Huntington, NY

Ron Schlick of Schlick Landscaping was contracted to create a pool and cabana for the oriental-style yard that his firm had been developing for the past six years. Schlick took the natural oriental theme of the rest of the property and extended it with a pagoda-style cabana and a naturalized pool in black marble surrounded by brick. The fully equipped cabana was insulated and climate-controlled so it could double as a guest cottage. The frame of the building was extended with beams to blend with the setting and give the impression of greater size.

The plantings were simple and natural, in keeping with the delicate theme of the yard. Evergreens such as dwarf garden juniper, a low spreading pine and weeping spruce highlighted the pool. Near the spa, they planted golden bamboo in large plastic containers to prevent it from spreading, along with pachysandra, ferns, maidenhair, daylily and columbine. Cer-

tain areas around the pool were accented with tulsans weeper and dwarf eastern white pine.

Schlick and his crew had to do the construction while directing 19 subcontractors around the site to prevent damage to the earlier plantings. Schlick hired one man whose only job was to direct traffic in and out of the work site and limited parking areas. As the job neared completion, the crews had less room to maneuver. Schlick explained, "our firm literally had to back out of the area as though we were painting ourselves out of a room."

#### Site: Fairfax Station, VA Landscape: Parsons and Wewerka Landscape Contractors Woodbridge, VA

The owner of this property had a simple request of contractor Richard Wewerka and designer Philip Cohen: to be able to sit at his kitchen table and have a view across the pool through a gazebo to his horses in the pastures beyond, all within four weeks of the starting date. In accepting the contract, the firm of Parsons and Wewerka had to construct between 800 and 900 sq. ft. of flagstone patio and walkway and 700 sq. ft. of redwood decking, the gazebo and a retainer wall near the barn. Additionally, 250 ft. of underground culvert to drain the pasture and parking areas, the adjacent plantings and the renovation of the plantings in the front of the house had to be installed.

All of the phases of the project had to be done simultaneously to finish the job within the time limit.

The gazebo was done without sheathing or tarpaper under the roof, so the cedar shingles are visible from both sides, tying the structure in with the wood decking and providing an interesting contrast on the inside against the white wood of the frame. The foundation of the gazebo eventually had to be raised to accommodate the desired view.

The areas around the gazebo, tennis courts, pool and the front of the house were planted in beds combining annuals with perennials such as blackeyed susan, hosta lilly, viburnum, variegated hosta impatiens crepe myrtle and boxwoods. **WTT**