Poa annua, an annual reseeding bluegrass declared noxious by several states, is a troublesome weed in lawns and turfs. It has very erratic growing habits (rapid growth in cool weather and quick disappearance in hot weather). Scattered infestations show up as rough dry patches of dead grass by middle summer in otherwise green lawns and golf courses. All of the new South Dakota certified seed is guaranteed free of noxious weed seeds.

Cleaned seed will not be tagged until each lot is completely processed, Colburn says. During the cleaning process, pint or 200-gallon sprayer, $200.00; Bean 55-QPM pump, $200.00; Homelite XL-12, $100.00; KWH Mistblower-duster, $125.00. Write for current bargains.

\[\text{FOR SALE}\]

**FOR SALE**


NEW AND USED HOMELITE chain saws and John Bean sprayers. Hardie 50 gallon sprayer, $200.00; Bean 55-QPM pump, $200.00; Homelite XL-12, $100.00; KWH Mistblower-duster, $125.00. Write for current bargains.


South Dakota Growers

(from page 27)

per cent other native species and 5 per cent inert material.

However, Colburn reports, samples collected during late summer are being reported out of the laboratory well above these minimums. These have a test weight of 26 to 28 pounds per bushel—indicating a heavy plump seed which should have good seedling vigor.

For instance, one large lot carried an inspection report of 98.99 per cent purity, 1.01 per cent inert matter, 95 per cent germination, with no other crop or weed seeds present.

"Our producers intend to maintain this high standard," Colburn adds, pointing out that the upper Great Plains' climate and environmental conditions (including temperatures ranging from 38 degrees below zero to 118 degrees above) prevent non-hardy types from surviving. Annual Bluegrass (Poa Annua) is not found in the South Dakota plains area. A vigorous natural selection process that goes on all the time keeps annual bluegrass out of this hardy Kentucky bluegrass sod.

Shade Tree Symposium Set For Penn State University

A 3-day symposium on shade trees has been set for Feb. 7-9 at Pennsylvania State University, University Park, Pa. This will be the third annual event of this type held by the University and the Pennsylvania-Delaware Chapter of the International Shade Tree Conference.

Dr. J. Robert Nuss, Extension Ornamental Horticulturist at Penn State, says formal sessions will include plant selection, air pollution, shade tree commission problems, and tree care. Program plans center on problems of community officials, shade tree commissioners, civic groups, garden clubs, nurserymen, arborists and citizens interested in trees.

**Reflector Landing System**

(from page 19)

The plane is normally adequate for use with the system. The 100 watts at 12 volts which is considered the minimum needed for aircraft will pick up the reflectors well over 1 mile from the strip. The 200-watt units which are found on most aircraft pick up the reflectors 2 to 2½ miles out. Slight fanning of the rudder enables the plane light, once the pilot is in the approach zone and within range, to pick up the reflector lanes.

Lights on the plane have to be of the clear lens type, rather than the prism lens found on some planes. Lights also need to be set at a 7°-approach angle to match the 7° angle of the marker mountings. This angle is standard on most planes, but adjustments must be made on the Cherokee and Piper Tri-Pacer, as well as a few other types.
Rotary Riding Mowers Need Standard Controls

Riding power mowers of the rotary type need standard controls, according to W. H. McConnell, Institute of Agricultural Medicine, University of Iowa, Iowa City, Ia. In a discussion of injuries resulting from the use of this type mower, McConnell also called for design changes. He said new designs are needed to protect the operator from his own errors.

On the program at the winter meeting of the American Society of Agricultural Engineers, McConnell related results of 45 injury cases. These, he said, show that in a panic situation the operator may resort to earlier patterns of learned behavior. For example, McConnell said, controls on such mowers are intended to begin motion as they do in an automobile. But on some mowers, control movement is just opposite that of an automobile. Even different models by the same manufacturer may vary, he said.

In some injury cases, McConnell said that the operator appeared to revert to behavior learned on the tricycle. In an emergency, the operator tried to put a foot down to stop the mower in place, or to jump off. This calls for a design to prevent dangling hands or feet, and to prevent either from being placed where they will contact the blade or rotating wheels of the machine. Riding rotary mowers also need to be designed, he said, to force the operator to mount and dismount from the side opposite the discharge chute.

Efforts also need to be made to increase the stability of the machine, McConnell advised, since a riding rotary power lawn mower can vary in weight from 150 to approximately 750 pounds. Further, it carries an operator who may vary in weight from as little as 60 (when children are allowed to operate them) to as much or more than 200 pounds. The addition of a rider results in a rearward and upward displacement of the center of gravity, he explained.

Roadside Management (from page 24)

ful spot in which to live and enjoy." Mrs. Jean L. Hennessey, Chairman of the New Hampshire Governor's committee on natural beauty, told of the ongoing efforts in the state to protect historic as well as aesthetic factors along this state's roads. However, McConnell said, the American Association of Nurserymen, warned the group that we, as a nation, have not made as much progress as we could or should. He noted, though, that some states had created new sections, new departments, and were now utilizing the assistance of landscape people, agronomists and horticulturists.

The U.S. Department of the Interior, Bureau of Public Roads, was represented by W. L. Hottenstein and Larry Issaccson of Washington, D.C. Hottenstein noted that landscaping in the "old days" was thought of as "embellishment" and useful for only erosion control, while today, roadside development considers the needs of the people in relation to their environment, that road sides must enhance as well as provide for safety and utility.

Norman H. Dill elaborated on the beauty inherent in roadside vegetation management. Dill, of the Right-of-way Resources of America and also on the staff of Delaware State College, Dover, urged the use of selective herbicidal control and added that some botanical knowledge was as important to the spray applicator as manual dexterity. He stressed the need for utilizing ecological principles in the improvement of roadside vegetation and also the usefulness of maintaining shrub or grass cover by careful selection and application of the proper herbicides.

Conference chairman for 1967 was Dr. H. E. Wave, University of Massachusetts Extension Service, now with the University of Maine; the chairman-elect for 1968 is Dr. M. G. Savos, extension Entomologist and Pesticide Safety Coordinator for Connecticut.
unpaved areas of the right-of-way. Not only does turf prevent erosion, but it also provides a neat, attractive highway.

“Our thinking is that a good turf with a minimum number of large trees and shrubs, well maintained, is roughly ninetieths of the aesthetic qualities, and that all other additions in plantings are more or less frosting on the cake,” Redman said.

One of the most popular features of Texas highway landscaping, he added, is the preservation and protection given to native wild flowers. It is common in the spring to see the right-of-way blanketed in various shades of blue, red, white and other colors as far as the eye can see.

“But we have learned that we cannot have our wild flowers and a heavy turf,” the speaker said. “Also, we cannot have our wild flowers in the urban areas because we must now too often to permit the plants to reseed, as a higher type of maintenance is required.

A major problem, Rodman emphasized, is weed control around sign posts, guard posts, bridge abutments and other tight spots along rights-of-way. Mowing equipment cannot do the job. Experiments are being done with chemicals.

“At this time, as far as my knowledge is concerned, I do not think there is a chemical on the market that will accomplish the control that the department would like to have for these areas. The reason I make this statement is that we can establish a pure stand of any particular grass during construction and within a period of three or four years, you would be surprised at what you will find growing in that area.

“All the trucks traveling the highway, the wind that we have in this state, and the water carrying the additional seed from adjoining areas, will bring in vegetation which you do not desire, and it is almost impossible to eliminate,” the landscape architect explained.

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Insect Report

WTT's compilation of insect problems occurring in turfgrass, trees, and ornamentals throughout the country.

Insects of Ornamentals

SPOTTED CUCUMBER BEETLE

(Diabrotica undecimpunctata howardi)

Alabama: Adults heavy and widespread in camellias, chrysanthemums, and many other blossoms throughout Mobile County; adult feeding heavy on late rose blooms and other blossoms this fall and early winter throughout southern and central areas.

ALFALFA LOOPER

(Authographa californica)

California: Moderate on chrysanthemum nursery stock in Half Moon Bay, San Mateo County.

AN ARMORED SCALE

(Rhizaspidiotus dearnessi)

Florida: All stages on some partridge-pea (Cassia sp.) plants at Stuart, Martin County.

ARMORED SCALERS

Florida: Lepidosaphes maskelli severe on stems and leaves of variegated juniper inspected at nursery in Williams Haven, Polk County. Gymnasus aechmeae, adult damage severe on leaves of billigbra at nursery in Brooksville, Hernando County; plants under quarantine. Adults infested 60 of 100 bromeliad torch plants at nursery in Lake Worth, Palm Beach County. Pseudoeoindia clavigera moderate to severe on all common and sausalitos at nursery in Tampa, Hillsborough County. California: Diasia coccus heavy on palm in Carpenteria, Santa Barbara County. D. echinocacti heavy on cactus nursery stock in Yucca Valley, San Bernardino County; very active in 1967. Acanthosoma rosae heavy on roses in Gonzales, Monterey County. Parlatoria oleae heavy on lilac nursery stock in Santa Maria, Santa Barbara County.

CAMPHOR SCALE

(Pseudoaonidia duplex)

Florida: Found on stems and leaves of camellia at nursery in Suwannee River area, Gilchrist County, November 30; all females parasitized. This is a new county record.

YELLOW SCALE

(Aonidiella citrina)

Florida: All stages moderate on leaves on 40 of 200 Japan fatsia plants at nursery in Apopka, Orange County; controls recommended. This is a new host record.

WHITEFLIES

New Mexico: Heavy on poinsettias in 2 commercial greenhouses in northern area; foliage discolored.

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Tree Insects

WHITE-PINE APHID

(Cinara strobi)

Virginia: Active on white pine in Prince Edward County; severe discoloration in Charlotte, Pittsylvania, and Orange Counties. Maryland: Eggs heavy on several young white pines at Fallston, Harford County.

BARK BEETLES

(Dendroctonus spp. active in City of Chesapeake, and in Orange, Westmoreland, and 14 southern counties; Ips arulius major pest in October although D. frontalis generally very active. D. frontalis killed loblolly pine in one-acre spot in King William and Chesterfield Counties; active in small spots in Nottoway and Lunenburg Counties.

PINE SAWFLIES

(Neodiprion spp.)

Virginia: N. lecontei larvae active on some loblolly pines in Westmoreland, King George, and Pittsylvania Counties; damage averaged 0.9 percent of total sample of trees in observation areas. N. orcutti found on several white pines at 2 locations in Orange County.

AN ARMORED SCALE

(Aspidiotus cryptomeriae)

Maryland: Collected from Canadian hemlock by C. W. McComb at Rockville, Montgomery County. This is a new state record.

AN ARMORED SCALE

(Aspidothrips ulmi)

California: Light on catalpa trees in Burlingame, San Mateo County.

PINE TORTOISE SCALE

(Toumeysella numismaticum)

Iowa: Infesting pine at Wadena, Fayette County. Virginia: Light on 6 Virginia pines at Frederick County location.

PINE WEBWORM

(Tetralopha robustella)

Virginia: Common or scattered plantation seedlings in Lunenburg and Bedford Counties. Florida: Larvae locally infesting leaves of 47 of 47 loblolly pines in Plant City, Hillsborough County.

WHITE-PINE WEEVIL

(Pissodes strobi)

Virginia: Damage light to 3 plantations in Giles and Craig Counties. Damage averaged 1 percent of total sample of trees in observation areas; static population indicated.

Compiled from information furnished by the U. S. Department of Agriculture, university staffs and WTT readers. Turf and tree specialists are urged to send reports of insect problems noted in their area to: Insect Reports, WEEDS TREES AND TURF, 1900 Euclid Ave., Cleveland, Ohio 44115.