

Rigid Field Burning Standards Set For Idaho Seed Producers

Smoke billowing across some of Idaho's fields have, because of a pollution problem, caught the eye of environmental protection officials.

And, unless the problem is solved, a growing and relatively new Idaho agricultural industry is likely to suffer. University of Idaho researchers in the College of Agriculture are seeking answers to the problem.

The industry is bluegrass and other lawn-type grasses grown for seed. Practically all the Idaho production is in the state's northern panhandle. Latah County production, although relatively small, contributes to the value of the industry, estimated at about \$12 million annually in Idaho.

The reason environmental protection officials are concerned is that growers burn off fields following a seed crop harvest and the burning frequently creates air pollution.

Grass seed producers have been cooperating with Idaho air pollution officials to hold down the pollution caused by burning grass fields. Burning of grass fields is timed by the U.S. Weather Bureau to coincide with the most favorable conditions in order to minimize the problem in local communities.

However, since there sometimes is a problem, Idaho pollution control officials, in cooperation with grass growers, have developed schedules concerning grass seed field burning. The schedules comply with the 1970 Amendments to the National Clean Air Act.

The schedules are:

—by May 1974, a study shall be conducted to show feasibility of straw removal prior to burning, on lowering smoke emissions.

—by 1975, open field burning will be prohibited after first year production, if alternatives are available.

—burning field grasses shall be prohibited after the 1974 harvest. This does not apply to turf grasses.

—grass fields scheduled for tear out will not be burned after 1975.

—by December 1976, a study will be conducted to determine alternative means of disease and production control to eliminate burning of turf grasses.

—alternate methods to field burning shall be used as soon as they are available.

Dr. Ronald Ensign, UI plant scientist, is heading up research to find ways to meet grass seed production environmental requirements. UI colleagues working with him are Drs. A. A. Boe and Clayton Oslund, plant physiologists, and Dr. Richard Naskali, biologist.

Ensign said burning has for years been an economical means of removing plant residues following grass seed harvest. Under good conditions, a 100-acre field can be "cleaned" in an hour or two.

Also, research has shown burning the post-harvest residue stimulates seed production the following year. In fact, many turf grass varieties will not produce much seed if fields are not burned, Ensign said.

Burning is a good control measure for some weeds. It also enables plants to make better use of fertilizers; part of the nutrients need not be used to break down old plant material. University research has proven that burning destroys insects and some disease organisms.

These are among reasons producers credit the burning practice with helping maintain good seed yields and keeping stands strong for seven to eight years.

Ensign said College of Agriculture research objectives are to:

—evaluate effects of various burn and management treatments on growth and development of bluegrass plants.

—study methods of residue disposal other than burning and assess their effects on air pollution.

—examine turf grass varieties to determine their ability to produce without extensive burning.

—cooperate with seed producers and pollution control agencies to help control pollution under economic seed production practices.

Ensign said a series of field plots has been established representing bluegrass areas in northern Idaho. About 10 or 15 turf varieties common to the Northwest are to be studied for growth habits under various conditions and cultural practices.

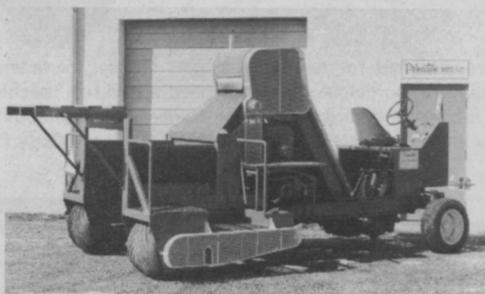
Build-up of certain disease and insect populations and their effects on seed production will also be studied.

It may be that new varieties might have to be developed to meet environmental standards and at the same time enable the grass seed industry to survive and grow, Ensign stated.

Idaho production figures for Merion Kentucky bluegrass seed over a span of years illustrates growth of the industry. Acres planted in successive years from 1954 through 1970 were 600, 700, 950, 1,100, 1,000, 1,300,

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1,600, 1,900, 2,100, 2,000, 2,200, 3,000, 4,00, 6,300, 5,700, 5,700 and 5,500.

In addition, the state boasts 25,000 acres of other proprietary and common grasses.

chitectural committee decided that Fylking was the variety most likely to please an estimated five million visitors.

Average cleaned seed yields ranged from a low of 145 pounds per acre in 1955 to a high of 345 in 1962 and 1967. The average from 1954 through 1970 was 260 pounds per acre.

Economic impact of the bluegrass seed industry in Idaho is illustrated by annual sales of only Merion Kentucky bluegrass seed harvested in Idaho from 1954 through 1970.

Those figures are: \$158,000, \$194,000, \$358,000, \$194,000, \$269,000, \$492,000, \$401,000, \$360,000, \$380,000, \$468,000, \$704,000, \$733,000, \$561,000, \$870,000, \$740,000, \$1,017,000, and \$1,544,000.

Idaho Crop and Livestock Reporting Service figures show Idaho, Oregon and Washington produced about 90 per cent of the 47 million pounds of bluegrass seed grown in the United States in 1972.

Idaho, with 6,076 acres under certification, was the largest Merion producer in 1972. Enough seed was grown in the state to plant over 200,000 average size lawns.

Ensign pointed out the figures quoted are only for Merion, only one of the many varieties and strains of cool season, lawn type grasses grown in the Gem state. Climatic conditions in the north Idaho area are ideal for growth of these grasses.

Expo '74 Committee Selects Fylking 0217 Official Grass

0217 brand Fylking Kentucky bluegrass has been selected as the official grass to be planted throughout the 100-acre site of Expo '74, the only World's Fair on the environment, it was announced today.

The first choice of Expo '74 landscape architects, Fylking Kentucky bluegrass will be used to highlight and enhance acres of trees, shrubs and flower gardens in a beautiful natural setting on the banks of the Spokane River in Spokane, Washington.

In carrying out the theme for Expo '74, "Celebrating Tomorrow's Fresh New Environment," the architectural committee was the variety most likely to please an estimated five million visitors.

During more than a decade of intensive testing in the United States, Canada and abroad, Fylking Kentucky bluegrass has proven its ability to thrive under adverse conditions and heavy traffic, yet maintain unexcelled color and appearance.

Fylking produces a finer, denser turf than most grasses according to Doyle Jacklin. It is one of the most energetic oxygen producers available. It requires little care and resists drought, disease and weed infiltrations. Fylking also receives high marks from environmentalists because of its ability to flourish with the application of little or no weed or disease control chemicals, he said.

Expo '74 visitors will be able to see lawns of Fylking Kentucky bluegrass, as well as foreign and domestic pavilions and exhibits on the environment, from May through October, 1974.

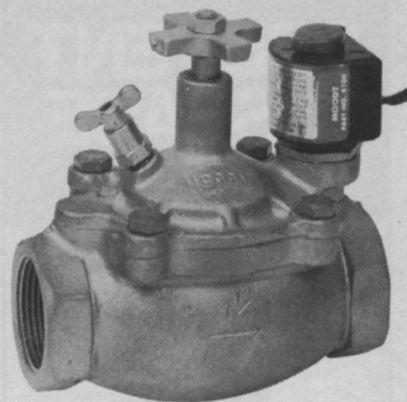
Drawdown Technique Holds Promise In Lake Weed Control

As the demand for water-oriented recreation continues to grow, lake weeds are proving to be an ever-increasing problem in our lakes. The Inland Lake Demonstration Project, a joint venture between the University of Wisconsin-Extension and the Wisconsin Department of Natural Resources, studied the use of overwinter drawdown (partial draining) to control lake weeds in two flowages in northwestern Wisconsin.

Dr. S. A. Nichols, Aquatic Biologist with the Project, reported a single drawdown during the winter of 1971-72 was very effective at controlling Robins pondweed, and to a lesser extent water lillies in the Mondeaux Flowage. The single drawdown eliminated approximately 50% of the problem vegetation with no direct costs involved.

The Chippewa Flowage was used to study the long-term effects of drawdown. The Flowage has been drawn down annually for 50 years. This study identified groups of plants which could and could not be controlled by drawdown.

Natural lakes, unlike impoundments, are not so readily manageable. However, Nichols indicates that even some natural lakes can be drained, using high capacity pumps, to achieve weed control. But he cautions that the resulting costs would be much higher and the environmental impacts must be carefully assessed.



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