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# DEVIL'S PAINT BRUSH

THE alarming spread of this weed into lawns along the eastern seaboard and its steady trek westward, is fast bringing it into the company of those turf pests which have become bywords in every home. If allowed to spread unmolested, some authorities have predicted that it may some day be as common as Plantain. This weed invaded our shores from

Europe, first gaining a foothold in Canada and New England. By reason of its wind blown seeds which possess equipment of the parachute type, it has moved into New York, Pennsylvania, and Ohio. At its present rate of spread, Devil's Paint Brush may yet span the country. Thus every home owner should be on the alert to check this pest and see that it is not accorded a welcome.

#### Description

Orange Hawkweed is a name more familiar in some localities than Devil's Paint Brush. The botanical name *Hieracium aurantiacum* is from the Greek word meaning "a hawk" and implying that the weed is to grass

what the hawk is to the defenseless fowls upon which it preys. The name Devil's Paint Brush doubtless arises from the flaming orange-red flowers which are borne at the end of a stem of 6 to 18 inches in length. At the base of the stem, dark green leaves, hairy on both sides, form in rosette clusters. As shown in the illustration, they are oblong to spatulate. This flat, matted growth of leaves chokes out grass while running surface roots spread out in all directions and have buds or young plants at their tips. Such interwoven growth permits very little grass to penetrate. Obviously the weed is a perennial reproducing its kind by both seed and stolons or runners. Because of the

> spreading tendency, this weed is hard to eradicate and when once introduced into lawns may become a serious pest.

### Other Characteristics

Like most other weeds. Devil's Paint Brush first began to cause alarm in fields and along roadsides from which places it gradually invaded home lawns. It has the questionable distinction of being only one of a dozen weeds beginning with the name "Devil." A member of the same family known as Yellow Flowered Hawkweed is exalted to the dignity of "King Devil." A writer in the 16th Century describing the spreading habit of this weed said: "The seeds turne into

downe that flies away with the Winde," but actually instead of having a downy sail, the seeds are supplied with a sturdy but gossamer-thin wing such as that of pine seeds concealed beneath the woody scales of the cone. In this respect they resemble the wings of the more familiar maple's twin seeds.

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DEVIL'S PAINT BRUSH

Orange Hawkweed

(Hieracium aurantiacum)



#### How to Combat It

An English botanist warned some ten years ago that Orange Hawkweed, as it is better known in Europe, would bear watching in this country but declared at the same time that it could be stopped in its tracks. He recommended that a can of dry sulphate be used so that one may douse the plants when the weather is hot and dry. The weeds, he reported, will turn brown, wither and die. (Ammonium sulphate is not now procurable on account of the war.)

A mixture of four parts sodium chlorate and one part sodium arsenite will do the job if about a half teaspoonful is placed on the crown of each plant. Commercial preparations of this kind are available. Crude sulphuric acid applied to the weeds with a long-spouted oil can will also do the trick.

In experiments conducted at the Vermont station some years ago it was found that applications of dry salt would kill this weed. At first only the individual plants were covered, but later experiments showed that 18 pounds per square rod (approximately 65 pounds per 1000 square feet) would destroy the weeds without permanent injury to the grass. This is equivalent to 65 pounds of salt to 1000 square feet, which would seem to be too strong for average soils. Because of the danger of sterilizing the soil, it would be better to first try a small scale application and observe the effect on the weeds, grass and soil.

The very fact that this weed grows in poor soils, indicates that by a faithful program of fertilizing and soil improvement it may be discouraged. In actual practice such a program has proven most effective in checking the activity of this weed in lawns. Where heavy infestation has occurred, however, more drastic methods are necessary.

### Grass Important in War Time

Grass is used for low cost dust prevention and erosion for military highways and airports. The use of turf for flight strips on military airports is said to increase the life of an engine 5000 hours.

## Sodium Fluoride on Crabgrass

S. Marcovitch of the Tennessee Agricultural Experiment Station reports that they have been able to effect good control of Crabgrass with a spray of a 2% solution of sodium fluoride to which has been added 1% soap powder as a spreader for the solution.

They report that perennials are not easily injured by sodium fluoride but that quick growing succulent annuals with thin cuticle are most susceptible.

The stage of growth of the weed is important in the control. The spray is more effective in the early season while the plants are tender and the solution can penetrate into the foliage.

Sodium fluoride is not a common chemical although it is used in some powders for the control of roaches and plant lice and should be available through wholesale druggists.

## A Friend of Clover

#### Sirs:

Just to show you that I read the Scott garden literature carefully, I would like to make a suggestion in connection with your latest edition of "Good Lawns." When it comes to White Clover (page 23) you overlooked one of the best reasons for growing White Clover in beetle infested areas, namely, that the clover will spread and cover up the bare spots where the beetles kill the grass. I have had experience with beetle grubs for five or six years now and it is quite a job and expensive keeping enough lead arsenate in the ground to control them, especially now that lead arsenate is hard to obtain. Therefore when you revise this booklet the next time, I think that it might be well to mention the fact that not only does White Clover collect nitrogen for the other grasses, but that it also is not attacked by any soil insects that I have heard of.

#### ANDREW S. WING

Editor Garden Digest Pleasantville, N. Y.



Sirs:

Several years ago we had a 10 acre field just "polluted" with Wild Onions and we killed them out with 40% commercial carbolic acid. We used about 350 gallons to do it but if I remember right it only cost about 12 cents per gallon. We used quart, long spouted oil cans like they use to oil locomotives, plugging the spouts so only drops came out. A few drops on the stalk killed roots and all. I weed out Dandelions by just putting a few drops on crown and find it the best and easiest way to kill any weed I have tried it on.

E. M. PIERPONT Harrisville, W. Va.

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## Leaves Should be Removed

It is always a problem to know what to do about fallen leaves, especially on a newly planted area.

It seems too bad to tramp on new and tender seedlings but this is necessary if the grass is to be protected from further harm. If the leaves are left on, a heavy rain will beat them down and they may smother out the young grass. In cold weather if a freeze follows the rain the damage will be even greater.

So the best thing to do is to try to catch a time when the surface is relatively dry, take a light broom type rake and brush off the leaves. Some young grass will be pulled out but if the job is done carefully the damage will be slight.

This suggestion applies to any lawn old or new. Keep the leaves raked up as often as possible. Those having oak trees that continue to drop leaves all through the winter should rake occasionally in the late fall until the ground freezes.

Grass should not be walked on while it is covered with frost. This will bruise the leaves and grass crowns and possibly kill the plants.

There are many questions about the use of a mulch to protect grass from the cold. There is no such protection; in fact grass does not need it though there may be some benefit from a mulch which prevents too early thaws in the spring. This may be especially beneficial to young grass on a southern exposure slope where the warm sun of late winter may thaw the ground in the daytime. A freeze at night may then result in heaving the grass roots.

Straw is about the only mulching material generally available and it has two serious disadvantages. It is apt to contain weed seeds and possibly worse, unthreshed heads of grain which will germinate in the spring and develop into a coarse, stubbly growth. Peat moss is better if available. Manures should never be used because of weed seeds in them and besides they are more valuable in the compost bed.

Since the only purpose of a mulch is to insulate the ground against too early spring thaws, it should not be put on until after the ground has frozen to a depth of several inches. The mulch itself may be spread to a depth of an inch or two and raked off when the danger of hard freezing seems past.

James Searles of St. Louis, Missouri, suggests that we conduct a column in LAWN CARE through which people can offer to buy and sell lawn maintenance equipment, particularly items that are scarce now.

There is hardly room in LAWN CARE for much of a swap column, yet we want to be as helpful as possible, so comments from readers will be appreciated.

# Long Experience Proves Spiking Pays

#### Sirs:

In LAWN CARE No. 67 you comment that "Spiking Benefits Turf." The suggestion may, profitably, be elaborated.

I have revived seemingly dead lawns situated between curbing and sidewalks, much abused by foot-travelers, hardpacked and under shade, by spiking. I have found that water should be turned on following the spiking, and that the ground should be thoroughly saturated to revive the grass roots. If fertilizer should be spread before the water is turned on the result seems almost miraculous.



Spiking is the proper treatment for terraces and all abrupt slopes. Where the slope is at such an angle that water from hose or rain is drained away as readily as from a house roof, there is little penetration of moisture to the grass roots.

You have noticed that under trees of loosely growing habit, such as walnut and locust, grass grows almost as well as away from trees, while under maple, elm and oak the grass makes little progress. There is a popular idea that the tree "saps the ground" near its trunk. Nothing is more erroneous. The tree saps the ground at the periphery of its widely thrown branches, water being supplied there in natural process by drip from the branches.

The correct idea is that loosely growing trees do not so greatly impede rainfall, while the dense maple, oak, elm etc., "shed" the rainfall, conduct the water of light showers to the periphery of their branches and deposit it where needed by fiber roots that feed the tree.

Grass will grow under trees if the ground is kept open by spiking and if water is supplied in proper quantity. It is possible to have both shade and grass to make the park more enjoyable.

The man who cultivates a good lawn is not only an artist in harmony with Nature, but he is a friend and benefactor to the traveling public that goes abroad to seek beauty. I am 80 and past effective age as a workingman but I still enjoy working with Nature.

W. I. ENDICOTT

Chesterhill, Ohio

Sirs:

I destroyed a patch of poison ivy, which a helper would not go near, by pouring Drano over it. Later I dug up the roots and treated them with the same liquid. There is not the least sign of poison ivy now in the patch which had been quite large and had several years' start.

O. M. SCOTT & SONS CO.

MRS. ALBERT GREEN

Conneaut, Ohio

## The Scott Publications

Lawn Care—Subjects featured in previous bulletins include:

1928 Plantain, Sodium Chlorate.

- 1929 Compost, Moss, Web Worms, Iron Sulphate, Buckhorn.
- 1930 Ground Ivy, Yarrow, Earthworms, Heal-All, Ants.
- 1931 Speedwell, Creeping Buttercup, Moles, Knotweed.
- 1932 Sheep Sorrel, Quackgrass, Spurge, Trefoil, Goosegrass.
- 1933 Nimble Will, Knawel, Terraces, Shepherd's Purse, Ground Covers.
- 1934 Sedge, Purslane, Spring Seeding, Dandelions, Summer Feeding.
- 1935 Peppergrass, Shade, Crabgrass, Summer Injury.
- 1936 Clover, Poa Annua, Henbit, Fall Seeding, Foxtail.
- 1937 Honeycombed Soil, Grubs, Orchard Grass, Soils, Turf Diseases.
- 1938 Liming, Dandelions, Chinch Bugs, Burlap Cover, Wild Garlic.
- 1939 Chickweed, Mowing, Dandelions, Fall Seeding, Poison Ivy.
- 1940 Spring Program, Organic Matter, Watering, Vitamins.
- 1941 Winter Affects Grass, Fertilizing, Moneywort, Mallow, Weed Control.
- 1942 Conservation of Lawn Tools, Tree Feeding, Crabgrass, Chemical Warfare on Crabgrass.

Paper Bound File-25c postage paid including all above bulletins.

Loose Leaf Binder—\$1.00 postage paid, all LAWN CARE issues to date and room for several years' future bulletins.

Good Lawns—That amateur gardener's guide to better lawns. Contains a complete outline for building new lawns and improving old ones. Free.

Bent Lawns—Illustrated new edition. Tells about the most beautiful of all lawn grasses—Scotts Creeping Bent.

Care Of Bent Grass—Describing the best maintenance practices for Bent Lawns developed from seed or stolons.



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