



University of Idaho
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RUSH SKELETONWEED



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Introduction

Rush skeletonweed (*Chondrilla juncea* L.), an introduced Eurasian native, presently infests several million acres in Idaho, Oregon, Washington and California. These infestations currently only affect rangelands. Ranges become less productive of desirable forage as rush skeletonweed infestations spread. This weed can potentially become an economic pest in croplands, particularly in areas with light textured soils. In Australia, rush skeletonweed infestations have reduced wheat yields as much as 70%, resulting in annual losses exceeding \$30 million.

This weed is an imminent threat to Pacific Northwest grain and livestock industries. Idaho, Oregon, Washington and California have implemented control programs to reduce the economic losses caused by the noxious weed.

Detection is the first phase of control and eradication programs. A cooperative effort is currently underway in the Pacific Northwest to detect rush skeletonweed infestations so appropriate control measures can be taken.

This bulletin promotes awareness of the rush skeletonweed problem and enlists the aid of residents in the early detection of the weed. The inner pages form a poster that will assist in identifying rush skeletonweed and list agencies to contact should the weed be found.

Identifying Characteristics Of Rush Skeletonweed

- Overwintering rosette resembles a dandelion plant; rosette leaves die back as flower stalks develop.
- Main flower stem 1 to 4 feet tall, nearly leafless, with spreading side branches.
- Stem leaves narrow and generally linear, occur sparingly on flower stalks.
- Downwardly bent coarse hairs on lower 4 to 6 inches of the stem.
- All flowers yellow; flower heads $\frac{3}{4}$ of an inch in diameter, composed of 7 to 15 individual florets.
- Cut surfaces exude a milky white latex sap.
- Generally inhabits well-drained, light soils along roadsides, in rangelands, grain fields and pastures. Soil disturbance aids establishment.



If You Find Rush Skeletonweed

- Mark and make note of the infested area so the exact location may be revisited.
- If positive identification is in question, do not disturb plants until authority has identified species, or keep plant parts in sealed containers to prevent dispersal of seeds and root pieces while being sent to address below for positive identification.
- Notify the appropriate agency from the list below to arrange a field visit.

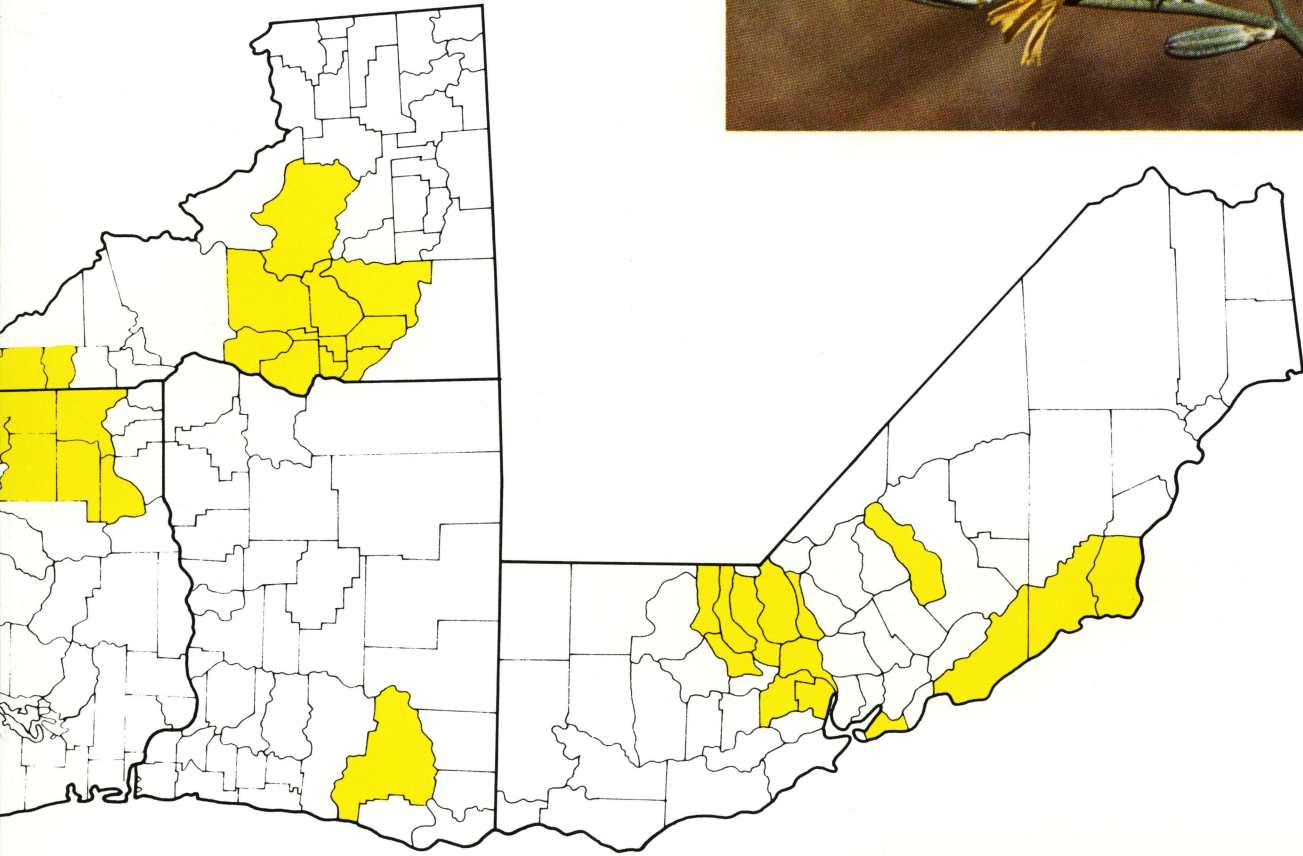
of Plant and Soil Sciences, Moscow, ID 83843 (208) 885-6617.

In Oregon

- Oregon Department of Agriculture, Noxious Weed Control Section, Agriculture Building, Salem, OR 97310 (503) 378-4987.

In Washington

- USDA Weed Scientists, Room 161 Johnson Hall, Washington State University, Pullman, WA 99164 (509) 335-3624.



Biology and Ecology

Rush skeletonweed (*Chondrilla juncea* L.) is a taprooted herbaceous perennial. It is a member of the family Compositae, commonly known as the "sunflower" or "thistle" family. Its seasonal cycle begins in the fall as increased moisture promotes seed germination and regeneration from established rootstocks. The plants overwinter as compact rosettes which resemble immature dandelion plants. With increasing daylength in the spring, the plants bolt and develop flower stalks. Soon after, rosette leaves dry up and decompose, leaving the aerial growth with sparse, nearly inconspicuous stem leaves.

Flowering begins in early summer and continues until frost in the fall. An individual plant is capable of producing over 20,000 seeds each year. Each seed is attached to a light pappus or parachute, like a dandelion seed, which carries it through the air allowing it to spread rapidly over large areas. The seeds have no dormancy and remain viable for only 18 months under normal environmental conditions.

In addition to taproots which may penetrate the soil below depths of 7 feet, rush skeletonweed

plants produce lateral roots which give rise to satellite plants. Both the main taproot and lateral roots may regenerate after mechanical damage. Even small root pieces broken and spread by cultivation often produce new plants.

The broad distribution of rush skeletonweed indicates its adaptation to a wide variety of climatic regimes and environmental conditions. Plants infest areas of eastern Washington where annual rainfall is less than 10 inches, and western Oregon which receives over 40 inches of rain each year. The weed is most often associated with disturbed, well-drained sites, particularly in areas with light textured soils.

Cooperative programs for the detection and control of rush skeletonweed have been initiated in the Pacific Northwest. Intense surveys are being conducted to more precisely determine the extent of the weed infestation. Research programs are being conducted to evaluate chemical, cultural and biological methods for control of rush skeletonweed.

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