

Wiry Skeletonweed Threatens Oregon Agriculture, Rangelands

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Anyone can have a skeleton in the closet, but the Bureau of Land Management is helping to fight a skeleton on public land, according to Jesse Higdon, BLM's Roseburg District staff silviculturist.

The skeleton is *Chondrilla juncea* L., or skeletonweed. It's a tough Mediterranean native that causes severe problems wherever it lands. Australia, invaded early this century, suffered 70% reductions in wheat yield in some affected areas. The weed crowds out the wheat and makes harvest of the remaining crop difficult with its tough, wiry stalks. Growers lost \$25 million per year.

In Idaho, where one patch of less than 50 acres was discovered in the early 1960's, there are now several million acres of rangeland dominated by the spindly weed. On rangeland, the weed displaces forage plant species used by livestock and wildlife.

"BLM is providing funding and helping find areas of infestation," said Higdon. "Our road maintenance personnel are also cooperating by keeping their eyes open for the weed."

Oregon's involvement is minor so far. But with any single plant capable of producing 15,000 seeds or more per year, the weed's potential for rapid spread is high. Sightings have been reported in counties on both sides of the Cascades.

The seeds are equipped with a bit of fluff—like a dandelion seed—and are able to move with the wind or running water. The roots of the plant, which may reach a depth of more than 10 feet, can also send out lateral roots to form new plants. Even small pieces of the main root, broken up and spread by cultivation, may form entire plants.

While early treatment involves chemical control, limited success from this method in California has led to the use of biological controls. The most effective of these has been a rust, or fungus, which grows on the skeletonweed and reduces its seed-making ability. One advantage of the rust as a control is its great selectivity—lettuce, the most closely related commercial crop to skeletonweed, is completely immune to the rust used.

The rust is effective, too. Australian wheat fields rendered completely unusable by skeletonweed were restored to production within 3 or 4 years after application of the rust.

Other controls which have helped include a midge—or fly—from the Mediterranean and a mite which attacks the weed's

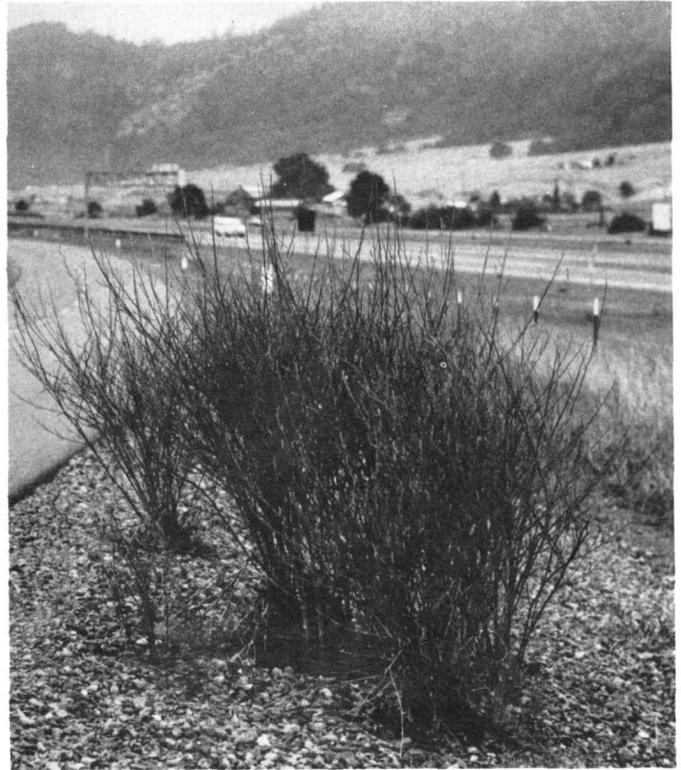


Photo by Oregon State Agriculture Department

Skeletonweed

root system. None of these methods have been used long enough in Oregon to judge effectiveness yet.

Skeletonweed in the winter months very closely resembles a common dandelion but shoots up one to four feet of skinny, branched stalks in the spring. The yellow flowers are about three-quarters of an inch in diameter, and are composed of seven to fifteen individual florets. The plant oozes a thick, white sap if cut. Usually found in well-drained soil along roadsides and in rangeland, grainfields, and pastures, the weed takes hold best in recently disturbed or cultivated ground.

BLM is one of several cooperating agencies in the fight against skeletonweed, with county Extension offices coordinating the operations.