

RUSH SKELETONWEED

Chondrilla juncea



CONTROL

Hand Pulling

Persistent hand pulling of rush skeletonweed throughout the year and for a period of six to ten years can be an effective way to eradicate small infestations. Hand pulling is most effective when soil is moist, and plants should be completely removed from the site in plastic bags to be burned at a high enough temperature to kill both root stocks and seeds.

Mowing

Mowing is not considered to be an effective method of control for rush skeletonweed because the large root system will only limit seed production on very dry years.

Biological control

Three biocontrol agents have been released in North America to control rush skeletonweed: a rust, a mite and a midge. Since Missoula County has no known infestations of rush skeletonweed, these biocontrol agents are not recommended for its control at this time, as focus should be placed on eradication. Planting competitive species (native perennials) alongside biocontrol agents has been shown to be the most effective integrated approach.

Grazing

Grazing is an effective method of reducing seed and rosette production of rush skeletonweed if it is continuous and moderate. Heavy grazing will also reduce seed and

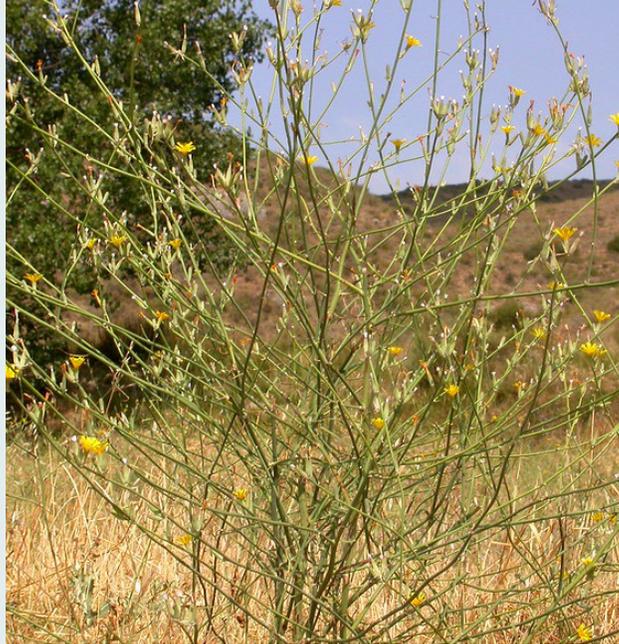
Ideal Timing for Treatment Options

Spring	Summer	Fall
Hand Removal		
Rust/Midge	Mites	Rust
		Foliar Spray

rosette production, but will also damage competitive desirable species.

Herbicide

Rush skeletonweed is difficult to control using herbicides due to its deep taproots that can re-sprout from a depth of up to 4 feet. Soil and moisture conditions at the infestation can also make effectiveness of herbicide applications variable. Repeated, annual applications are often needed to get acceptable control of a site. The herbicide chart on the back lists approved controls for rush skeletonweed. Always consult product labels and read them carefully to ensure correct species/land management usage and chemical application.



Rush Skeletonweed Life Cycle

Life Cycle	Root	Leaves	Stems	Flower	Seed/Fruit
Perennial	Taproot and some lateral roots	Lobed rosette leaves with spine-tipped edges, wither as the stem grows. Occasional narrow leaves on stem.	Downward bent, dark, coarse hairs on the lower 4 to 6 inches of green stems.	Yellow flower heads ¾ inch in diameter are scattered on the stems and branch tips. Flowers single or clusters of 2 to 5.	Light brown to black, ribbed, with long, white dandelion-like bristles.

Herbicides for Rush Skeletonweed, *Chondrilla juncea*

Active Ingredient	Rate	Efficacy	Comments
Aminopyralid	5-7 oz/ acre	Rosette/ Early Bud Stage (Fall)	Can apply to waters edge. Do not get in water.
Picloram	1 quart/ acre	Rosette/ Early Bud Stage	Do not use near surface water, shallow ground water, landscaped areas, or vegetable gardens (present/future).
Clopyralid	1 pint/ acre	Rosette/ Early Bud Stage	Safe to use in conifer trees
Aminocyclopyrachlor + chlorsulfuron	4.75-8 oz/ acre	Rosette Late fall, After first frost	Selective blend, non-crop use, may cause injury to some grass species
Aminocyclopyrachlor + metsulfuron methyl	4.75-9.5 oz/ acre	Rosette Late fall, After first frost	Selective blend, non-crop use, may cause injury to some grass species
Imazapyr	3 pints/acre	Anytime when plants are growing or in the fall after frost	Nonselective herbicide. Potential of overspray and killing of nontarget plants through root transfer. Direct spray or wipe method.

Information on diagnostic identifying characteristics adapted from "Montana's Noxious Weeds" by Pokorny and Mangold, Montana State University Extension Bulletin EB0159.