

STEVE'S Weed of the Month

St. Johnswort

Also Known as: Klamath weed, St. John's wort, common St. Johnswort, goatweed, amber, rosin rose, tipton weed

St. Johnswort is a Class C Noxious Weeds: Non-native plants that are already widespread in Washington State. Counties can choose to enforce control, or they can educate residents about controlling these noxious weeds.

St. Johnswort (*Hypericum perforatum* L.), native to Europe, western Asia, and Northern Africa, is a perennial plant that reproduces by seeds and also spreads vegetatively by short creeping stems (above and below ground). It grows 1-4 feet tall and typically has numerous upright stems. Main stems are reddish or rust-colored, somewhat two-ridged, woody at the base, with multiple branching. Leaves are opposite, elliptic to oblong, and stalkless (no petioles), so they attach directly to the stem. The leaves have distinctive small translucent glands that make them appear pierced or "perforated" when held up to the light, thus the name "perforatum." St. Johnswort flowers from May to September. Flowers are numerous and found in flat clusters at branch ends. Each flower has five bright yellow petals, many stamens, and occasional black dots along the margins. Fruits are three-cell capsules containing shiny, dark brown seeds that are cylindrical in shape. The seeds have a gelatinous coating that, when wet, causes them to adhere to moving objects, dropping off into the soil when they dry. Annual seed production ranges from 15,000 to 30,000 seeds, although a single plant can produce up to 100,000 seeds. Seed may remain viable in the soil for 6 to 10 years.

While St. Johnswort is used medicinally as an antidepressant and an appetite suppressant, it is considered a noxious plant and is cumulatively toxic when ingested by livestock. St. Johnswort contains hypericin, a phototoxin that travels to the skin after ingestion. Tolerance of any animal to the poison appears to be directly related to the amount of skin surface protection it has. Light-skinned and soft-skinned animals and those with white markings are the most affected. Livestock that ingest the weed can develop a sensitivity to sunlight.



Once a sensitivity to hypericin is developed, it is cumulative. Livestock generally avoid St. Johnswort when forage is available. Animals that ingest the weed can develop blisters and scabs on the mouth, eyes, ears, nose and feet, especially when exposed to sunlight. The minimum toxic dose of foliage for sheep is about 4% of live weight. Horses are more sensitive to hypericin than cattle and sheep, with goats the least sensitive.



St. Johnswort grows best in gravelly or sandy soils, but is commonly found in heavy soils. It usually occurs in dry habitats. It is commonly found along roadsides and in other disturbed areas, and aggressively invades rangelands and pastures. In dense stands, common St. Johnswort displaces native plant species, reducing forage for livestock and wildlife.

CONTROL METHODS

St. Johnswort is difficult to eradicate because of its extensive root system and long-lived seeds. An integrated management plan is recommended and should include revegetation of a beneficial plant species. Fire is not recommended as a means of control since burning can actually increase the weed's density and encourage its spread.

Physical/Mechanical: Because St. Johnswort can vegetatively reproduce from a rhizomatous root crown which can be quite extensive underground, physical/mechanical control efforts may actually stimulate plant production. For small infestations, the plants can be handpulled, but gloves should be worn to avoid contact with the plant. Persistence will be required to remove the entire root system of the plant, and plant fragments should be bagged to prevent spread. Mowing has little effect on the plant itself, but can reduce its spread if performed before seed formation. Repeated cultivation effectively eradicates St. Johnswort, so the plant is not a serious threat in cultivated fields.

Chemical: St. Johnswort can be difficult to kill with herbicides because of its extensive root system. Uptake of herbicides may also be inhibited by the plant's waxy leaves. Chemical control is possible with repeated applications of 2,4-D during the seedling and pre-bloom stages. Picloram can also be effective. Metsulfuron with a surfactant is recommended as a post-emergent for use in noncropland, pastures and rangeland.

More Information can be found in the
[PNW Weed Management Handbook](#)

Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

Biological: Biological control should be considered for large infestations of St. Johnswort. Several insects have been tested and released in the Pacific Northwest to control this weed. The Klamath weed beetle (*Chrysolina quadrigemina*) was released in the Pacific Northwest in 1948 with great success in some heavily infested areas. Another beetle, *Chrysolina hyperici*, was also released and is better adapted to wetter sites.



Klamath Weed Beetle

N Poritz Photos



Defoliating Moth Inchworm

A root-boring beetle, *Agrilus hyperici*, was introduced and has become established in eastern Washington and northern Idaho.

A defoliating moth, *Aplocera plagiata*, is established in a few sites in northern Washington. Climate and elevation may impact the effectiveness of biocontrol agents.

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