• ALTERNATIVES

POISON OAK AND IVY MANAGEMENT

Poison oak and poison ivy can be dangerous plants, but they also have positive characteristics. They provide nourishment to a wide variety of animals including many birds, rabbits, deer and bears. They are useful for soil stabilization and erosion control, particularly in areas that have been disturbed. They also make effective natural boundaries.¹

Native to the United States and flourishing in the Northwest, these plants will be with us for the foreseeable future. Consider leaving poison oak and ivy alone if it is not a threat to people. Poison oak and ivy are only a danger if people come in contact with the plant and its chemical oil, urushiol. This chemical can cause swelling and blisters when it bonds with human skin. Many, but not all people, are susceptible. Some people may not be affected the first or second times they are exposed, but on subsequent exposures have strong allergic reactions.¹

This article is designed to help you avoid poison oak and ivy exposure and carefully manage these plants on your property.

Identification

The first key to avoiding and managing this plant is being able to identify it. Both poison oak and poison ivy are members of the cashew or sumac family, and they appear similar.^{1,2} The most significant differences are that they grow in different parts of the country, and the tips of poison ivy leaves are acutely pointed while the poison oak leaves are more rounded and oak-like.² Poison oak grows west of the Sierra and Cascade mountains and in the southeast. Poison ivy is widespread, but is not typically found in California or western Oregon and Washington.¹ Either plant can grow as a shrub

Pete Haws is a former NCAP staff member.

or vine.¹ They do not tend to grow above 4,000 feet in elevation.³

The plants are distinguished by their leaves which grow in groups of three on a shared petiole (stem). The leaves resemble oak or ivy leaves, often turn red or orange in the fall, and usually appear shiny and leathery.^{1,2} The best advice to follow is the old saying - "Leaves of three, let them be."¹ In the spring, the plants have greenish-white little flowers and white berries with hard seeds inside.^{2,4} The berries are toxic to humans.³

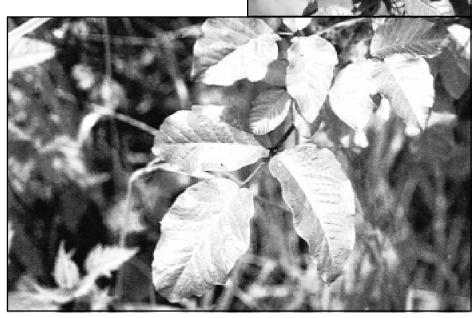
In the winter, when the leaves are gone, the plant is harder to identify. It probably will have its berries and is still dangerous. Stems and stalks contain their troublesome oil year-round. When parts of the plant are bruised or broken, the sap turns black and sticky.⁵ It is a good idea to mark the plants or areas containing the plants in the leafy seasons, so you can avoid, manage, or remove them later.¹

Careful Removal

Physical removal, by digging, pulling

and cutting the plants out, is most effective. Of course, this requires precautions and protective clothing.¹ The roots also contain urushiol. The plants have long underground root systems that tend to be shallow (about four to six inches deep).¹ Therefore, the digging required is not deep but may disrupt a large area. Once poison oak is removed, it is still dangerous and needs to be disposed of properly. Do not put plants on the compost pile because they remain toxic for years.^{1,5} Debris can be buried on site or raked and bagged for disposal. The disturbed area should be replanted with something else as soon as possible or





Poison oak leaves (large photo) and poison oak fruits (small photo).

covered to prevent a resurgence.¹

The best time to remove the plants is late fall, when the leaves are gone and the soil is soft and moist.¹ New sprouts are easier to remove in spring before their roots get established.1

Burning Not Recommended

While burning is fast, burning these plants or their debris creates contaminated smoke, that if inhaled, can cause fever, extreme respiratory problems, lung poisoning, or even death.^{1,2} Poison oak often returns strongly after burning if not replaced or otherwise controlled.⁶

Mechanical Control

Mowing, pruning, sawing and tilling are effective if repeated and maintained, and replacement vegetation is introduced. These methods require vigilance since the root systems remain and must be starved. Late summer is a recommended time to mechanically clear poison oak because the dryness may minimize the plant's ability to revive.⁶ Dust masks should be worn if saw dust will be in the air. Remember all bits and scraps of the plants can be harmful. A thick cover, such as carpet or layers of tarpaper, can prevent regrowth after cutting.¹ In fact, if you can bury or cover the poison oak, completely taking away sunlight for several months, this in itself may be enough to kill it.7

Exposure

You should cover as much skin as possible while working with these poison plants, and remember not to touch your face. Take frequent breaks to wash off the urushiol and to prevent sweating which opens up skin pores. Afterwards, clean the clothing and tools used without directly touching them. If possible sun dry the clothes after washing them.^{1,7}

Wash yourself within thirty minutes of the exposure with a mixture of cold or tepid water and rubbing alcohol; follow this with more water and, optionally, soap.^{1,3} Use "copious amounts" of water.³ Commercial skin cleansers that are designed to separate urushiol from skin may also be useful.⁸ After a reaction, hot



Poison oak.

water can help to reduce discomfort.³ Calamine lotion, some steroid (hydrocortisone) creams and other similar products can help alleviate itching.³ The blisters are not contagious because their fluid does not contain urushiol.³ Reactions may not occur until hours or days after the exposure.^{1,2} If a serious reaction occurs, you should see a doctor.^{2,3} Corticosteroid tablets and injections can stop the allergic reaction.³

More Protection

If skin may become exposed to these poison plants, you can apply a barrier cream to attempt to keep the urushiol away from your skin.^{1,8} Protect your neck and face with hat, goggles, and bandanas.¹

Animal Management

Grazing animals, especially goats, have been used successfully to keep poison oak and poison ivy under control. Goats are particularly adept at controlling regrowth and starving the plants by eating their leaves. You will likely need to confine the animals with an electric fence or another enclosure.^{1,9} A few people have even utilized pigs and mules in their control efforts.^{10,11}

You should avoid contact with animals' fur, which may be contaminated. Beware of pets that may be contaminated with urushiol as well.^{3,5}

According to a recent study, goats fed poison oak do not transfer significant amounts of urushiol to their milk.¹² No problems are known with honey created by bees using poison oak or ivy pollen.⁵

No Chemical Pesticides

For health and environmental reasons, we do not recommend pesticide use. As a further disincentive, repeated herbicide treatments may be required which can hinder the establishment of replacement vegetation. After spraying, removal of plants will still be necessary because of the urushiol.

Conclusion

If removal of poison oak and poison ivy plants is necessary, they should be identified and then dug or pulled out by the roots, controlled mechanically, or covered to prevent access to sunlight. Grazing animals can also play an important role in the management of poison oak and ivy. - Pete Haws

References

- Daar, S. 1991. Safe ways to outwit poison ivy and poison oak. Common Sense Pest Control. VII(4): 7-14.
- Callihan, R.H. 1990. Poison ivy and poison oak: Biology, toxicity, and management. Univ. of Idaho Coop. Extension. Current Information Ser. 856.
- Hauser, S.C. 1996. Nature's revenge: The secrets of poison ivy, poison oak, poison sumac, and their remedies. New York: Lyons & Burford.
- Walters, C. (1991). Weeds: Control without poi-sons. Kansas City, MO: Acres USA. Pp. 248-249. Mitich, L. 1995. Poison-ivy/poison-oak/poison-5. sumac-the virulent weeds. Weed Technol. 9: 653-656
- Johnson, S. (1991). Poison oak control. Proc. 6 43rd Annual California Weed Conference. p. 21.
- 7 Poison Ivy, Oak, and Sumac Information Center. 2000. General discussion. poisonivy.aesir.com/ control.html, May 21 1994.
- 8 Richard, T. 1994. Albany firm takes the itch out of poison oak. The Oregonian (Apr. 28):4.
- 9. Dreisdadt, S.H., J.K. Clark, and M.L. Flint.1994. Pests of landscape trees and shrubs. Univ. of Calif. Div. of Agriculture and Natural Resources. Pub. 3359. Pp.251-252
- 10. David, G. Pigs as weed control (poison ivy) and rototillers. E-mail submitted to Sustainable Agriculture Network, May 16, 1997.
- Fink, H. 2000. Native and Urban gardening, Eugene Or. Personal communication, Dec.
- 12. Kouakou, B et al. (1992). Dairy goats used to clear poison oak do not transfer toxicant to milk. California Agriculture. 46(3): 4-6.