

What About Poison Ivy?

By Greg Sykes (greg@grsykes.com)

That is the most frequently asked question I hear as an IMA Site Leader, so here is a brief summary on the plant people love to hate: *Toxicodendron radicans*. The bad rap it gets is because humans can develop an itchy allergic reaction from the oils (urushiol) in this plant. The foliage easily breaks thereby releasing the urushiol-containing sap, thus the person is exposed to the antigen. People can develop reactions from contacting any part of poison ivy any season of the year. In the most severe cases (e.g., inhaling burned leaves from open fires), the patient may require hospitalization.

The chemicals causing the itch are an anti-predation mechanism that the plant has evolved. Such plant defenses are common; bitter tasting tannins are an ancient chemical countermeasure that many animals, including humans, have adapted to ingesting. Caffeine and nicotine are other botanical weapons. As poison ivy is a Virginia native, many plants and animals have evolved ways of coexisting with—even depending on—this plant. Deer and rabbits eat the very leaves humans fear to touch! A member of the cashew family, the fruit is eaten by numerous animals; I've personally witnessed three species of woodpecker eating the berries or pickings from the vine at the same time! The fruits ripen in late autumn/early winter when other food sources are scarce. Small mammals and amphibians seek shelter on the ivy. These animals are all natives, and their co-evolution with poison ivy enabled them to evolve immunity to the urushiol as humans have to tannins in leafy foods such as tea. On the other hand, humans are relative newcomers to North America, so we have no natural defenses in this particular evolutionary arms race.

Poison ivy plays an important roll in *succession*: the processional order by which certain plants take root in a cleared or disturbed zone. The clearance could be natural (volcanic eruption, glacial recession) or artificial (clear-cutting, arson). The first plants to colonize a clearance are short-lived, prolific species. Colonizers stabilize the ground against erosion and condition the soil for other, more enduring plants. In Northern Virginia, the succession cascade goes from colonizing plants (pokeweed, briars, grasses), to transition plants (maples, tulip poplars, Virginia pines), followed by mature forestation (white oaks, hickory). Often found by roadsides, stream banks, and farm fields, poison ivy is an early succession plant, favoring areas that have experienced disturbance within the past 20-30 years or so. You will find little poison ivy growing in a mature forest; one of Royal Lake Park's IMA sites is an established oak/hickory woodland and the ivy is only present around the trail—a heavy disturbance zone.

Providing food, shelter, soil conditioning, and erosion protection, now we see poison ivy as a major ecological player! The question is what to do with it? If it's in the woods, leave it alone. Some thick poison ivy vines growing next to streams and off-trail habitats were cut; these isolated vines caused no harm to people but someone has gone out of their way to remove both a wildlife food source and a ground stabilizer. If the ivy is growing along a path, trail maintenance personnel will push it back along with other encroaching vegetation. If the ivy sprouts in your backyard, it's up to you to remove unwanted plants from your property. Poison ivy's native status means it is not an IMA program target species; furthermore, poison ivy may cling to trees but does not kill them!

Whether or not you are allergic to poison ivy, treat it as if you will react. So many people tell me how they used to play with the leaves and now don't want to look at the plant! In case of accidental contact, highly effective special soaps are available designed to remove the ivy oils. Again, the best way to avoid reactions with the misunderstood poison ivy is to be aware of your surroundings, prevent exposure, and to live and let live.

For more information about poison ivy, including great pictures of it throughout the year, visit:

http://www.fcps.edu/islandcreekes/ecology/poison_ivy.htm

Other references:

<http://poisonivy.aesir.com/view/faq.html>

http://www.amnh.org/learn/biodiversity_counts/ident_help/poison_ivy.htm

<http://www.poison-ivy.org/html/faq.htm>

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