

# Getting to Know Poison Oak

by Becky Riley, Friends of Rasor Park, Spring 2015



*Poison oak is a native plant common in natural areas throughout the Northwest. Though feared by many people, it is very valuable to wildlife, and is also a signature species in the now-rare Oregon white oak savanna landscape. Contact with the sap of poison oak causes a notorious allergic dermatitis in sensitive humans. Interestingly, Native Americans had a variety of uses for the plant, from basketry to medicine and even cooking. As a potent immune system stimulator, the oils in poison oak may turn out to have valuable uses in modern medicine, too.*

*Learning to recognize and avoid contact with poison oak is an important life skill for anyone who enjoys getting out in nature. There are also some things you can do to minimize the potential reaction and reduce the misery if you do come into contact. With some practice, you can learn to work or play around poison oak without as much fear, and perhaps even come to appreciate some of the values of this interesting and important native plant.*

## **1. Wildlife & Environmental Values**

## **2. Human Uses & Reaction To Poison Oak**

**Allergic Reaction**

**Ethnobotanical Uses**

**Biomedical Research: Uses, Treatments, Vaccines**

## **3. Identifying Poison Oak: Leaves of Three, Let it Be!**

**The Many Forms of Poison Oak**

**Mistaken Identity? Other Look-Alike Plants in Rasor Park**

## **4. Poison Oak in Rasor Park**

## **5. Working Around Poison Oak**

**What to Wear**

**Cleaning Up**

**If You Get the Itch**

**PO Growth Habit &**

**Removal Techniques**



## 1. Wildlife & Environmental Values

Western or Pacific poison oak (*Toxicodendron diversilobum*) is a native plant that is widespread in Lane County, and present in many of Eugene’s most popular natural area parks (such as Mt. Pisgah, Spencer’s Butte, Skinner’s Butte, Morse Ranch, Mt. Baldy, Ridgeline Trail, Willow Creek, East Alton Baker Park, and along the Willamette River Greenway). Poison oak is common across Oregon, Washington, California, Nevada, Baja, and British Columbia.



Poison oak is found in many different natural landscapes. It is a signature species in the understory of Oregon white oak savannas, including in the upland oak savanna that was once widespread in the Willamette Valley (and that we are trying to restore at Razor Park).

Poison oak provides important—and in some places critical—food and cover for many birds, western gray squirrels, deer, mice, and other wild creatures. Poison oak berries hang on until early winter, providing needed winter food. Poison oak is relatively nutritious (high in minerals) compared to other wildlife browse plants. Native bees gather nectar from poison oak, as do honeybees. Poison oak is sometimes planted in habitat restoration projects.

At Mt. Pisgah, poison oak thickets are a source of food and cover for coveys of quail. The dense poison oak and snowberry thickets in the understory of white oaks, such as those at Razor Park, are favored forage areas for spotted towhees. Northern flickers eat poison oak berries, especially in winter. Western pond turtles use poison oak thickets for shelter during flooding.

Learning to live with poison oak is a way we humans can support the habitat that native wildlife need for to survive and thrive.



*Poison oak leaves and berries have high food value for birds and wildlife; thickets and vines provide cover for foraging and nesting.*

## 2. Human Uses & Reaction to Poison Oak

### Allergic Reaction

Poison oak makes a landscape welcoming to wildlife, but humans tend to have a completely different view of it. That is because the sap within all parts of the plant—roots, stems, leaves and flowers—contain urushiol, an oily resin that causes a moderate to severe allergic dermatitis in most people that are unfortunate enough to come into contact. The oil is in resin channels near the surface of the plant, and can easily exude from cut stems or bruised or damaged leaves. The sap is light, colorless, and odorless, so it can't be seen.

Only a tiny amount of urushiol can cause a rash, blisters, and severe itching after it penetrates and bonds to human skin. The offending oil can be washed from skin with water and soap immediately after exposure, but it is less efficiently removed within a relatively short period of time (10-30 minutes).



Though the skin bonding occurs relatively quickly, the allergic reaction to urushiol is delayed. Symptoms usually do not appear for a day or two, and they may last for several weeks. You can get the rash on skin that touches any part of the plant directly, or if you touch tools or clothing or pets that have brushed against it. The palms of hands and soles of feet \*generally\* do not get the rash, but if you get the oils on your hands, you can easily spread it to other parts of your body.



Fortunately, young children are usually not affected, as their immune systems have not yet developed the sensitivity to urushiol. Sensitivity to urushiol also decreases with age. People typically do not react to the first (sensitizing) exposure, but only to subsequent exposures. A percentage of the population does not react at all, though figures on this vary considerably (from 10-50%).

Because poison oak is so widespread, human contact is common, and the dermatitis is a common cause of visits to urgent care centers. Poison oak exposure generally is not considered a medical emergency unless the urushiol oils are ingested or inhaled in smoke. Skin reactions to poison oak usually resolve on their own within two weeks. Sometimes steroids are prescribed if the rash is widespread or affecting eyes, face, or other delicate mucus membranes.

Nonetheless, the reaction to poison oak can be miserable, especially if the exposure is widespread on the body. It is a common cause of temporary disability and time off from work. Many people have a strong fear of poison oak based on a memorable previous encounter.

It is best to assume that one might react to poison oak, as an individual's sensitivity can change over time and depending on exposure. It is well worth learning to recognize and avoid touching this plant, and also to learn how to clean up if one is exposed inadvertently (see Section 5). These are important outdoor skills for anyone who enjoys getting out in nature.

## Getting to Know Poison Oak — 3

### Ethnobotanical Uses

Despite the fact that many of us have nothing good to say about poison oak, there are some historic and modern human uses of the plant.

Some Native American groups used the sturdy yet flexible stems and shoots of poison oak as warp strands in woven baskets.



When exposed to oxygen, the urushiol in poison oak sap hardens into a dark, durable natural stain or lacquer. Native Americans learned to use poison oak sap or soot as a black dye for basket elements, and also for tattoos and skin darkening.



Japanese, Chinese, and Koreans have long prized the urushiol sap of a closely related plant as a natural lacquer that imparts the high sheen to their decorative “urushi” lacquerware. (Most people can handle the heat-treated objects without reaction, but some sensitive people evidently do react.)

Native Americans reportedly also used the sap of poison oak to remove warts, corns, and calluses and to cure ringworm and skin cancers. They also used it to cauterize sores and stop bleeding, and to treat dysentery. They applied a poultice of fresh poison oak leaves to rattlesnake bites, evidently as an antidote to rattlesnake venom. Some groups even cooked with it.

There are still many mysteries about how native peoples were able to use poison oak in these medicinal and culinary ways. Some believe that certain tribes were naturally more tolerant of the urushiol allergen, or that they developed a tolerance through exposure. Yet reportedly some native peoples considered the plant to be toxic, and most had their own natural remedies for poison oak rash and itch, which suggests that they did indeed have those reactions. Also, it seems likely that the immune system reaction to urushiol is what made the plant potentially effective as a treatment for the various ailments it was used for. Modern research continues—see next page!



Historically, and to the present day, poison oak is sometimes planted in botanical gardens or even recommended by landscape architects. It is also trained into bonsai form by some horticulturists. It is appreciated for its high sheen and vivid red highlights that contrast with the green and white foliage and berries. The red color is especially brilliant in fall, but the plant can have red highlights in any season.

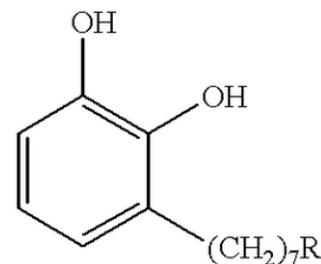
Poison oak is even celebrated (with humor) in an annual fall Poison Oak Show in the historic Sierra Nevada mining town of Columbia, CA (near Yosemite National Park).



## Getting to Know Poison Oak — 4

### BioMedical Research: Uses, Treatments, Vaccines

Urushiol is really not a single chemical, but a mixture of catechol and resorcinol compounds. These chemicals are powerful immune system stimulants in most people. They bond with membrane proteins on skin cells and causes the body's T-cells (white blood cells) to attack and kill the cells as if they were foreign invaders. In essence, our well-developed immune system overreacts to a relatively innocuous plant resin on the skin.



Indigenous peoples found ways to use some of these properties of urushiol compounds in their traditional herbal medicine. Urushiols have also been identified as the active ingredients in some traditional herbal anti-cancer remedies still in use in Japan, China, India and other countries.

Poison oak may yet prove its value to modern Western medicine. In laboratory studies, urushiol has demonstrated strong cytotoxicity against gastric, breast, ovarian, and colon cancer cells, including against certain aggressive and invasive types for which current treatments are lacking. It has also been proposed as a treatment for basal cell (skin) cancer and bladder cancer. Its properties as an immuno-stimulator and anti-angiogenic agent (inhibits capillary growth) have led researchers to study it as an adjuvant or synergist to boost the efficacy of other chemotherapy agents. It has also been studied as a treatment for rheumatism and inflammation. Researchers are also looking for ways to neutralize the dermatitis effect of urushiols so they can be used for medical applications.

There is continuing research into how urushiols affect the immune system. There appear to be genetic factors that confer some tolerance. Some sources say that people may develop progressively stronger reactions after repeated exposures. Yet, others say it is most common that sensitivity decreases with repeated exposure. Several studies have found decreased sensitivity to urushiols among factory workers exposed to it occupationally (cashew nut shell oil, and lacquer workers). Sensitivity is related to the balance of effector and suppressor lymphocyte cells present at any time, which can change based on exposure and other individual factors. Also, sensitivity usually decreases with age.

Oral, inhalation, or injected exposure can produce a different and more systemic reaction. However, the nature of this reaction is debated and not well understood. Some think urushiol can enter the blood or lymph systems, while others think it does not.

Research also continues to find a treatment (or preventive vaccine) for poison oak dermatitis. There have been effective vaccines in use in the past—some older folks will remember being vaccinated as a child—but there is no longer a poison oak vaccine on the market.

There is also ongoing research on the efficacy of traditional herbal remedies for treatment of the dermatitis, such as grindelia and jewelweed.

For now, medical science is still learning how to harness the power of urushiol. And as with many other conditions, the best treatment for the dermatitis is prevention—recognizing the plant, knowing where it grows, and dressing accordingly if you are going to be in poison oak habitat.

## Getting to Know Poison Oak — 5

### 3. Identifying Poison Oak: Leaves of Three, Let it Be!

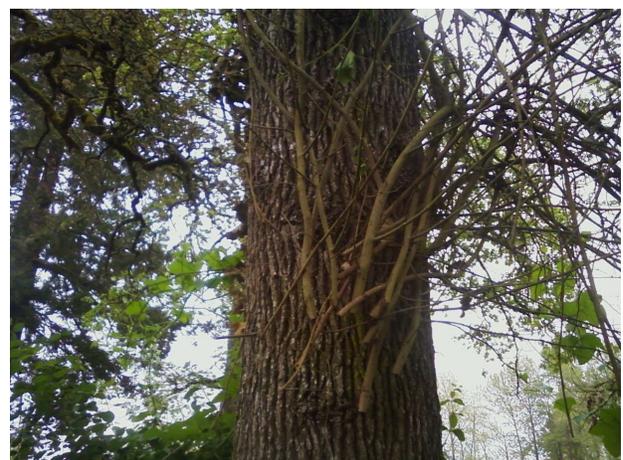
The 3-leafleted, slightly lobed leaves of poison oak are often bright red when they first emerge in the spring. They later turn green and can appear glossy or dull. Eventually they turn a brilliant red again in autumn. The leaves resemble oak leaves, but can be quite variable in shape and size. “*Leaves of three, let it be!*” The plant has small white-green flowers in spring, and clusters of small ivory-colored berries later in the summer. “*Berries white, run in fright!*”



## Getting to Know Poison Oak — 6

### The Many Forms of Poison Oak

Poison oak has a widely variable growth habit—it can grow as a creeping groundcover in grass and shade, or as a free-standing shrub up to 6 ft. tall in sunny areas, or as a thick woody vine climbing high up tree trunks. The best way to learn to recognize it is to get out and experience first-hand the “gestalt” or pattern and characteristics of the plant and how and where it grows.



## Getting to Know Poison Oak — 7

### Mistaken Identity? Other Look-Alike Plants in Razor Park

There are some other plants in Razor Park that people can mistake for poison oak. Some of these are Oregon white oak seedlings, young blackberry sprouts, and even snowberry shrubs. To complicate matters, often poison oak grows amongst other plants or vines, making it hard to distinguish the leaves and stems of one plant from the other.



*This is snowberry. It is common in Razor Park, in thickets under the mature oak trees, and in the savanna zone. Typically snowberry leaves are more oval than poison oak leaves, though sometimes they can be lobed and also tinged pink or red. The leaves are also arranged opposite each other on a twiggy stem. The white berries are much larger and softer than poison oak berries.*

*This photo shows an Oregon white oak seedling (right) and a poison oak plant (left) growing together. The small reddish leaf is part of the poison oak. True oak leaves grow singly, not in groups of three, and are larger and more deeply lobed than poison oak.*



*Both native and non-native blackberries and dewberries (trailing brambles) have three leaflets (at first). They can be distinguished from poison oak by their thorny stems and prickles on the underside of leaves. Dewberries (below, left side) have more pointed leaves than poison oak (right side).*



*At left, poison oak (thick vine and smaller, lighter colored leaves) is growing amongst snowberry and a wild cucumber vine at the base of an oak tree.*



## Getting to Know Poison Oak — 8

### 4. Poison Oak at Razor Park

There is poison oak in the oak woodland and the north east quadrant of the park (see green shaded area), with a few isolated patches outside that zone, too. There are vines of it growing up oak and pine trees, and under some of the firs. Some of it grows low in the grass, and some of it grows as taller, standing shrubs in sunny areas.

Volunteers are making an effort to keep poison oak grubbed and trimmed along the mowed paths in the north end, and the few isolated patches elsewhere. Nonetheless, you'll want to keep an eye out for and avoid poison oak sprouts. Going barefoot is also not a good idea in most areas of the park—there are plenty of other natural and unnatural hazards, too, like sharp tree needles, stinging insects, and sometimes broken glass, tin cans, or even hypodermic needles. You may want to wear close-toed shoes for extra protection.



If you want to avoid any possibility of exposure to poison oak, you may want to stay on the paved paths in this area of the park. Also, if you let your dog off-leash and off-trail in this area, it's likely that your dog may brush up against poison oak. Keeping dogs on leash is also a way to encourage wildlife, including ground nesting birds, to use the site. (Off-leash dogs are also a violation of City park rules.)



If you do come into contact with poison oak, be sure to wash any affected skin and your hands as soon as possible (see section 5, Working Around Poison Oak—Cleaning Up).



## Getting to Know Poison Oak — 9

### Poison Oak Removal and Meadow Restoration at Rasor Park

Rasor Park is managed by the City of Eugene as a natural area park. The master plan for the park was created in 2001 with input from hundreds of community members. The plan is based on restoring the now-rare oak savanna landscape (grassland dotted with Oregon white oaks) that was present on this site prior to European settlement. The plan also calls for restoring wildlife habitat, using a “nudge” approach to controlling weeds and increasing the population and diversity of native trees, shrubs, and other plants.

Poison oak is a native and signature part of the historic landscape at the park. Along with the oak trees, themselves, poison oak is arguably one of the most important plant species in the park for wildlife habitat. However, due to the hazard to unsuspecting humans, City parks managers have decided they want to remove the plant from this site, especially the meadow areas. Friends of Rasor Park has developed a multi-year plan for grubbing poison oak from the park, in an effort to prevent the application of strong herbicides over wide areas.

Nudge approaches we are using to reduce poison oak on this site include mowing, grubbing, and smothering with shade cloth. We will also plant other native grasses and wildflowers to recolonize disturbed areas. (Other options, such as fire, goats, or mulching, have been rejected as inappropriate for this site.) Though grubbing is a lot of work, it is likely to be the most effective method. It will take a persistent, multi-year effort.



Thanks for staying on paths!

For more information or to help with this effort, contact:  
Friends of Rasor Park  
[briley@efn.org](mailto:briley@efn.org)

Though removing poison oak might actually be reducing wildlife habitat on this site, grubbing it out does give us an opportunity to do more to restore a diversity of native savanna-prairie grasses and forbs in areas that are being disturbed. Native grasses and flowers, allowed to grow tall, provide much more habitat value (to native pollinators, all insects, birds, etc.) than the exotic grasses and weeds that currently dominate in the park. But the native species simply can't compete against the exotics. As we grub out poison oak and turn sod, we will be covering disturbed areas with shade cloth temporarily to reduce weed resprouting, and then we will replant the bare areas with native grasses and wildflowers. With reduced competition, these native species have a better chance of becoming established.

Here are some of the native flowers and grasses that we will be planting: Oregon sunshine, rosy checkermallow (2 photos), Roemer's fescue, and yarrow.



## Getting to Know Poison Oak — 10

### 5. Working Around Poison Oak

You can greatly reduce your risk of exposure and minimize any skin reactions to poison oak by dressing appropriately and cleaning up thoroughly. Though most adults are sensitive to urushiol, relatively severe dermatitis is likely to be a problem only for those who are inadvertently exposed and who don't wash up afterwards.

#### What to Wear

Wear old or grubby work clothes and shoes that can be laundered or scrubbed (or disposed?) after use. Poison oak sap oxidizes to a shiny black lacquer that can stain clothing and shoes. You may want to wear dark colored clothing, so any stains won't show. (Or, you may want to wear lighter colored clothing so you will be able to see any residual urushiol contamination after laundering, and perhaps dispose of items if appropriate.)

- Long pants
- Long-sleeved shirt that covers/protects wrists
- Washable long-sleeved overlayer, preferably with tight or elastic cuffs (fleece works well)
- Sturdy work shoes—taller (washable) boots are desirable for ankle protection
- Long socks can give extra leg protection
- Eye protection (wrap around goggles or sunglasses)
- Sweatband (some want this to keep sweat and hair off their face)
- Gloves (see more below)

Moisture on clothing, whether sweat or rain, can carry urushiol oils through cloth to skin. Wearing two long-sleeved layers on top—a shirt, topped with a looser over-layer that is easy to remove and launder—gives extra protection. However, some people sweat too much when working, and prefer just a single layer. In that case, choose a loose-fitting layer. If it does get touched by poison oak, the sap will not soak through to skin as easily. However, tight, preferably elastic cuffs are desirable to protect wrists. (Some people like to tape their wrists, or wear cut up tube socks on their arms. But these can also be itchy and hot when working, causing sweat or becoming a conduit for oils to seep through. They can also be tricky to remove without contaminating the skin anyway. I rely on long-sleeved gloves instead.)

#### Gloves:

I prefer to wear two layers of gloves:

- underneath: a long-sleeved **chemical-resistant nitrile glove** to protect the wrist and forearm (Boss brand from Bi-Mart works well)
- over the top: any **latex or nitrile-dipped** (washable) cotton glove.



The nitrile glove prevents urushiol from seeping through to skin, while the outer glove protects the nitrile glove from puncture, and also provides the grip for pulling slippery poison oak vines.

I launder the outer cotton/latex-dipped gloves in the washing machine, and I use a scrub brush and hot soapy water to wash the chemical resistant gloves and find I can wear them many times

## Getting to Know Poison Oak — 11

before they get too stained and contaminated. When I pull off both sets of gloves at the end of the work session, I keep them “outside out,” as I don’t want to contaminate the insides, especially of the nitrile gloves.

Some people find the nitrile gloves get too clammy inside while working. This does happen, as they are not breathable. But nitrile resists poison oak oils better than latex/rubber, cotton, leather, or suede. I find it manageable, and I haven’t found a better solution.

Some prefer thick leather gauntlet gloves. However, these gloves are relatively expensive, and also difficult to clean. Poison oak oils can permanently bond, stain, and penetrate through them. I also find them too stiff and difficult to work in, especially after a washing.

### Workday, and In the Field

- Think ahead about how you will remove your gloves and clothes and get them into the laundry without contaminating yourself, your transportation, or your door knobs, etc. at the end of the work day. You may want to lay out your cleanup supplies (soap, alcohol, wash cloth—see next section, Cleaning Up) and set up your washing machine ahead of time.
- You may want to bring a **plastic bucket or large plastic bag** and/or put a washable poly **tarp** down in your car or cart for putting dirty gloves and tools after working. 
- **Leave home anything that you don’t need:** watch, jewelry, cell phone, wallet, extra keys, etc. The fewer things you bring, the fewer things you will need to wash later. If you drive, bring just your license and keys you need. You might want to zip the license into a clean pocket or plastic bag. If you carry a bag with supplies into the field, remember that the bag will get contaminated as you carry it around.
- Bring a **water bottle**. Think about how you will open and drink from it without contaminating the drinking lip. 
- You may want to **eat a snack**, and you will definitely want to **go to the bathroom** immediately before you leave for the work session. Once you get your clothes and gloves contaminated, you will not be able to handle food or use the bathroom without risking spreading the oils to your skin or mouth.
- Once you touch poison oak or tools that have touched poison oak, **do not remove your gloves** until you are done for the day. You will contaminate yourself and need to wash ASAP. When you are done for the day, plan to go directly home to clean yourself up.
- Think about what you will do when your nose itches, or your glasses slip down, or a fly lands on you, or sweat pours down your forehead or neck, or your gloves get clammy inside. (Keep a clean shoulder and rub on that? Rub on a tree? Come with a sweatband? Grin and bear it?)
- If you are going to wash and re-use (nitrile) gloves, keep them “outside out,” so they don’t get contaminated on the inside.

## Getting to Know Poison Oak — 12

### Cleaning Up

There is much folklore about how to clean up after poison oak exposure, or how to treat a rash. Some of the treatments proposed are quite preposterous, containing harsh solvents or toxic ingredients that may be as bad or worse than poison oak exposure itself. Some are just very expensive. Ordinary soaps and detergents can work just fine to remove the oily residue, but technique is important. All soaps and detergents by their nature can be skin irritants. Scrubbing can also be irritating, so don't get carried away.

**For skin:** The goal is to remove the urushiol oil as quickly as possible after exposure—within 10-15 minutes is best. Though the urushiol bonds with skin relatively quickly, some solvents and surfactants are able to leach it out of skin up to 8 hours later. It is important to wash affected areas very thoroughly, as just trace amounts of urushiol left behind are enough to cause a reaction.



- **Water** alone is effective at diluting and rinsing off poison oak oil before it has bonded to skin. Use large amounts of comfortable temperature (but not hot) water to flush the affected area. If cleaning up after working around poison oak, wash hands and wrists thoroughly first, before moving on to other body parts. Don't forget face, neck, and ankles.
- Anything that helps remove oily residues can be useful. This includes **soap, scrubbing with a wash cloth or scrub brush, or various solvents (rubbing alcohol is especially effective)**. The trick is to continue to flush with copious water, and to be careful to rinse the flow down and off the body to avoid spreading the urushiol up your arms or onto other parts of the body. Gently scrub any crevices where trace residues might linger—around nails and knuckles, between fingers, etc. But avoid scrubbing so hard that you damage skin.
- A full shower can also be helpful. Avoid baths (which can spread the oils). Most sources warn not to use hot water (which, while it can help remove oils, also opens pores and may allow the oils to penetrate the skin more easily).
- **Ordinary soap or detergent** is fine, especially when accompanied by scrubbing and copious rinsing. Liquid soaps may be preferable to bar soap, though some swear by Fels Naptha, oatmeal, lava, or other abrasive soap for the extra friction that aids in removal of oils. Soaps with herbal ingredients made for poison oak may or may not be any more effective than ordinary soap. Any “degreasing” dish liquid or hand cleaner (Seventh Generation, Dawn, Goop, Gojo, etc.) will be helpful at removing the oils. However, the degreasing solvents and surfactants in



## Getting to Know Poison Oak — 13

these products (and also any fragrances, dyes, or anti-bacterial ingredients such as triclosan) may be allergens or irritants, or pose their own health or environmental hazards. Always best to use sparingly, especially on skin.

- **Isopropyl (rubbing) alcohol** can rinse or leach urushiol out of the skin for up to 6 hours after exposure. Some sources indicate it is more effective than Tecnu (and it is much less expensive). It is recommended by the Centers for Disease Control. A cloth dipped in alcohol (or alcohol wipes) can be useful if followed by good rinsing. Alcohol (70%) can be diluted further with water to be less harsh on the skin. Use sparingly—alcohol is readily absorbed by the skin and it can be toxic in large amounts.



- Tec Labs® **Tecnu Extreme Medicated Poison Ivy Scrub** and **Zanfel®** are two very expensive poison oak wash products that claim to remove urushiols and also reduce itch. They contain various surfactants and micro polyethylene beads as abrasives. Tecnu also contains alcohol, and the herb grindelia as an anti-itch ingredient. Because of their solvents or surfactants, these products can remove oils hours after exposure. Yet, solvents and surfactants may pose their own risks to health or the environment. If you are comfortable using these products on your skin, they do seem to be effective at removing urushiol and reducing reactions.

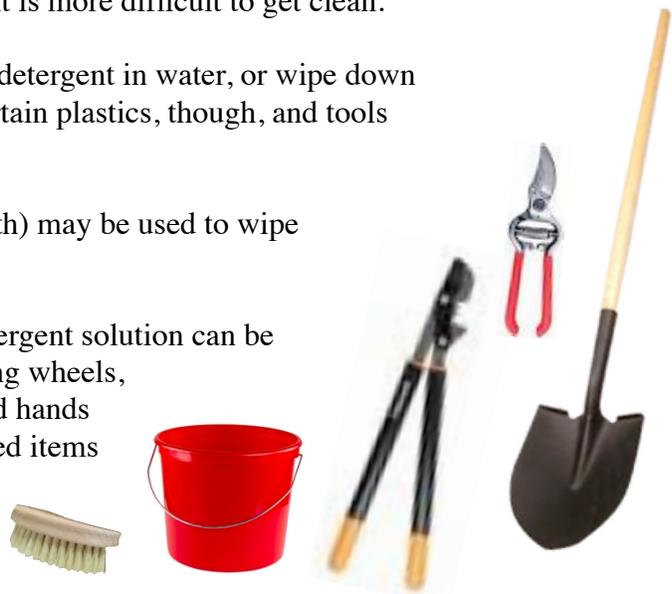
**For clothes:** Handle contaminated items carefully. Use hot water and regular detergent, and wash contaminated items separately from other laundry. Shoes can be laundered, wiped down with alcohol, or scrubbed with warm soapy water and a brush, depending on the type of material. It may not be possible to remove the oils completely from certain fabrics such as leather, suede or others, which may be permanently stained. Some also recommend wiping down the inside of the washing machine to remove possible oily residue at the fill line. I have not found this to be necessary with the (stainless steel) basket in my washing machine.

**For gloves:** I launder latex-dipped cotton (outer) gloves with my dirty clothing. I use a laundry brush and detergent to scrub the outside of the chemical resistant nitrile (inner) gloves. I avoid turning gloves inside out when I remove them, as I want to avoid getting urushiol oils down into the inside of the fingers, where it is more difficult to get clean.

**For tools:** Scrub with a brush and a degreasing detergent in water, or wipe down with rubbing alcohol. Alcohol may damage certain plastics, though, and tools may need to be re-lubricated.

**For pets:** Alcohol wipes (or alcohol-dipped cloth) may be used to wipe down pet fur, if a full bath is not possible.

**Other items:** A cloth dipped in alcohol or a detergent solution can be used to clean house or car door handles, steering wheels, keys, or anything else touched by contaminated hands or tools. Be careful when handling contaminated items—wear gloves, wash carefully.



## Getting to Know Poison Oak — 14

### If You Get The Itch

The cleaning steps above should dramatically reduce the severity of any reaction that does occur. However, if you fail to fully remove the urushiol oil, a rash may appear. Most poison oak rashes will self-resolve within 2 weeks. The steps that follow are for helping soothe the itch in mild, limited reactions. If you do have an extensive reaction, or open blisters, or a reaction in a sensitive place such as near eyes or genitals, you may want to seek professional medical advice. A doctor may prescribe oral steroids for severe cases. They are powerful drugs.

- Avoid scratching. You don't want to break the skin or cause infection.
- Running **very HOT (but not scalding) water** onto affected skin can offer relief from itching for many hours. The itching will briefly become very intense and then will stop, supposedly because the nerves responsible for conveying the sensation to the brain become overloaded and quit. As soon as the itching starts again, go back to the heat treatment. According to Dr. Andrew Weil, hot water treatment will cause the whole reaction to resolve much more quickly than it would otherwise. (Note: Some dermatologists say hot water will further dry irritated skin or irritate the rash. However, the hot water method is widely recognized as an effective way to control itch in the folklore about poison oak, and it really does seem to work. Use your own judgment, and use only for mild cases. Don't burn yourself!)
- **Calamine lotion** is a thin pink solution of zinc oxide with ferric oxide or zinc carbonate. Topically applied, it is effective at soothing mild itch.
- Some recommend a poultice or mask of **bentonite clay or baking soda** as a soothing, drying, and even less toxic alternative to calamine. These can be messy.
- **Aloe vera gel** can also be applied to cool, soothe, and heal irritated skin.
- Avoid over-the-counter topical antihistamine or anti-itch creams. They are considered ineffective, or worse, they can even prolong the rash or further irritate or damage the skin (evidently many contain ingredients that commonly cause new allergic or toxicity reactions).



Some botanical remedies (historical and modern) include poultices, salves, or teas made from: Grindelia robusta (gum plant), jewelweed, narrow-leaf plantain, yerba santa, roots of mule ears, mugwort, Pacific madrone and manzanita, aloe vera, honeysuckle, rhubarb, milkweed.

Note that grindelia is listed as the active ingredient in Tecnu Extreme Medicated Poison Ivy Scrub. Also, in a 2012 study, jewelweed mash was found to be effective in reducing poison ivy dermatitis (though extracts were not, and soaps made of these extracts were no more effective than jewelweed-free soaps).

Freshly cut pieces of mushrooms, apples and potatoes contain the enzyme tyrosinase, which is an enzyme that can oxidize (“detoxify”) phenolic compounds such as urushiol. But once the cut pieces turn brown, the tyrosinase is already used up and no longer effective.

## Getting to Know Poison Oak — 15

### Poison-Oak Growth Habit & Removal Techniques

Poison oak has an extensive network of roots, and also horizontal woody runners and rhizomes, some on the surface and some just under the surface of the ground. The runners can be many feet long.

A “patch” of poison oak might be just one or relatively few plants, with lots of horizontal rhizomes. The youngest runners are thin, greenish and unattached—they can be easily pulled out of grass. Later in the growing season, they thicken and branch or attach with rootlets.

There are relatively few deeper woody root crowns that grow more vertically. These can be very thick, and require deep digging, or cutting off below the surface. One source says to grub and cut at least 8-10 inches down.

To effectively remove poison oak by grubbing, it is important to get the runners all the way to the tip, and also all the little root fragments. Pieces of rhizomes or rootstock left behind will easily resprout. It is satisfying to follow the runners and get large amounts of the plant off the surface!