



Forestry, Wildlife & Fisheries Update Newsletter

Department of Forestry, Wildlife and Fisheries
 George Hopper, Department Head

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Notes From the Web - Farm Ponds and Vegetation Control

Samuel Jackson, Web Coordinator

Is that duckweed on your pond? Yes, it's the time of year when we start seeing vegetation problems in farm ponds. These long, hot summer days make the different species, such as watermeal and watermilfoil, grow rapidly. These plants can quickly inundate a small pond. But where can you get some quick, basic answers to questions like "How do I control watermeal?"

The Southern Regional Aquaculture Center (SRAC) is an organization that provides fisheries information across the south. SRAC has an excellent website loaded with information at <http://www.msstate.edu/dept/srac/>. Though much of the information on the site is important, I want to focus on the Publications section.

From the home page, you can click on "Publications" and the link takes you to a listing of the different types of information the Center offers. You can even order videos and CDs. However, some of the most useful information can be found under "Fact Sheets." There is a fact sheet for several species of fish, pond construction and management, and even marketing of fish produced. These fact sheets will help landowners efficiently manage their farm ponds and control problems.

The second beneficial section of the publication list is the "Aquaplant" pond manager tool. By clicking on the link to Aquaplant, you are accessing a useful diagnostic tool for aquatic plant identification and the associated information for controlling the problem. The identification database allows users to visually identify plants based on what they have found in their pond. Once identification is made, a database of control information is available for users to identify the control measure that would most benefit them. A glossary is also available to clarify terms in the website. The SRAC Aquaplant site is a great tool for southern pond owners. Check it out today!

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Wildlife Management Calendar For July

Craig Harper, Associate Professor, Wildlife Management

Prepare new cool-season plots for fall planting

- spray existing sod with glyphosate herbicide (e.g., Roundup—2 quarts per acre)
- amend soil according to soil test recommendations
- incorporate (disc or plow) lime and fertilizer into root zone of plot
- see *Growing and Managing Successful Food Plots for Wildlife in the Mid-South*, PB 1743, for additional information on seeding rates and management recommendations

Bushhog and spray perennial forage food plots for weed control if necessary

- see *Growing and Managing Successful Food Plots for Wildlife in the Mid-South*, PB 1743, for herbicide recommendations

Spray woody competitors in oldfield habitats, including native warm-season grasses

- multiflora rose privet, sericea lespedeza, sweetgum, elms, etc.
- Roundup, Garlon, Arsenal, Ally, and PastureGard should be considered

Begin strip-mowing dove fields once they mature

Top-sow winter wheat (late August) to attract doves and provide forage for deer, turkeys, and other wildlife through fall and winter

Burn old-fields to stimulate forbs and reduce grass dominance (late August)

Plant firebreaks (late August) and other disced strips not left for natural vegetation

- annual cool-season grains (e.g., wheat and oats) along with annual legumes (crimson and arrowleaf clover and Austrian winter peas) are excellent choices

Finish planting japanese millet around beaver sloughs and other areas that will be flooded in November for ducks

Construct/repair dikes and water-control structures for flooding fields/woodlands for waterfowl this fall/winter

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New Website - UT Forest Products Extension

There is a new website for UT **Forest Products Extension** at <http://web.utk.edu/~mtaylo29/default.html>. The site has information on wood and forest products extension resources, including numerous publications and useful links. The website is maintained by UT Extension Forest Products Specialist Adam Taylor, whose contact information is shown on the site.

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Hardwood Analysis and Trends (HAT) – July 2005

David Mercker, Extension Specialist, Forest Management

HAT is designed to inform readers of recent changes in usage and demand of six of the more commonly sought-after hardwood species. It provides general trends in pricing as well. There has been some pricing activity during June, with average grades of red and white oaks, and cherry lumber suffering additional price reduction. Poplar continues to be a bright spot, enjoying a second straight monthly price increase. Mills are in their usual summer slow period, with some shutting down for vacations and maintenance.

We are still considering adding ash and hickory to **HAT**, a decision that will be based on reader request. Contact David Mercker at dcmercker@utk.edu if you'd like to see these species added. Thank you.

Red Oak – The situation for red oak continues to be difficult; the upper grades have sufficient inventories and prices have fared well, but average to lower grade lumber has suffered considerably; if prices for “white woods” continue to rise, there is some conjecture that alternative woods such as red oak may regain a portion of the lost market share; during the month of June, common grade red oak lumber dropped an additional 1.5 percent.

White Oak – There is strong demand for upper grades of this species, particularly from the overseas markets; however, demand for common grades is slower due to an oversupply; in an effort to limit white oak production, some mills are producing fewer boards but thicker stock; common grade lumber dropped an additional 1.5 percent in June.

Poplar – Inventories for upper grades of poplar (typically used for molding) are low for both green and kiln dried stocks; overall, the marketplace activity is favorable with steady volumes moving overseas and is anticipated to remain strong through summer; poplar lumber is quick from a green to kiln-dried state, and inventories can become full rapidly; as such, prices tend to raise incrementally, but drop suddenly; unlike white and red oak, the trend in common grade lumber is up, enough to warrant a 1 percent increase in June.

Black Cherry – In some regions, cherry lumber has been a substitute for mills seeking to turn production away from red oak (due to profit margin); this activity is creating excess in green lumber inventory, particularly in common grade; though demand remains strong, supply is plush, enough to warrant another price dip (2 percent) in June for common grade lumber.

Sugar Maple – Sugar maple still leads the group in consumer demand; levels are very high when compared to previous years; the continued strength in the housing market brings additional optimism for this species as a product used in furniture, cabinets, flooring, and molding; prices remain firm and unchanged.

Black Walnut – Walnut lumber continues to enjoy a solid demand; finer quality logs are shipped to international destinations causing some concern for domestic supply; prices were unchanged in June.

Perspectives on Forest Disturbance: the Norm or the Exception in Tennessee?

Wayne K. Clatterbuck, Associate Professor, Forest Management and Silviculture

The forests of Tennessee are composed of trees of many species and sizes. Upon first look at the wide distribution of tree diameters, it would seem reasonable to assume that the trees are of many ages. However, upon further investigation, most of the trees are similar in age. They started from a disturbance event that allowed trees the space and sunlight to develop and grow. Each species has its own growth rate that is influenced by its genetics and the environment in which it grows. Put together several species of differing growth rates, and the forest has trees of many different diameters.

Most of the forests of Tennessee are continually disturbed by outside influences, whether natural events such as tornados, insect or disease outbreaks, ice storms and fires or man-caused events such as harvesting. Natural disturbances are more rampant on the landscape than one might consider. A recent article on tornados in the April 2004 issue of *National Geographic* shows that Tennessee is one of the more highly susceptible areas for tornados and states for most of the eastern United States about one percent (1%) of the land area is affected by a tornado each year. Thus, if these tornado disturbances are evenly-distributed, the probability is that every 100 years, each acre of land is disturbed by a tornado. If we look at the forest area of Tennessee, we have few old growth forests because of disturbances. Most of our old growth forest areas are in depressions, coves or gorges that are not influenced by disturbance events, primarily wind and fire or are inaccessible for harvesting. These tracts are usually less than 100 acres and are found in the Smoky Mountains or the South Cumberland / Savage Gulf area on the southern Cumberland Plateau. Thus, the overwhelming majority of the forests in Tennessee have been disturbed and regenerated several times. Most forests in Tennessee have regenerated three, four or five times since European settlement.

Succession is the replacement of one community by another due to changing environmental conditions. Each community modifies its environment over time making it more suitable for another community more adapted to those environmental conditions. In theory, a community that is stable and is able to sustain itself is considered a climax community. In Tennessee, we rarely ever reach a climax community (hundreds of years) because disturbances are so common that succession is set back to an earlier stage.

Research has shown time and time again that forest openings of 1.5 to 2 acres are needed for trees to regenerate and develop in Tennessee. Smaller openings are not feasible because the crowns of adjacent trees expand and close the overhead opening before a smaller regenerating tree can grow and become part of the overstory. Thus, single tree selection and "select" cutting does not allow new sun-dependent regeneration to grow and prosper because the remaining residual trees take the growing space. Most of these smaller trees will die because they cannot prosper due to the limited sunlight in the midstory and understory.

Most of the forests in Tennessee are considered even-aged or two-aged because new age classes only occur because of disturbance. Even if man did not disturb the landscape, natural disturbances are so common, we would rarely reach an old growth condition in Tennessee (two or more hundred years without natural disturbance). Furthermore, openings less than 1.5 acres (or small gaps) do not allow the environmental conditions for new regeneration or age classes to develop and become a component of the upper canopy. By definition, for a uneven-aged forest structure to occur, there must be three or more age classes. The frequent forest disturbances in Tennessee, setting succession back to an earlier stage, generally do not allow more than one or two age classes. Even though the forest has many trees of varying diameters, these trees are the same age because of the differential growth rates of the many species, not because these trees regenerated at different times.

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Crop Tree Release Considerations for Select Species

David Mercker, Extension Specialist, Forest Management

1. **Black Cherry** – prefers mesic sites; with its shallow roots, it does not tolerate fire, pasturing, or soil compaction and is susceptible to windthrow; value is extremely high (although best markets are located to the northeast); it has rapid height growth but only moderate diameter growth; it does not respond well to release if it reaches the age of 50, or if it loses the competitive race with adjoining trees; It becomes highly susceptible to ice damage when released; Cherry experiences epicormic branching if released too heavily; It has a high propensity to produce gum spots caused by bark beetle; If deadening cherry, do so between July and January to lessen the suitable habitat for bark beetles; release cherry from wild vines at an early age because the flexible crowns can be easily deformed.
2. **White Ash** - is a better crop tree than green ash and is distinguished by the U-shaped leaf scar; Having a high demand for fertility and moisture, it prefers a soil depth of 16 inches or more; It is commonly found as a pioneer on old field sites, although it performs poorly on such sites, and is not worth releasing; It is an early rapid grower and resists epicormic branching; White ash responds well to release if conducted prior to crown suppression; It is shade tolerant while young, becoming less so with age; The wood is a favorable substitute for oak.
3. **Yellow Poplar** – is a very rapid grower, although it has a very narrow moisture niche (preferring sites neither decidedly dry nor moist); the seeds remain viable for 8 years in the soil and require intense sunlight (elevated ground temperatures) to germinate; On dry sites, poplar will gain early competitive advantage, but normally succumbs, giving way to more drought tolerant oaks; As with ash, it colonizes old fields well, particularly those with bare mineral soil at the time of abandonment; The market value has traditionally been moderate, but the rapid growth rate allows for shorter harvest rotation; It is best to release poplar only on the most productive sites and only when more preferable species are absent.
4. **Northern Red Oak** – is perhaps the species most suitable for release because of its unmatched growth response and its traditionally high market value; As with yellow poplar, its moisture niche is somewhat narrow, performing best on rich, moist sites, located on lower and middle slopes, in coves and deep ravines, and on well drained valley floors; It will produce epicormic branches if released too heavily, if having an abundance of dormant buds, or if growing on poorer sites; A four-sided crown release allowing ten feet free-to-grow space is sufficient.
5. **Black Walnut** – is very site sensitive; It has a prominent tap root, preferring deep, well drained soils; it is often found on alluvial deposits along creeks, and on old pastures and abandoned home sites where squirrels buried the seeds in full sunlight then failed to recover them; Although walnut often performs poorly on the latter two sites if a soil hardpan exists; It produces epicormic branches if released too heavily on the south side; walnut is normally not an abundant species in most stands, except on abandoned bottomland sites; if walnut is grown too rapidly, the market value for fine veneer is lowered; such trees are termed “sappy” because of the wide light-colored sapwood ring; Experienced foresters and veneer buyers are expert at recognizing this trait by examination of the bark.
6. **Sugar Maple** – not traditionally thought of as a preferred crop tree, sugar maple is gaining in consumer preference as a light-colored wood; As with black cherry, sugar maple prefers the slightly cooler temperatures, higher elevation, and mesic sites found in the northeast; It is rarely found in even-aged, pure stands, but rather slowly invades due to its tolerance to shade (particularly in the absence of ground fires and with repetitive selection harvesting); when it develops as an understory tree, the quality is normally poor and not worthy of crop tree release; small stands of ¼ to ½ acre size sometimes

develop following gap-scale disturbances in the forest; sugar maple does not respond aggressively when released; the leaves of sugar maple decompose quite rapidly, and when in pure stands, exposes the soil thereby accelerating soil erosion; it has low wildlife value.

7. **White Oak** – is an excellent choice for crop tree release; as with most hardwood species, it prefers the more productive mesic sites, but is normally not competitive on such sites and is relegated to the dryer slopes and ridge tops; Expends more energy into early development of a viable root system and less into top growth, making it a slow initial starter but longer-lived and more capable of withstanding drought; Even with release, it grows slowly, but still averages 67% increase in growth over unreleased trees; stressed trees or those strongly suppressed in the understory, will not respond well to release and often produce epicormic branches; It is important to only release crop trees with healthy, vigorous crowns in the main crown canopy and with no existing epicormic branches on the butt log.

Reference: *Perky, Arlyn W. and Brenda L. Wilkins. 2001. Crop Tree Field Guide: Selecting and Managing Crop Trees in the Central Appalachians. US Forest Service. Morgantown, WV.*

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Is it Okay to Use a Wooden Cutting Board?

Adam Taylor, Assistant Professor, Wood Products Management

Yes! While there has been some debate over whether plastic is better, it is safe to use a wooden cutting board for food preparation.

Poisonous bacteria can exist in raw meat, but they will be killed if the meat is properly cooked. A possibility of food poisoning arises when these bacteria are transferred to uncooked foods during meal preparation. For example, this “cross-contamination” could occur when vegetables for a salad are cut on a board that was previously used for cutting infected chicken.

The question is whether wooden or plastic cutting boards are more likely to harbor harmful bacteria, even after being cleaned. Some have suggested that it is “just common sense” that a porous material like wood would be harder to keep clean than plastic. It turns out that testing does not necessarily support this assumption. In fact, some studies have suggested that used wooden cutting boards are less friendly to bacteria than used plastic boards. Other studies have shown plastic to be slightly easier to clean.

One of the more recent studies on this issue concluded that wood and plastic are about the same in terms of food safety, and that other factors – e.g. price and durability – will be more important when choosing a cutting board. And the Food & Drug Administration’s (FDA) Food Code states that “hard maple or an equivalently hard, close-grained wood” may be used for cutting boards and other restaurant food equipment.

Regardless of what material you choose, the following steps are recommended: use different cutting surfaces for raw foods that require cooking and wash and dry your cutting boards after use.

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Toxicodendron, Poison tree

Larry Tankersley, Extension Assistant, Forest Management

The first published records of poison ivy in North America date back to the early 1600s in the writings of Captain John Smith. In fact, Captain Smith included an illustration of the plant and originated the common name because of its superficial resemblance to English ivy or Boston ivy. The name ivy or "hiedra" was also used by early Mexican settlers in California who mistakenly thought poison oak was a kind of ivy. California poison oak was noted by another British explorer of the 19th century, Captain Frederick Beechey, who took samples back to England. Much to the chagrin of unwary gardeners, both poison oak and poison ivy were planted in English gardens for their graceful climbing habit and beautiful autumnal coloration.

North Americans and English gardeners are not the only ones exposed to *Toxicodendron* dermatitis. In his monograph of poison oak and poison ivy, Gillis (1971) lists four native species of *Toxicodendron* in North America, including seven subspecies of poison ivy. He also lists three species in Malaysia and China, including two subspecies of poison ivy, one in China and one in Japan.

In Tennessee, we have *Toxicodendron pubescens*, poison oak, *T. radicans*, poison ivy, and *T. vernix*, poison sumac. According to the *Tennessee Vascular Plant Atlas*, poison oak has only been reported in six counties, same with poison sumac (six counties); by far most of what we see here in Tennessee is poison ivy.



Approximately 85 percent of the population will develop an allergic reaction if exposed to poison ivy, oak or sumac, according to the American Academy of Dermatology. *Toxicodendron* dermatitis is an allergic reaction that occurs from exposure to members of the plant genus *Toxicodendron*. Usually, people develop a sensitivity to poison ivy, oak or sumac only after several encounters with the plants, sometimes over many years. However, sensitivity may occur after only one exposure.

The cause of the rash, blisters, and infamous itch is urushiol (pronounced oo-roo-shee-ohl), a chemical in the sap of poison ivy, oak and sumac plants. Because urushiol is inside the plant, brushing against an intact plant will not cause a reaction. But undamaged plants are rare.

"Poison oak, ivy and sumac are very fragile plants," says William L. Epstein, M.D., professor of dermatology, University of California, San Francisco. Stems or leaves broken by the wind or animals, and even the tiny holes made by chewing insects, can release urushiol.

Reactions, treatments and preventive measures are the same for all three poison plants. Avoiding direct contact with the plants reduces the risk but doesn't guarantee against a reaction. Urushiol can stick to pets, garden tools, balls, or anything it comes in contact with. If the urushiol isn't washed off those objects or animals, just touching them--for example, picking up a ball or petting a dog--could cause a reaction in a susceptible person. Only humans appear to have painful encounters with the plant, although laboratory studies indicate sensitivity on exposed skin of guinea pigs, rabbits, mice, sheep, dogs and rhesus monkeys.

The foliage and fruits are eaten by deer, goats, horses, cattle and a variety of birds. In fact, wood rats even use the branches to construct their nests.

Urushiol that's rubbed off the plants onto other things can remain potent for years, depending on the environment. If the contaminated object is in a dry environment, the potency of the urushiol can last for decades, says Epstein. Even if the environment is warm and moist, the urushiol could still cause a reaction a year later.

"One of the stories I tell people is of the hunter who gets poison oak on his hunting coat," says Epstein. "He puts it on a year later to go hunting and gets a rash [from the urushiol still on the coat]."

Almost all parts of the body are vulnerable to the sticky urushiol, producing the characteristic linear (in a line) rash. Because the urushiol must penetrate the skin to cause a reaction, places where the skin is thick, such as the soles of the feet and the palms of the hands, are less sensitive to the sap than areas where the skin is thinner. The severity of the reaction may also depend on how big a dose of urushiol the person got.

In susceptible individuals, urushiol triggers a hypersensitivity reaction. Usually the skin is involved; however, the eyes, airway, and lungs may be involved if exposed to smoke from burning plants. In susceptible individuals, lesions generally appear within 12-48 hours, although they have been noted to appear earlier. New lesions may continue to appear for up to 2-3 weeks. Initially, these lesions tend to occur from the slow reaction to adsorbed urushiol; however, lesions that appear later are often secondary to contact with contaminated surfaces (eg, clothing, pet hair, gardening tools, camping equipment). Although a common misconception, fluid from the “blisters” of a poison ivy rash does not contain urushiol and is not an irritant source for new lesions.

Quick Action Needed

Because urushiol can penetrate the skin within minutes, there's no time to waste if you know you've been exposed. "The earlier you cleanse the skin, the greater the chance that you can remove the urushiol before it gets attached to the skin," says Hon-Sum Ko, M.D., an allergist and immunologist with FDA's Center for Drug Evaluation and Research. Cleansing may not stop the initial outbreak of the rash if more than 10 minutes has elapsed, but it can help prevent further spread.

If you've been exposed to poison ivy, oak or sumac, if possible, stay outdoors until you complete the first two steps:

First, Epstein says, cleanse exposed skin with generous amounts of isopropyl (rubbing) alcohol. (Don't return to the woods or yard the same day. Alcohol removes your skin's protection along with the urushiol and any new contact will cause the urushiol to penetrate twice as fast.)

Second, wash skin with water. (Water temperature does not matter; if you're outside, it's likely only cold water will be available.)

Third, take a regular shower with soap and warm water. Do not use soap before this point because "soap will tend to pick up some of the urushiol from the surface of the skin and move it around," says Epstein.

Clothes, shoes, tools, and anything else that may have been in contact with the urushiol should be wiped off with alcohol and water. Be sure to wear gloves or otherwise cover your hands while doing this and then discard the hand covering.

Dealing with the Rash

If you don't cleanse quickly enough, or your skin is so sensitive that cleansing didn't help, redness and swelling will appear in about 12 to 48 hours. Blisters and itching will follow. For those rare people who react after their very first exposure, the rash appears after seven to 10 days.

Because they don't contain urushiol, the oozing blisters are not contagious nor can the fluid cause further spread on the affected person's body. Nevertheless, Epstein advises against scratching the blisters because fingernails may carry germs that could cause an infection.

The rash will only occur where urushiol has touched the skin; it doesn't spread throughout the body. However, the rash may seem to spread if it appears over time instead of all at once. This is either because the urushiol is absorbed at different rates in different parts of the body or because of repeated exposure to contaminated objects or urushiol trapped under the fingernails.

The rash, blisters and itch normally disappear in 14 to 20 days without any treatment. But few can handle the itch without some relief. For mild cases, wet compresses or soaking in cool water may be effective. Oral antihistamines can also relieve itching.

FDA also considers over-the-counter topical corticosteroids (commonly called hydrocortisones under brand names such as Cortaid and Lanacort) safe and effective for temporary relief of itching associated with poison ivy.

For severe cases, prescription topical corticosteroid drugs can halt the reaction, but only if treatment begins within a few hours of exposure. "After the blisters form, the [topical] steroid isn't going to do much," says Epstein. The American Academy of Dermatology recommends that people who have had severe reactions in the past should contact a dermatologist as soon as possible after a new exposure.

Severe reactions can be treated with prescription oral corticosteroids. Phillip M. Williford, M.D., assistant professor of dermatology, Wake Forest University, prescribes oral corticosteroids if the rash is on the face, genitals, or covers more than 30 percent of the body. The drug must be taken for at least 14 days, and preferably over a three-week period, says FDA's Ko. Shorter courses of treatment, he warns, will cause a rebound with an even more severe rash.

There are a number of over the counter products to help dry up the oozing blisters, including:

- * aluminum acetate (Burrows solution)
- * baking soda
- * Aveeno (oatmeal bath)
- * aluminum hydroxide gel
- * calamine
- * kaolin
- * zinc acetate
- * zinc carbonate
- * zinc oxide

Desensitization, vaccines, and barrier creams have been studied over the last several decades for their potential to protect against poison ivy reactions. Ivy Block® is the only product approved by FDA as a barrier creme. If you plan to be around a lot of poison ivy this product should help slow the penetration of urushiol

Getting Rid of the Plants

Poison ivy, oak and sumac are most dangerous in the spring and summer, when there is plenty of sap, the urushiol content is high, and the plants are easily bruised. However, the danger doesn't disappear over the winter. Dormant plants can still cause reactions, and cases have been reported in people who used the twigs of the plant for firewood or the vines for Christmas wreaths. Even dead plants can cause a reaction, because urushiol remains active for several years after the plant dies.

If poison ivy invades your yard, "there's really no good news for you," says David Yost, a horticulturist (specialist in fruits, vegetables, flowers, and general gardening) with the state of Virginia. The two herbicides most commonly used for poison ivy--Roundup and Ortho Poison Ivy Killer--will kill other plants as well. Spraying Roundup (active ingredient glyphosate) on the foliage of young plants will kill the poison ivy, but if the poison ivy vine is growing up your prize rhododendron or azalea, for example, the Roundup will kill them too, he says.

Ortho Poison Ivy Killer (active ingredient triclopyr), if used sparingly, will kill poison ivy but not trees it grows around, says Joseph Neal, Ph.D., associate professor of weed science, Cornell University. "But don't use it around shrubs, broadleaf ground cover, or herbaceous garden plants," he says. Neal explains it is possible to spray the poison ivy without killing other plants if you pull the poison ivy vines away from

the desirable plants and wipe the ivy foliage with the herbicide, or use a shield on the sprayer to direct the chemical.

Where poison ivy has grown up tree trunks or into hedges, cut the vine at ground level. Remove as much of the stump and roots as you can with a hoe or by pulling. As regrowth occurs, apply an herbicide to the leaves, or keep pulling up the growth. With perseverance, and probably of few itches, poison ivy can be controlled.

If you don't want to use chemicals, "manual removal will get rid of the ivy if you're diligent," says Neal. You must get every bit of the plant--leaves, vines, and roots--or it will sprout again.

The plants should be thrown away according to your municipality's regulations, says Neal. Although urushiol will break down with composting, Neal doesn't recommend that because the plants must be chopped into small pieces first, which just adds to the time you're exposed to the plant and risk of a rash. "It's a health issue," he says. Never burn the plants. The urushiol can spread in the smoke and cause serious lung irritation.

The American Academy of Dermatology recommends that whenever you're going to be around poison ivy--trying to clear it from your yard or hiking in the woods--you wear long pants and long sleeves and, if possible, gloves and boots.

Neal recommends wearing plastic gloves over cotton gloves when pulling the plants. Plastic alone isn't enough because the plastic rips, and cotton alone won't work because after a while the urushiol will soak through.

(This information was freely adapted from the FDA and the Poison Ivy, Oak and Sumac Information Center. Both websites contain large amounts of information on these interesting plants.)

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