OUTDOOR HAZARDS IN WISCONSIN:

A Guide to Noxious Insects, Plants and Wildlife

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Wisconsin’s bountiful natural resources—clear lakes and rivers, forests, rolling hills and interesting land forms—make the state an ideal place for outdoor recreation.

When you hike, camp, hunt, fish or spend time outdoors, it is possible to encounter plants or animals that might cause problems. While poisonous plants, wild animals, and swarms of biting insects do exist in Wisconsin, the risk of meeting them is actually quite low. In most cases, you can avoid these natural hazards altogether, or handle them with little difficulty.

This publication was written to help you recognize, avoid and cope with potential problems caused by wildlife, plants or insects.

WILDLIFE

Wisconsin’s wildlife includes more than 450 species of birds, mammals, reptiles and amphibians. Millions of dollars and hours are spent hunting, observing, studying or photographing these animals. The vast majority of the species are absolutely harmless. Some, however, can inflict physical damage or, at the very least, cause a bit of a fright!

AMPHIBIANS

All amphibians found in Wisconsin—frogs, salamanders and toads—are non-poisonous and harmless. In fact, frogs and salamanders make excellent subjects for children to observe and study. These creatures have no claws and do not bite. If you collect them for study, please return them to the site from which they came. Do not collect endangered or threatened species for any reason!

Most of Wisconsin’s salamanders are small, though some, such as the tiger or spotted (Ambystoma sp.) varieties may grow to 10 or 12 inches in length. You won’t often see a solitary salamander, since these reclusive creatures seldom come into the open. But when environmental conditions are right, you may encounter large numbers of them. For example, a warm spring rain may trigger a mass movement of tiger or spotted salamanders from their woodland home to ponds used as breeding sites. (Water is an essential part of the amphibian life cycle.) When these migrations occur, salamanders may literally fill window wells, cover roadways, or create the general impression of an “invasion.” These animals are harmless and should be removed from natural traps and sent on their way. There is no harm in handling them except for the possibility of transferring their slimy skin secretions into your eyes which will cause annoying, but not dangerous, eye irritation.

The mudpuppy (Necturus) is a large (up to 16 inches) aquatic salamander found in rivers and lakes throughout Wisconsin. Though not dangerous, mudpuppies can bite, and their size, bizarre external gills, and extremely slimy skin may startle an angler who inadvertently hooks one. Mudpuppies should be unhooked and released. They are rarely seen in the wild.

The amphibian that concerns people most often is the toad (Bufo americanus). This is mainly due to the myth that handling toads will cause warts. There is no need for concern—the toad’s bumpy, warty skin is not “contagious” to people or other animals.

The largest bumps on the toad’s upper back are actually glands which secrete a foul-smelling, milky fluid that protects the toad from being eaten. It can irritate eye and nose membranes. The only real risk in holding a toad is having it urinate on your hands, which usually causes you to drop the toad—exactly why it is done.
Wisconsin’s reptiles—snakes, turtles, and lizards—are much better equipped to protect themselves than amphibians. Most species have sharp claws and powerful jaws, and two snake species are venomous. Wisconsin’s lizards, which include racers, skinks, and slender glass lizards, are quite rare and prefer to dwell in secluded spots. You are much more likely to encounter a turtle or snake than a lizard.

Children are attracted to both amphibians and reptiles. These creatures can be examined or photographed, but should be returned to the point of capture. Endangered species, such as the ornate box turtle, should be left alone!

**Turtles**

All of Wisconsin’s turtles have claws and strong jaws. You can protect yourself from a turtle’s claws if you hold the animal securely by the shell. But keep away from the turtle’s head. Its jaws deserve respect.

A turtle may walk slowly on land, but its surprisingly long neck and head can move rapidly. Any turtle of more than baseball-size diameter can deliver a painful bite, particularly to a child’s fingers. Snapping turtles (Chelydra serpentina) reach impressive size in Wisconsin and are frequently seen in spring when females search for nesting sites on land. They are very aggressive out of the water! Stay away from the “head end.” If you must carry a snapping turtle by the tail, hold it well away from your legs.

According to Richard Vogt in *Natural History of Reptiles and Amphibians of Wisconsin*, stories of people losing fingers or toes to snapping turtles are “questionable.” In fact, snapping turtles rarely bite when they are in the water. The fear of losing a finger or toe left dangling in the water is usually unwarranted.

**Snakes**

Only two of Wisconsin’s 23 snake species are poisonous: The massasauga or swamp rattlesnake (*Sistrurus catenatus*) and the timber rattlesnake (*Crotalus horridus*). The larger and more dangerous is the timber rattlesnake. It is large, sometimes reaching 4½ feet or longer. The timber rattler is yellowish with narrow, bold dark bands, black tail, unmarked yellow to yellowish-tan head, and tan rattles. It lives mainly near cliffs, rock outcroppings, and steep rocky hillsides along the Wisconsin and Mississippi Rivers and their tributaries in southwestern Wisconsin, although it may occasionally turn up outside this primary range (see map).

Timber rattlers are aggressive when cornered and are very poisonous. If you are hiking or hunting in the timber rattler’s range and habitat, be extremely cautious about where you place your hands and feet when you climb around rocks or walk near thick brush piles, fallen trees, and wood piles. You should also know, from consulting a first-aid guide, what to do in case you are bitten by a poisonous snake.

The massasauga is a small to medium-sized, heavy-bodied snake that lives in low marshy or swampy areas in west central Wisconsin. It is an endangered species and rarely seen. It has disappeared from 52 of the 62 townships in which it was found before 1980, and now only a few isolated populations are known to exist. These are found at the mouth of the Chippewa River, near Portage and in the Turtle Creek area in Walworth County. The massasauga has lethal venom, and humans have died from its bite, though no record of such deaths exists in
Wisconsin. Because the snake is so small, its bite is seldom fatal, although it can be serious if left untreated.

There are several ways to distinguish poisonous from non-poisonous snakes. In the field, the two rattlesnakes can be identified by their obvious rattles and color patterns. In Wisconsin, any solid-colored or horizontally striped snake is non-poisonous. You can examine the characteristics of a dead snake in more detail (but don’t kill a snake for this purpose). Be careful when approaching and examining an apparently dead snake. It may only appear dead. A freshly “killed” snake can turn its head and bite by reflex action.

Both of Wisconsin’s rattlesnakes belong to the pit viper family, so named because of a pit or depression in front of each eye (see diagram). The pits are heat-sensing organs that aid in locating and seeking warm-blooded prey. Non-poisonous snakes have no pits.

Poisonous snakes have elliptical, vertical eye pupils, while non-poisonous varieties have round pupils. Also, the scales on the underside of the tails of poisonous and non-poisonous snakes differ.

Throughout most of Wisconsin, the likelihood of encountering a poisonous snake is slim. Several non-poisonous Wisconsin snakes, including the bullsnake, blue racer, black (rat) snake, and fox snake, can reach lengths of up to four or more feet. All have numerous sharp teeth and can deliver a painful bite. Black snakes (Elaphe obsoleta) and Northern water snakes (Nerodia sipedon) have nasty dispositions and will strike with little provocation. Hognose snakes (Heterodon platyrhinos) will rarely bite even if violently provoked. Several of the smaller species, such as garter snakes, can be handled safely with only the risk of provoking a foul-smelling excretion.

University of Wisconsin-Extension publication Snakes of Wisconsin (G3139), the previously-mentioned book by Vogt, and good field guides can help with snake identification.

**BIRDS**

Birds should be a source of interest and wonder for the outdoors enthusiast—not a safety concern. Although some larger species have sharp talons or impressive bills, they use them only to obtain food or defend themselves. Birds can be dangerous in two situations: When they are defending their nests or territories; and when they have been injured or incapacitated.

**Defending territory**

Many birds, from swallows and blackbirds to hawks, owls, and swans, become very aggressive and defensive during the nesting season. Swallows frequently dive at people who approach their nests, and some may even strike an intruder’s head. Such behavior is annoying but hardly a safety problem. Larger birds can inflict some damage. Large waterfowl (geese and swans) and most raptors (hawks, owls and eagles) have powerful wings, strong (and often sharp) bills, and dangerous talons. Never approach the nests of these species. It is illegal, potentially destructive to the eggs or young, and dangerous for you. Many experienced researchers have been injured by the blows or talons of such birds while working at nest sites.
Handling birds

People frequently attempt to aid injured birds. While their concern is admirable, birds must be handled properly to avoid further injury to the bird and to the person helping. Calm a large bird by covering it with a box or blanket. Restrained its wings and feet if you plan to move the bird by hand. The bill of a hawk or owl may look threatening, but it is the needle-sharp talons that must be controlled. If the bird is in no immediate danger or can be coaxed or put into a large box, leave the handling to an experienced rehabilitator or biologist.

MAMMALS

Fears of “wild animals” are usually directed at mammals. Most mammals have the teeth, claws, or size to injure or even kill people, but they rarely do. By nature, wild mammals avoid human contact and outright attacks are almost unknown. When attacks do occur, they almost always involve cornered, sick or injured animals, or mothers defending their young.

Only one Wisconsin mammal is poisonous. The short-tailed shrew (*Blarina brevicula*) found throughout Wisconsin, is a small, dark gray animal about 4 to 6 inches long with a very short tail. Its fur is very short and sleek, and it has small eyes and a pointed snout. Short-tailed shrews are often confused with meadow mice (*Microtus sp*). All shrews are carnivorous, and the short-tailed shrew uses its poisonous saliva to help subdue prey such as mice which may be as large as itself. The bite of a short-tailed shrew may cause painful swelling, but is not life threatening.

A few facts and common-sense rules should guide your actions when dealing with wild mammals:

- Unusual behavior—tameness, erratic movement, activity during unusual hours of the day, etc.—indicates a sick or injured mammal that should be avoided. Several diseases common in wild mammals are transmissible to humans and potentially dangerous. Contact a licensed rehabilitator, biologist or humane agency if you believe an animal needs help.
- Do not encourage or allow children to collect, pet, or make pets of young or mature wild animals.
- Do not corner, grab, or threaten any wild animal—even one as small as a mouse. Most will fight tenaciously to defend themselves. Injured or sick animals are especially unpredictable.
- Most common fears of bats are not based on facts. All bats are not rabid; bats do not bite to consume blood (vampire bats do not dwell anywhere near Wisconsin); bats will not intentionally entangle themselves in long hair. Bats are interesting, beneficial creatures. If you have problems with unwanted bat colonies, consult the Extension publication *Bats: Information for Wisconsin Homeowners* (G3096).
- Timber wolves are a very rare, endangered species in Wisconsin. Their ultimate survival depends on human understanding and tolerance. They do not threaten human safety.
- Black bears are common in many parts of the northern half of Wisconsin. They are capable of killing or injuring people, but they rarely do. The black bear is an important part of a northwoods “experience,” whether you actually see one or simply because you know one may be nearby. Problems *can* occur when bears scavenge for food around dumps, campgrounds, or farms. If you are interested in bears, request an excellent booklet entitled *How to Live with Black Bears* from the USDA-North Central Forest Experiment Station, 1992 Folwell Avenue, St. Paul MN 55108. If you respect a bear’s strength and behavior and act accordingly, the result will be a peaceful coexistence.
Deer are very abundant throughout Wisconsin. Deer-vehicle collisions result in human death and injury, millions of dollars in property loss, death and injury to the deer (35,000 or more annually in Wisconsin), and mental anguish for the driver. There is no foolproof way to eliminate deer-vehicle collisions. Fencing, reducing the deer population, intercept feeding, and mechanical gadgets all have serious limitations. The best advice is to recognize the risk and drive defensively. Know the seasons of the year (fall and spring) when the risk of encountering deer is highest, the times of greatest deer activity (early morning and late evening), and areas of greatest risk (often marked by deer-crossing signs). Slowing down and being alert for deer will do more to reduce collisions than anything else.

INSECTS AND OTHER INVERTEBRATES

There are more than 10,000 different insects, spiders, and related creatures that you could meet during a summer walk in Wisconsin. Over 95 percent of these are completely harmless; less than 1 percent of the rest go out of their way to torment people. Insects and other invertebrates attack people for two reasons: to obtain food or to defend themselves. Blackflies, ticks, mosquitoes, chiggers, deer flies and horse flies require animal or human blood as food. Females use the protein from blood to make eggs. Any other bite or sting is a defensive or protective reaction by the insect.

STINGING INSECTS

Many insects feed on each other or similar small creatures. Such predators have powerful enzymes and proteins in their saliva that paralyze, kill, or digest their prey. If one of these predacious creatures is mishandled, it can inflict a painful bite that may take time to heal. Although the bite may be mistaken for a sting, there is no stinger left behind. The only treatment required is to put ice on the site if swelling develops.

Some types of hairy or spiny caterpillars are covered with “urticating,” or stinging hairs. These hairs contain a poison cell gland, and if rubbed, the hair will break, releasing enzymes that cause blisters, burns, or rashes. The sensations feel similar to those caused by a stinging nettle plant. If you are unfamiliar with an insect, it is best to observe, rather than pick it up. Most other insects, such as adult butterflies, moths, and dragonflies, are not capable of biting people.

Bees, hornets, wasps, and some ants have a special defensive weapon—the stinger. By nature, these insects are not aggressive, but can become so if their nests are disturbed or if they are trapped or confined.

The honeybee stinger is barbed much like a fish hook. The honeybee flies away after stinging, but leaves its stinger and poison sac behind, killing the bee. The muscular poison sac will continue to pump venom, so remove the stinger promptly by scraping with your fingernail or knife. Do not try to pick the stinger off with your fingers because this squeezes the poison sac, injecting more enzymes and poisons into your skin.

All other stinging bees and wasps have unbarbed stingers, and can sting repeatedly if given the opportunity. The amount of venom injected will affect the severity of the
reaction. Most species of bees, wasps, and hornets will sting if they feel threatened, but will allow you to calmly brush them away if you move slowly.

A recent import, the German yellowjacket, is responsible for a marked increase in stings and related problems from early August through September. This black and yellow insect, slightly smaller than the honeybee, made its debut in Wisconsin in the late 1970s. German yellowjackets build nests of paper in rodent burrows or other cavities. In spring and early summer, when colonies are small, yellowjackets survive by feeding on other insects. In late summer, when the colonies have increased in size, yellowjackets are forced to seek extra nourishment in the form of sugar or protein. Thus, they compete with anyone trying to eat a sandwich, pick a ripe raspberry, or drink a can of soda outdoors.

Take care when eating or drinking outdoors during the late summer. Keep food covered as much as possible, and dispose of food scraps after meals. Trash should be disposed of in garbage bins with tight fitting lids, or sealed in airtight bags to prevent yellowjackets from foraging in the area.

Some simple measures can help you avoid stings from bees and wasps:

- Don’t wear perfumes, hair sprays, suntan lotions, or cosmetics that may attract unwanted attention.
- Don’t walk barefoot outside.
- Avoid outdoor cooking and eating during the yellowjacket season.
- If a bee or wasp lands on you, stay calm and gently brush it away. Sudden movements increase your chances of getting stung.

If you are stung, you will first feel intense burning at the site of the sting, followed after several minutes by swelling and severe itching. Swelling may be localized or involve an entire limb. Ice or cold compresses applied to the site will decrease swelling and slow the movement of toxins. Other treatments, such as household meat tenderizer or commercial preparations, will help reduce pain and neutralize the proteins and amino acids in the venom.

Far more serious are the allergic or systemic reactions experienced by about one percent of the population. Symptoms such as throat or chest constriction, dizziness, labored breathing, fever, confusion, wheezing, or unconsciousness indicate serious reactions that require medical intervention.

Anaphylactic, or hypersensitive, reactions can be fatal. Such reactions often appear within the first hour after the sting or they may be delayed for several hours.

People who are sensitive to stings should carry emergency medical kits at all times during the spring and summer. A person who is sensitive to one type of bee sting may not necessarily be sensitive to the stings of all wasps or bees. There are methods of desensitizing people to various stings. Consult a physician for more information.

BLOOD-FEEDING INSECTS

More than 50 mosquito species live in Wisconsin. All females of the species require a blood meal to breed. The most notorious mosquitoes come from the genus *Aedes*—the floodwater mosquitoes. If a pond or riverbank dries up, their eggs can remain dormant for months or years until they again come into contact with water. It takes about two weeks after water is available for the adults to appear, and up to 100 mosquitoes can emerge per square foot of water surface per day in good breeding habitat. More than 60 percent of these adults will migrate approximately 10 to 20 miles from their breeding site in search of a blood meal. Female mosquitoes will live for three to six weeks and can take multiple blood meals during this time.
Mosquitoes are most active under low light conditions, yet some are “day biters.” Winds above 10 miles per hour force mosquitoes to land and rest; when the winds die down, mosquitoes again become active. Avoid brushy, shaded sites, which have the low light and poor air movement that attracts mosquitoes. Temperatures below 50°F prevent mosquitoes from flying, but it usually takes three or four killing frosts to end the mosquito season.

Mosquitoes use carbon dioxide, lactic acid, and heat to find their hosts. The more active you are, the more of these attractants you give off. Individuals differ in both their attractiveness to mosquitoes and the way they react to a bite. Dark colors and some fragrances also attract certain mosquitoes.

Even if you sit on a sunny, windy hillside and wear light-colored clothing, you can still be bitten by a mosquito. Other than covering up, the only practical way to deal with mosquitoes is to use a repellent spray, cream, or lotion. The active ingredient in such repellents is usually DEET (N, N-diethyl-meta toluamide), which does not kill mosquitoes, but prevents them from finding you. Read the label. Not all repellents are to be used on skin, and concentrated repellents should not be used on small children. Some repellents will dissolve or stain watch crystals, glasses and painted or varnished surfaces on fishing rods, cars, etc. Most repellents last one to five hours, depending on the amount of sweating or rubbing that occurs. Even coverage is important. Mosquito netting (23-26 meshes per inch) may come in handy for overnight trips.

The wound of a mosquito bite is minor. The intense itching and swelling is an allergic response to the mosquito’s salivary secretions. Various treatments such as rubbing alcohol or mild ammonia will help relieve itching.

Although mosquitoes transmit many serious diseases throughout the world, the only mosquito-borne disease seen regularly in Wisconsin is LaCrosse encephalitis, which can cause complications in children under 12 years old.

**BITING FLIES**

Deer and horse flies are large, robust, somewhat hairy biting flies up to 1½ inches long. Many species have bright green or purple eyes; deer flies have dark bands on their wings. They feed during the day and are most abundant in low, moist, wooded areas from late May until September. They breed in the mud of ponds, swamps, and ditches. Adult female flies are very strong fliers and their bite is painful because they make a deep wound as they continually stab the skin with knife-like mouth parts. Cover up with a light, long-sleeved shirt and wear a hat or cap to reduce exposed skin. Applying tick or mosquito repellents to exposed skin will provide added protection. Biting flies are most active on warm, sunny days.

**BLACKFLIES**

Blackflies are small, weak flying, gray or black humpbacked gnats, about the size of fruit flies. These day-biting flies breed in moving water in rivers, streams and creeks. “Buffalo gnats” bite painlessly on any exposed part of the body, but often prefer the forehead, hairline, or wherever clothing fits snugly, such as at collars, cuffs, and the top of socks. They are persistent and may crawl into your ears, nostrils or hair. The bite appears as a small, red, central spot surrounded by a reddened, swollen area. Because blackflies use enzymes that prevent blood from clotting, a small trickle of dried blood may remain at the wound. The bite site often remains irritated for several days, and some people develop swollen glands around the ears and neck.
Wearing a hat will put a stop to scalp bites. Repellents prevent biting, but will not stop blackflies from flying around your head. Canoeists and people fishing in prime blackfly habitat may have to tape their cuffs shut and use head nets to remain comfortable.

The numbers of most blackfly species peak over a two to three week season each year. Staying in areas where air movement is good and away from streambanks will reduce attacks.

There is a group of tiny biting midges known locally as punkies, sandflies, and “no-see-ums.” The burning and irritation they cause is far greater than their size would suggest. Their weak flying ability usually limits and localizes problem areas. Repellents will help protect you from their bites, as will mosquito netting for tents and sleeping bags.

**TICKS**

What is a May walk in the woods without ticks? Ticks are eight-legged, blood-feeding relatives of mites. Their thick, leathery skin and slow movements allow them to “lie in wait” for months on the underside of leaves or on twigs. Tick habitat includes long grass or brushy areas near game trails, hiking paths, and sites with high small rodent populations. Feeding is much more complicated than a quick bite.

Ticks attach painlessly by means of a barbed hypostome (see figure) and will remain attached for days if left undisturbed.

Only 2 of the 15 or so tick species in Wisconsin normally bite humans. What most people call the “wood tick” is the American dog tick, *Dermacentor variabilis*. Tick activity starts in early May and slows down in early July. Immature ticks feed primarily on rodents, and a normal life cycle takes two years.

Both male and female ticks grab on to pants or socks and start searching for a place to feed. Often the first skin they encounter is in the neck area, giving people the impression that they have dropped from above. American dog ticks are reddish brown and range up to one-quarter inch in length. American dog ticks transmit Rocky Mountain Spotted Fever in other parts of the country, but this disease rarely appears in Wisconsin.

The deer tick, *Ixodes dammini*, is smaller than the American dog tick and lacks gray or white markings on its back. Adults and immature ticks feed on humans and pets. The tick season extends from early April through November with this species. Deer ticks are the only known carrier of Lyme disease in Wisconsin.

It is important to remember that it takes the tick a number of hours of feeding (18 or more) to transmit the disease. This means prompt removal will prevent you from contracting Lyme disease. If flu-like symptoms or a spreading rash appear around a tick bite site within two weeks, contact your family physician. Prompt treatment with antibiotics has been very successful in treating Lyme disease.

Deer ticks seem to be most common in wooded areas with a lush understory of brambles and other shrubby material.

To remove an attached tick, grasp it with tweezers as close to the head as possible and pull gently and steadily. Care should be taken not to break the mouth parts. If left behind, they can cause infection. The use of home remedies such as petroleum jelly, lighter fluid, hot
matches, and nail polish remover do not help removal and could cause other complications.

Preventing tick problems starts with wearing long-sleeved shirts and pants. Tuck pant legs inside socks or boots to cut down on exposed skin. Repellents containing DEET or insecticide/repellent sprays containing permethrin can be sprayed on socks, pants, and shoes. Routine total-body tick checks should become a daily ritual. Prompt removal of deer ticks goes a long way toward preventing Lyme disease.

CHIGGERS

Chiggers are tiny, red, parasitic mites that are scarcely visible. They exist on deer, mice and birds. In humans, “chigger bites” cause intense itching and small, reddish welts on the skin. They most often appear where clothing fits tightly against the body, such as the ankle, waist, behind the knee, or upper arm. Welts last for three to ten days, and often become infected after being scratched. Humans are not a suitable host, and the mite has often left or died before a skin reaction is evident.

Chiggers are most numerous in brushy sites or long grass that has high rodent populations. If you have been exposed to chiggers, take a hot soapy bath or shower as soon as possible. A vigorous rubdown with a towel will remove and kill unattached larvae. Wash all clothing before wearing it again. Various antiseptics or local anesthetic products can be found at drug stores for temporary relief of the itching. To prevent chigger bites, use mosquito repellents, especially along cuffs, waistbands, collars, and ankles. Avoid sitting or reclining on the ground in infested sites.

PLANTS

Most weeds are simply unwanted plants. The majority of them compete with crop and landscape plants, or are visually unattractive in places where aesthetics are important. However, some Wisconsin weeds go beyond simply being bothersome. Some are poisonous when eaten; others cause skin irritations or blisters. Several weeds cause problems because they are thorny or because their fruit sticks to clothing or hair. A few weeds produce pollen which causes hay fever.

Weeds spread as seeds, tubers, bulbs, rhizomes (rootlike, underground stems), and stolons (stems which take root at plant nodes to form new plants). These are moved about mostly in organic mulches, manure, and soil. Many weed pests have very effective means of dispersing their seeds over extensive areas. Most thistle seeds have a pappus, or parachute, that the wind can carry for long distances. Bull thistles grow in lawns from seed produced miles away. Burdocks, sand-burs and stick tights have hooks on their fruit and are moved about as they cling to fur, hair and clothing. Water also transports seed.

But once seed or other vegetative plant parts take root, they are non-mobile. Poison ivy does not come to you; you invade its domain.

Almost all weed pest problems can be avoided simply by staying away from pest plants, except in the case of pollen. Ragweed pollen is carried many miles by the wind. On the other hand, you will be exposed to less pollen if you stay out of ragweed patches when the weed is flowering in August and September.

To avoid contact with poisonous plants, you must first be able to recognize them. Many excellent publications are available to help you identify and control plants. They are usually found in bookstores or libraries in the gardening or nature sections.
PLANTS THAT POISON ON CONTACT

Poison ivy (Rhus radicans)

Poison ivy, a member of the cashew family, grows as either a low woody shrub or climbing vine. It is also called poison creeper or three-leafed ivy. All plant parts, roots, stems, leaves, flowers, and fruits are poisonous to about half the population. Poison ivy causes dermatitis in the form of skin irritation and blisters, followed by scabs or crusts. Symptoms usually occur within 24 hours of exposure.

The plant is toxic all year, which means that its dry, fallen leaves are just as poisonous as the green, growing plant. Be especially careful when burning poison ivy. Inhaling the smoke can cause a serious reaction.

Poison ivy is often found in damp forests, especially along rivers. The vines climb trees and fences. The shrub variety grows out in the open. Poison ivy is found in woods, pastures, roadbanks, fence rows, parks, beaches and campgrounds.

The leaves of poison ivy are divided into three leaflets. The lateral two leaflets are fastened directly to the leaf stem, or petiole. The terminal leaflet is borne on a short leaf stalk. Heed the old adage, “Leaflets three, let it be.” The three leaves may vary in size and shape. The edges might have a smooth margin, be toothed or lobed. Leaves may be smooth or slightly hairy, glossy or dull in appearance. Leaves turn yellow, orange or red before they drop off in the fall.

The flowers are greenish-yellow and occur in clusters along the stem, frequently hidden by leaves. The fruit is a yellowish-white, round berry about one-quarter inch in diameter. The berry has stripes on it resembling a peeled orange. Birds, not sensitive to the plant, eat the berries and spread the seeds. For humans, eating a leaf, or any part of the plant, does not confer immunity. Don’t forget that all parts of the poison ivy plant are toxic throughout the year.

Poison sumac (Toxicodendron bernix)

Poison sumac is also called poison dogwood, poison elder, poison ash and swamp sumac.

The plant grows as a shrub or small tree, but never as a vine. It ranges in height from 5 to 25 feet. Poison sumac grows in wet areas, such as flood- plains, swamps and bogs. It differs from staghorn sumac, the common sumac often seen on highway banks. Staghorn sumac has bright red berries while poison sumac produces greenish-white berries similar to those of poison ivy. Birds eat and distribute the seeds. The plant’s leaves turn orange-red in the fall.

Contact with poison sumac causes water blisters.

Wild parsnip (Pastinaca sativa)

A member of the parsnip family, wild parsnip is a biennial plant that reproduces by seed. It is also known as birds-nest, Harts-eye and madnip.

In the first year of its two-year life cycle, the plant produces a rosette of large leaves that somewhat resemble celery and a large, fleshy tap root.

In year two, wild parsnip produces a stem 3 to 5 feet tall, flowers, generates seed and dies. Leaves have saw-toothed margins and alternate along the elongated stem. Flowers are arranged in rounded clusters. Individual flowers have five small, yellow petals.
Wild parsnip is found on rich, fertile land. It is very common in roadside ditches and waste lands.

The sap of wild parsnip can cause severe skin blisters in certain people. The blisters resemble the irritation caused by poison ivy. Handling or coming in contact with wet wild parsnip leaves produces severe skin irritation.

**Stinging nettle** (*Urtica dioica*)

Stinging nettle is also referred to as tall nettle or slender nettle, and belongs to the nettle family. It is a perennial plant that reproduces by seed and underground rootstocks.

The plant grows 2 to 7 feet tall, and is slightly branched near the top of the stem. Its stems are stiff, rigid and covered with stinging hairs that cause welts, inflammation and a burning sensation when they come in contact with skin.

Leaves alternate on the stem and are very dark green. They are typically 3 to 6 inches long with saw-toothed margins and are covered with stinging hairs. Flowers lack petals and grow in clusters in the leaf axils.

Stinging nettle grows in full sun in damp fertile soil and is frequently found along canals in muck soils, around barnyards and in fence rows throughout Wisconsin.

**PLANTS THAT ARE POISONOUS WHEN INGESTED**

**Poison hemlock**

(*Conium maculatum*)

Socrates was put to death by drinking poison hemlock—a “cup of death.” All parts of this plant (a member of the parsley family) contain the toxic alkaloid coniine. Socrates’ drink was made from unripe hemlock seeds.

Poison hemlock has several common names, including deadly-hemlock, snake-weed, poison-parsley and poison stinkweed.

Like other biennial plants, it produces a rosette of leaves and a fleshy, parsnip-like root the first year. In its second year, poison hemlock grows 7 to 10 feet tall, flowers, produces seed and dies.

There may be 4 to 5 leaves on a stem, with finely divided, toothed margins. The leaves are arranged in an alternate pattern along the stem.

Poison hemlock stems are covered with purplish blotches and are hollow between nodes. Stems produce many branches.

Flowers are white and look similar to wild carrot. An individual flower may be no wider than one-tenth of an inch. Seeds are found in pairs, are pale brown, ribbed and highly poisonous.

Poison hemlock grows in moist sites such as along streams and in wet ditches.

All parts of this plant, which grows throughout Wisconsin, are poisonous when eaten.
**Spotted water hemlock** *(Cicuta maculata)*

Spotted water hemlock belongs to the parsley family. It is also referred to as spotted-hemlock, musquash root, beaver-poison, spotted cowbane, muskrat weed and childrens-bane.

Spotted water hemlock is a perennial plant that reproduces by seed and by tuberous roots. Stems are 3 to 5 feet tall and are streaked with purplish spots. Branching occurs only toward the top of the plant. Leaflets are linear with saw-toothed margins. Individual flowers are small, white and arranged in clusters.

Spotted water hemlock grows in swamps and lowlands, often very close to or in shallow water.

All parts of the plant are poisonous when eaten, especially the roots. Both roots and seeds have a distinctive parsnip-like odor.

**Bitter nightshade** *(Solanum dulcamara)*

Bitter nightshade is also known as European bittersweet, blue nightshade, woody nightshade, poison berry, climbing nightshade and scarlet berry.

A member of the nightshade family, the leaves and berries of bitter nightshade contain toxic alkaloids which make them mildly poisonous if eaten.

Bitter nightshade is a slender woody vine that climbs trees and fences. The plant has simple leaves with one or two lobes. Flowers are purple and the fruit is a soft, round berry which is green when immature and bright red when mature. The berries contain solanine, a toxic alkaloid, and are toxic when ingested.

Bitter nightshade grows in moist soils and on trees in woods and orchards. It also climbs on shrubs, fences and buildings.

**Black nightshade** *(Solanum ptycanthum)*

Deadly nightshade, poison berry and garden nightshade are other common names for this member of the nightshade family.

Black nightshade is an annual plant that grows in gardens, fields and waste areas. It comes up from seed in spring or early summer and dies in fall after the killing frosts. Black nightshade has simple alternate leaves. Its flowers are white and its berries are green when immature and black when mature. The fruits contain a toxic alkaloid, solanine, which makes them mildly toxic when ingested.

**Jimson weed** *(Datura stramonium)*

Another member of the nightshade family, Jimson weed is an annual plant that reproduces by seed. Other names for it include Jamestown-weed, thorn-apple, mad-apple, and stinkwort. The plant grows to a height of 2 to 4 feet. The stem branches toward the top. Leaves are large, coarse and alternate along the stem and branches and have a distinctive unpleasant odor.

Flowers are large (2 to 5 inches long), tinted white to pink, and funnel-shaped. Jimson weed flowers open in the evening between 7 - 8 p.m.

The plant’s seed pod is about one inch in diameter, egg-shaped and covered with short, very stiff spines. It contains many seeds.

Both foliage and seeds are poisonous. Jimson weed contains an alkaloid which is a stomach poison. Certain people develop a rash from touching the leaves.

Jimson weed grows in rich soils, feedlots, hog yards, barnyards, and sunny sites. It is common in the southern third of Wisconsin.
PLANTS THAT CAUSE HAY FEVER

Common ragweed
(*Ambrosia artemisiifolia*)

A member of the composite family, the pollen of common ragweed is a major cause of hay fever. Common ragweed is an annual plant which ranges in height from 1 to 3 feet. It is also called wild tansy, hog-weed, bitterweed, mayweed, hay fever weed and blackweed.

Common ragweed grows straight and has many branches. The stems are rough and covered with hairs. Leaves are deeply cut or lobed and look somewhat like carrot leaves. The plant has separate male and female flowers, all of which lack petals. The seed is enclosed in a crown-shaped woody hull.

Common ragweed grows in pastures, grain fields and along roads. It produces pollen profusely. Pollen is shed from early August until the first killing frost. Common ragweed sheds its pollen about the same time that goldenrod begins to flower. Goldenrod is often blamed for causing summer hay fever while ragweed is an actual culprit.

Giant ragweed
(*Ambrosia trifida*)

Giant ragweed, also a member of the composite family, is an annual plant that reproduces only by seed. It is a weed of floodplains and fertile farmland. It frequently grows along the edge of corn fields. Giant ragweed ranges in height from 3 to 16 feet.

The leaves tend to be large and slightly hairy with 3 to 5 lobes. Ragweed flowers have no petals. Pollen is produced from August until frost kills the plants.

Giant ragweed pollen is a major cause of summer hay fever. It is also called great ragweed, kinghead, crown-weed, horse-weed, bitterweed and tall ambrosia. Giant ragweed seeds are a food source for wildlife.

THorny, barbEd plants

Bull thistle (*Cirsium vulgare*)

Bull thistle, also called spear thistle, is a biennial plant which reproduces from seed. Bull thistles grow as solitary plants unlike Canada thistle, which forms dense patches of plants. In the first year of its two-year life cycle, bull thistle seed germinates and produces a rosette of spiny leaves and a fleshy tap root. In the second year, the plant sprouts a 2- to 4-foot branched stem, flowers, produces seed and dies.

Reddish-purple to rose-colored flowers are produced in compact heads at the tips of the branches. Spiny bracts surround the flowers. Bull thistle seeds are attached to a pappus, or parachute, which allows the wind to disperse seeds.

Bull thistles grow in undisturbed soil such as pastures, lawns, roadbanks, and railroad embankments. They prefer rich, moist soils. Bull thistle seeds are blown in by the wind, and the weed is very common in lawns. Bull thistles are found throughout Wisconsin.

Beggar ticks (*Bidens frondosa*)

A member of the composite family, beggar ticks are also called stick-tights, devil’s bootjack, bur-marigold and pitchfork-weed. Beggar ticks are annual plants that reproduce by seed and grow to a height of 2 to 5 feet. Branching occurs only near the top of the plant.

Beggar tick leaves grow opposite each other and are deeply divided in a featherlike formation. Flower heads are about one inch in diameter. The outside, or ray flowers, are bright yellow while the inside, or disk flowers are brownish yellow.

Seeds are flat, brown and equipped with two barbed fish-hook type spines that attach themselves to clothing, hair and fur.

Beggar ticks grow in rich, moist soil such as wet meadows and along streams. They grow throughout Wisconsin, especially in muck soils.
Beggar ticks are a particular nuisance to hunters and hunting dogs.

**Burdoc** (*Arctium minus*)

Burdocks are biennial plants that reproduce by seed in waste areas, around buildings and other undisturbed sites. They prefer rich, fertile soil. A member of the composite family, the burdock is also called clotbur, cuckoo-button and cockle-button.

In the first year of its life cycle, the plant produces a fleshy tap root and a rosette of large leaves that look somewhat like rhubarb.

The next year the plant grows a 3- to 6-foot hairy, grooved stem, produces flowers and seed, and dies. Leaves are large and heart-shaped and arranged alternately on the stem.

Flowers are small, red-violet in color and surrounded by hooked bracts in the form of a bur. Burs are about one-half inch in diameter. The burs hook into clothing, hair and fur. Slugs and other garden pests are often found beneath burdocks.

**Cocklebur** (*Xanthium strumarium*)

Cocklebur, also known as spiny clotbur, clotweed, Spanish thistle and dagger cocklebur, is an annual plant that reproduces by seed. It has a large, woody tap root and a stem that reaches 2 to 4 feet in height. Stems are rough, hairy and covered with reddish spots.

Leaves are simple and triangular with long petioles. They are arranged alternately along the stem.

Flowers are enclosed in a spiny bur covered with hooked spines and two prominent curved spines or beaks.

The hard, prickly bur attaches to clothing, hair and fur. Cocklebur seedlings are poisonous to cattle.

Cocklebur grows in fields, abandoned lands, pastures and roadsides and can be found throughout Wisconsin.

**Sandburs** (*Cenchrus longispinus*)

Sandburs are just plain nasty plants. A member of the grass family, their other common names include bur-grass, sandbur-grass, bear-grass and hedgehog-grass.

Sandburs are annual warm season grasses that produce seeds in spiny burs that stick to fur and clothing and injure the mouths of animals which have the misfortune to graze on them.

Sandburs germinate after the danger of spring frosts passes. The plants grow from 6 inches to 2 feet tall. Sandburs have no flower petals. The spines on the burs have curved barbs which work into the flesh and can result in infection. The weak stems of the grass lie on the soil and form large mats.

Sandburs are associated with sandy soils and drought conditions. They are found in pastures, fields, orchards, and crop land.

Now that you know about some of the potential problems caused by native wildlife, insects and plants, you can take precautions to protect yourself or simply avoid these outdoor hazards. Most often, you can hike, hunt, picnic or enjoy other activities with little concern about dangerous plants and animals. Some common sense and a healthy respect for Wisconsin’s plants and wild creatures will go a long way toward maximizing your enjoyment of the outdoors.
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Design: Susan Anderson
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Produced by Cooperative Extension Publications.

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G3564 OUTDOOR HAZARDS IN WISCONSIN: A Guide to Noxious Insects, Plants and Wildlife