

Ricky's Gardening Tips and Tricks and Home Horticulture

May 2021 Issue

Written and compiled by Ricky D. Kemery, Allen County Extension Educator Retired, phone: 260-431-6893

Ricky's Gardening Tips and Tricks and Home Horticulture is an online newsletter designed to provide citizens of Allen County and northeastern Indiana with up-to-date information about Horticulture and home issues, written in a lighthearted style! To subscribe, send an email to kemeryr7@frontier.com.

Trying to Control Poison Ivy

Controlling Poison Ivy is difficult because of its extensive root system, its ability to conceal itself, and the fact that birds are constantly distributing the berries along fencerows, forest edges, and under trees and shrubs.



I have observed many interesting and many times incorrect and unrealistic ways to try and control this weed on social media.

The problem with poison ivy is that its active ingredient, urushiol, is extremely potent at very minute quantities.

Urushiol is a colorless or slightly yellow oil found in the leaves, stems, and roots. The oil can remain active for months on objects. Specimens of urushiol several centuries old have been found to cause dermatitis in sensitive people. The normal time frame for urushiol oil to stay active on any surface, including dead plants, is one to five years.

One quarter of an ounce of urushiol is all that is needed to cause a rash on every person on earth. Enough urushiol to cover the head of a pin can cause 500 people to itch.

Urushiol oil on clothing and gear can transfer to skin again and again. Boots, clothing, sleeping bag, tent, backpack — they can all be carriers. Washing, often several times, is necessary to remove the oil.

Urushiol becomes airborne when droplets are suspended on particles of smoke. Burning poison ivy plants can send microscopic droplets of urushiol into the air and into human airways and eyes. Lawnmowers and trimmers also can cause the oil to become airborne.

While animals don't react to poison ivy, they can spread the oil to humans. Many people are exposed by their pets.

The rash, blisters and swelling are a complex immune response, the body's way of fighting off the oil invasion. Rash blisters are not contagious and don't contain urushiol. Scratching may seem to spread the rash, when in fact the new area simply took longer to respond to the exposure.

Some people can appear to be immune, but it is usually only a matter of time to become allergic. The amount of exposure, and a person's tolerance and immune response also plays a factor.

There are specially prepared cleansing agents (such as Tecnu Skin Cleanser, Tecnu Extreme Medicated Poison Ivy Scrub, and Zanfel) that remove much of the rash-causing oil if applied to the skin within 4 to 8 hours of contact. Manganese sulfate solution has been shown to be effective both to inactivate urushiol on the skin, to relieve itching, and probably acts as a chelating agent for detoxification of urushiol. Dr. West's Poison Ivy, Oak, Sumac Cleanser is the most common manganese sulfate solution available for treatment of poison ivy rashes. Ivy Shield, Ivy Block Lotion, and Ivy X Poison Oak Lotion are protective agents for sensitive individuals to reduce the risk of a rash when spending time in areas with these plants.

Don't confuse poison ivy with Virginia creeper (*Parthenocissus quinquefolia*), which also grows as both a groundcover and climbs trees as a vine. However, Virginia creeper plants have compound leaves with five leaflets rather than three.

Some experts recommend trying to dig up or repeatably cut back poison ivy in an attempt to control it. I have not seen anyone be successful using these methods. They have been successful in getting poison ivy.

Applying rock salt to poison ivy may work, but unfortunately repeated or large quantities of salt will sterilize your soil so nothing will grow – for quite a long time. The same goes with applying a soil sterilant like pramitol or large quantities of borax to try and kill poison ivy.



Burning down foliage with boiling water or Epsom salt vinegar solutions will appear to work, but soon the plant will regrow. Sigh.....

You could do nothing and allow poison ivy to take over your garden and landscape. After all, the plant is native. Birds especially use the berries for food. Instead of being called "Cat Lady" or "Cat Man" by your neighbors because you have 16 cats in your

home, you could be referred to as the “Poison Ivy” Queen (or King) – Or Queen (or King) Rash – since you would be constantly covered by one. Another sigh....

This is a case where, unfortunately, the use of conventional herbicides is necessary. I prefer to use a spot treatment which is much more environmentally friendly than spraying rampantly. I attach an old paintbrush to a long piece of wood (2 by 2's are best), or a broken broom or hoe handle. I use the handy person's favorite tool – duct tape - to attach the brush. I put either concentrated glyphosate – (also referred to as Round-up), or herbicide containing triclopyr (Chickweed Clover Control) or 3-way herbicide that contains 2,4-D amine, dicamba, and mecoprop. I prefer to use formulations of Round-up that contain no surfactants or adjuvants as they have less issues than those that do. I sometimes add a smidgen of Dawn dishwashing detergent that helps the product stick and work more effectively, without all the potential cancer-causing effects.

I use only the concentrate (straight from the container) poured into a soup or coffee can. A larger container works better to avoid tipping over the can. I then dip the brush with concentrate and brush the leaves and / or



stems of the poison ivy with the concentrate. Make sure to wear gloves and long sleeves and pants while doing this. This works well as applying the herbicide only to the poison ivy in a fence row, under a tree or shrub, or in a flower or groundcover bed. This will not damage any other plants nearby – as long as you don't get any herbicide on non-target plants.

The herbicides glyphosate, 2,4-D amine, dicamba, mecoprop, and triclopyr are translocated from the leaves and cut stems to the rest of the plant, eventually killing the shoots and roots. Repeated applications may be necessary.

Depending on weather and other factors, it may take one to several weeks before you discover whether you have successfully eradicated the plant, so be patient.

Poison ivy is most sensitive to 2,4-D amine and dicamba treatments in late spring or early summer. Triclopyr offers the best control after the leaves fully expand in the spring and before leaf color changes in the fall.

Glyphosate offers the best control when applied in early summer.

Many times, poison ivy grows as a vine up trees and fence rows. If you see a vine growing up a tree with hairy stems, it is almost always poison ivy. Many people contract poison ivy by placing their hands or brushing up against trees covered with a poison ivy vine. What triggers a poison ivy plant to climb is a mystery. Some poison ivy plants climb right away from seedlings and others do not. Individual populations of these plants often contain a mix of climbing and non-climbing plants.



In this case , especially when the vines are well established, carefully use pruners to lop off the poison ivy about 6 inches or so above ground level. Let the top portion of the plant die as since water and nutrients are literally cut off. Do not attempt to pull the poison ivy off the tree or fence or you will become Queen or King Rash. Apply the herbicide with the brush to only the bottom portion of the plant. Most established tree bark will protect the tree from absorbing the herbicide. If the tree is young just try to brush foliage rather than the thinner bark.

Just to be clear, it is ok to apply concentrated herbicide in this manner to poison ivy in this manner. You are not breaking any rules. I understand there are many folks opposed to using anything but organic controls for pest or weed problems. Unfortunately, there are no other options that I am aware of to control poison ivy in a landscape.



Lumber Costs Skyrocketing

Compiled from Fastmarkets

In North America, lumber is typically traded in units of 1,000 board feet; builders need about 15,000 board feet, on average, to construct a single-family home. From 2015 to 2019, lumber traded at \$381 for 1,000 board feet, according to Fastmarkets. This month, it reached an all-time high of \$1,104 for the same amount. The lumber shortage has added at least \$24,000 to the cost of a new home, according to the National Association of Homebuilders.

Since 2018, increased demand for lumber products, wildfires, and insects have devastated the lumber industry in Canada, the largest lumber exporter to the United States. A catastrophic and multi-decade outbreak of bark-eating beetles, (which I discussed in the April edition of Home Horticulture), followed by a series of historic wildfire seasons, have led to lasting economic damage in British Columbia, a crucial lumber-providing province. Americans also have, in effect, made a mad dash for lumber at the exact moment Canada is least able to supply it.

Canadian SPF wood (spruce – pine forests) is grown in orderly tracts of forest that span much of Canada’s northern belt. Starting in 1999, an outbreak of bark-eating mountain pine beetles has ravaged conifer forests

across the American and Canadian West. It has been especially bad in British Columbia, which exports about half of its lumber to the U.S.



“The mountain pine beetle has been a force of nature in this current epidemic. The beetle has devoured 18 million hectares of forest in British Columbia alone, killing 60 percent of its merchantable pine. The outbreak has been accelerated by warmer weather and drought associated with climate change . A series of unusually warm winters has failed to kill the usual number of mountain pine beetles, allowing populations to swell to unprecedented size. Nor have two decades of unusually dry and drought-ridden summers helped. When trees are drought-stressed, they’re less able to mount a defense to the beetle, and they succumb more quickly.

In 2017, British Columbia recorded the worst wildfire season in its history. Fires cleared 1.2 million hectares of land, or more than 1 percent of the province’s area, and forced 65,000 people to evacuate. That record was surpassed the following year, when 1.3 million hectares burned.

Tomatoes and Nitrogen Deficiency



Tomatoes are heavy feeders, meaning the plant requires twice the amount of fertilizer that a cucumber needs, and even four times the amount as beans.

If you don’t fertilize enough with nitrogen, the older leaves will begin turning yellow and, in many cases, may fall off. The older leaves turn yellow because they are providing their nitrogen to the younger leaves to survive.

Sometimes, yellow leaves on tomatoes can be a sign of plant disease or insects. However, if the leaves are yellow, with healthy green foliage at the top of the plant, and there are no signs of spots or lesions on the leaves, it is most-likely nitrogen deficiency.

Wheat

Compiled and revised from articles written by Thomas Keller, and Real Simple

The use and cultivation of wheat date back to humanity's earliest nomadic beginnings. While the common wheat grown today was cultivated by the repeated selection and harvesting of specific strains from a family of wild grasses (*Triticum*) over centuries, evidence of domesticated emmer wheat can be found as far back as 9,600 BCE, and durum wheats have been found in burial sites from 100 BCE.



Wheat breeding and hybridization began in the area now known as the Middle East. Wheat cultivation quickly spread to North Africa and Europe, and wheat arrived in North America in the sixteenth century. Wheat's adaptability to most climates and terrains made it a natural centerpiece of early diets.

Domesticated strains of wheat's oldest known ancestors, einkorn, Khorasan (kamut), and emmer are still grown and eaten in some parts of the world. For example, durum wheat is grown from crosses of domesticated emmer wheat. Spelt, also known as dinkel or hulled wheat, is a nutty and complex ancient grain that's been around since 5,000 BC has become a regular sight at grocery stores—for use in everything from pancakes to quick breads.

Types of Wheat

Winter Wheat is common in our area. When you see green wheat fields in early spring in our area, it is winter wheat. It is planted in the fall, grows for a bit, and then continues growth in the spring and is harvested in late spring/early summer. Full-flavored **hard red winter wheat** is the primary grain used for whole grain and whole wheat blends as well as all-purpose flours, making it a great fit for rustic breads like sourdough.

Soft red winter wheat maintains all the flavorful characteristics of the hard variety but is far easier to mill and results in a finer “soft” texture that's best for products like cookies, crackers, and cakes.

Spring Wheat is typically planted in the spring throughout the northern reaches of the U.S. and Canada and ready to harvest in the fall.

Hard red spring wheat has a high gluten content and is ideal for breads and tensile pastries like croissants and doughs that rely on a texture with some elasticity, like pizza dough.

Hard white wheat is lighter in kernel color and with a sweeter, more subtle flavor than hard red wheat cultivars, Hard white wheat is typically milled whole, preserving its moderate protein and nutrient content. This type of wheat is used to make tortillas, pan breads, and some noodles.

Other Wheat Types

Soft white wheat is the go-to grain for all of the crumbly, meltaway pastries, yeast breads, and snack foods. Most cake and pastry flours are composed of soft white wheat—which is not denoted by season like the others, though there are different cultivars of soft white winter wheat and soft white spring wheat.

Durham wheat is also known as “pasta wheat,” and is the hardest of all the wheat strains, used for fresh pasta and Middle Eastern or Mediterranean flatbreads.

Semolina, which is often used to make couscous and some pastas, is composed of the leftover byproduct of the durum milling process known as “middlings”—coarse particles of the cracked inner endosperm.

Bulgur wheat is made from the cracked and parboiled wheat berries of durum wheat, is a staple cereal grain in Levantine dishes like tabbouleh and kibbeh.



Will the Cicadas Come? How to Protect Young Trees

Compiled from articles written by Master Gardeners of Northern Virginia, Bill Horan, Purdue Extension Educator – Wells County, and Cliff Sadof, Purdue Entomology Specialist

As exact date is hard to pinpoint but expect 17-year cicadas to begin to arrive in mid-to-late May. Look for cicadas to peak in late May and June. Their lifespan is four to six weeks above ground, and they'll begin to die off in late June and into July. There may be a few stragglers that linger far into the summer. If the weather is consistently warm and dry, that could mean cicadas will finish mating sooner than later and be gone by mid-July.

"The first cicada sign that we will see will be the development of little chimneys, mud extensions of their tubes after very heavy rain," said Gene Kritsky, the Mount St. Joseph University dean of behavioral and natural sciences. Kritsky is one of the world's leading experts in cicadas. Cicadas don't all appear at once. It takes about two weeks for all of them to dig out from under the ground as the crawl from their long dormancy to sing, mate, reproduce and lay eggs.

Kritsky helped develop the Cicada Safari app, that allows users to search, photograph, video and help map the cicadas, which will contribute to vital scientific research by determining the distribution of the brood of the emerging cicadas. Such information will enable scientists to assess the status of Brood X cicadas. He also launched the **CicadaSafari.org** website, which offers a virtual trove of cicada facts, history, facts, maps, activities and more. At their peak, you can expect to see cicadas seemingly everywhere -- on trees and on the façade of your home. “There’s going to be 1 to 2 million per acre boiling out of the ground,” explained Clifford Sadof, Professor of Entomology at Purdue University, “There’s going to be so many insects coming out that no one predator is going to be able to eat them all.” Cicadas are mainly a nuisance, flying into windshields and littering homes with tiny carcasses. Mating chorusing of male cicadas is very loud, occurring in large aggregations with peak noise usually around 10 am. “If you are bothered by Cicadas harassing you or maybe landing on you while you are out mowing the grass, you are less likely to attract them if you do that right at the beginning of the day or towards the end of the day, rather than the middle of the day,” said Bill Horan, Purdue Extension Educator in Wells County. Young, newly planted trees can be vulnerable to severe damage from



periodical cicadas. Only the females are known to feed on the leaves, but the real damage is to young branches and trunks of trees ¼-½ inch in diameter that can be killed back by the female cicadas who cut a slit through the

bark to deposit 400-600 eggs after mating. Damage is not as serious on older, well-established plants, as only the branch ends will die back.

This could lead to some trees looking bare in some spots. If you do have trees you are worried about you can cover them with netting before the cicadas emerge.

Netting with a mesh no larger than 1 cm will effectively control injury on branches of young trees. Make sure that the net is tied well enough to avoid trapping mammals and birds. Tree wrapping with paper tape, tin foil, or similar materials can also deter egg laying. Biological control is ineffective because of predator satiation strategy of periodical cicadas. Insecticides are not typically recommended. Later this summer the newly hatched brood of cicadas, called nymphs until they become fully grown, burrow back into the ground to feed and mature, not to be heard from for another 17 years. Only time will tell if “billions” of cicadas appear in our area this season. Past 17-year infestations have been somewhat of a disappointment because of development of areas and loss of trees in recent years.

Beavers Against Technology – compiled and revised from an article by Sophie Lewis

A group of eager beavers shut down internet service in a western Canadian town after they chewed through fiber cables and used them to build their homes. One wonders if this is related to the lumber costs and shortages I discussed previously. After all, beavers need homes also.

The outage wreaked havoc on the internet, cable television and local cell phone service in Tumbler Ridge, British Columbia — a town with only about 2,000 people total. The service provider described the 36-hour outage as a “very rare and uniquely Canadian disruption.” The service provider goes on to describe – in a uniquely Canadian way – how brilliant and thorough they were to solve this problem,

“Our team immediately worked to identify the location of the damage and discovered that the cause of this fiber cut is fairly unique — beavers have chewed through our fiber cable at multiple points, causing extensive damage,” “Our team located a nearby dam, and it appears the beavers dug underground alongside the creek to reach our cable, which is buried about three feet underground and protected by a 4.5-inch-thick conduit.”

The beavers chewed through both the conduit and the cable in multiple locations. Angry beavers are formidable. The beavers were particularly angry about the slow internet, poor customer service, cell phone dead zones, and the disappointing and delayed rollout of the “Handmaids Tale”. “Will June’s torment ever end?” one anonymous beaver commented.

“Our crews brought in additional equipment and technicians to help expose the cable and determine how far the damage continued up the line.” A crew worked “around the clock under challenging conditions” to fix the issue. Service was first interrupted to the area early Saturday morning and finally restored around 6:30 p.m. ET on Sunday. The challenging conditions turned out to be beavers stealing tools and cable from the provider crew.

“We know how critical connectivity is to our customers, and we are very sorry for this interruption. The beavers did not respond to repeated attempts to contact them and refused to apologize for the disruptions. **Note:** I always love the antics of mischievous, troublesome beavers.



Cedar Apple Rust

Cedar Apple rust is a fungal disease that is appearing in landscapes currently. It is a strange disease, because of its jelly-like fruiting structures which appear on junipers and Red Cedar trees in our area. There is also a form that appears on hawthorn trees and quince. This disease bounces back between junipers and its alternate hosts in the course of a year. The main point is that this disease rarely does much harm to its hosts. Commercial apple growers will treat for this disease because they do not want the appearance of their apples compromised. I do expect that the increasing red cedar populations in waste areas will increase the occurrence of this disease. Here is a link that further explains this disease. [Cedar Apple Rust | NC State Extension Publications \(ncsu.edu\)](https://www.ncsu.edu/extension/publications/cedar-apple-rust/)



Different Types of Bread

White Bread

Grain kernels are made up of three parts: the fiber-dense bran, the nutrient-rich germ, and the starchy endosperm. White bread is made from wheat kernels that have been processed to remove the bran and the germ, leaving only the endosperm. This results in a lighter texture and flavor—as well as fewer nutrients.

Wheat Bread

Wheat bread should not be confused with whole wheat bread. Wheat bread merely means the product is made using wheat flour, which is another term for refined white flour.

Whole Wheat Bread

The word “whole” is crucial here: it means that the bran, the germ, and the endosperm of the wheat kernel have all been left intact. The bread is made up entirely of wheat kernels (as opposed to being mixed with other grains). It is a healthier choice than wheat bread.

Whole Grain Bread

Similar to whole wheat bread, whole grain bread is made up of grains that are fully intact. In addition to wheat, whole grain bread can include other whole grains, such as whole barley, brown rice, whole grain oats, and rolled oats, among others (all of which are rich in fiber, vitamins, and minerals). Though whole wheat is the most popular type of whole grain, whole wheat bread is only one type of whole grain bread. They are the two healthiest options in the store, varying slightly in nutrition depending on the exact combination of grains.

Multigrain Bread

Though it sounds like a healthy choice (multiple types of grains!), there is no guarantee that multigrain bread is made with 100 percent whole grains—or that it is free of refined grains. It simply means that it contains more than one type of grain, such as wheat, oats, and quinoa. These grains may have been processed to remove their bran and germ, which strips them of nutritional value (including fiber and important nutrients). Because of this, it may not be as healthy as whole grain or whole wheat bread. Read the ingredient list and look out for terms like “bleached” or “enriched,” which means the bread is not made up entirely of whole grains.

Sprouted Grain Bread

Sprouted grain breads are made using flours from sprouted grains, which are formed when grains are exposed to moist warm conditions. The carbohydrates stored in the endosperm become more easily digestible, and sprouting is also thought to increase the bioavailability - the degree at which something is absorbed into your body - of some vitamins and minerals.

Any bread made with 100 percent whole grains, whether it is whole wheat or whole grain, is the most nutritious option. But be careful: just because a label says “whole grain” doesn’t guarantee that the product contains exclusively whole grains. The best way to learn about your loaf is to look at the stamps on the front of the packaging. If it bears the 100% Stamp, all of its grain ingredients are whole. These loafs also contain at least 16 grams (one full serving) of whole grain per serving, according to the Whole Grain Council.

There is a lot of controversy over many ingredients that conventional bread contains. It is true that glyphosate (Round-up) is sprayed directly on non-organic wheat to reduce the time to harvest. Almost all non-organic grain crops are genetically modified. This explains why many consumers purchase organic bread if/when they can.

Gene Logsdon



The first and last time I spoke to Gene Logsdon was just before Christmas in 2011. I was trying to convince him to speak at an upcoming Master Gardener state conference that was being held in Fort Wayne.

I had heard that Gene was an excellent speaker on sustainability. I had increasingly adopted the idea of sustainable gardening after finding article after article about the topic. I liked the idea of combining organic gardening, biodynamic practices, Integrated pest Management, and being frugal and efficient into a modern gardening paradigm.

“Imagine, someone from Extension calling me” He joked. Gene was not a fan of what he referred to as “industrialized” agriculture that was promoted by Extension Services.. He had written many books about farming using crop rotation, cover crops, animal manures – in other words going back to a farming system the way it used to be before farmers began to totally rely on pesticides and conventional fertilizers to grow crops.

We talked for over two hours about common interests in sustainable agriculture, compost teas, and using animals and their manure to produce healthy soils – which in turn produced healthier plants and food.

Gene was sad that the small farm was disappearing - replaced by farms consisting of thousands of acres, with equipment “the size of a large barn”, and how farmers were in increasing debt after buying the equipment. He correctly predicted that Amish farmers and other small-scale farmers would buy and modify older, simpler equipment from the megafarms. He was also opposed to CAFOS, large scale confined feeding operations, to raise large quantities of animals in very small spaces. He wanted animals to roam free – eating grass and foraging for food in more natural systems where land was allowed to rest and rejuvenate before crops were grown. Now free-range grass-fed cattle and chickens and eggs are a part of almost every grocery store. He was way ahead of his time.

We talked about being frugal, and how Gene used a small grinder to bake his own bread and pancakes, tapping his maple trees every year for homemade organic syrup, popping organic popcorn to eat in front of a fire, and growing non-GMO sweet corn to put onto coals to eat.

It was a wonderful conversation on a very snowy night.

After our conversation, I did more research on Gene. Turns out, he didn't live that far from me – his farm was in Upper Sandusky Ohio. He had published many books on sustainable farming. I ordered many of them though Chelsea Press. He had an extremely popular radio show, newspaper articles, and a Blog site.

Some of my favorite books by Gene Logsdon include his classic “The Contrary Farmer” , “Small Scale Grain Production” and “Living at Natures Pace” You can still order his books online and I encourage forks to read them.

Gene was also a fan of Wendell Berry, who I had never heard of. I was totally amazed at Berry's thoughts on nature, philosophy, and sustainability.

As we finished our conversation late into the night, I wish I had taken Gene up on his invitation to visit his farm. “Just call me”, he said, “when you want to visit”. I didn't understand then what an honor his invitation to visit was. He died several years later, and I never made it to visit him at his farm.

Caddisflies

Sometimes during the early spring, folks are surprised by a weird looking insect flying or crawling around their property- especially if they live near a pond, lake, river, wetland, or stream. . Adult caddisflies are mothlike creatures, holding their wings roof like over their backs. The forewings are hairy (instead of scaly like a moth's). Their antennae are threadlike, many-segmented, and long, usually as long as the rest of the body.



Anglers sometimes use caddisflies and lookalike lures as bait, especially at times when caddisfly adults are emerging in great numbers and fish are hunting them. The larvae are sensitive to pollution and thus serve as an indicator of water quality.



Caddisfly larvae are aquatic, slender, with a segmented abdomen that is usually hidden within a portable protective case. The head has chewing mouthparts, and there are 3 pairs of legs at the front of the body. The case varies with species but is most typically created from tiny pieces of plants, sand grains or other detritus adhered or spun together into a tube or cone. Some cases are spiral like a snail shell. Some species don't make cases at all.

There is great diversity among American caddisflies, and naturally they can inhabit different habitats. Adults roost in shrubs and other plants during the day and fly at night. Like moths, they are often attracted to artificial lights. As larvae, most creep along rocks and other submerged objects in the clean waters of streams, rivers, and springs, where the movement of the water increases the oxygen level. Others prefer lakes, ponds, and other quiet waters, including marshes.

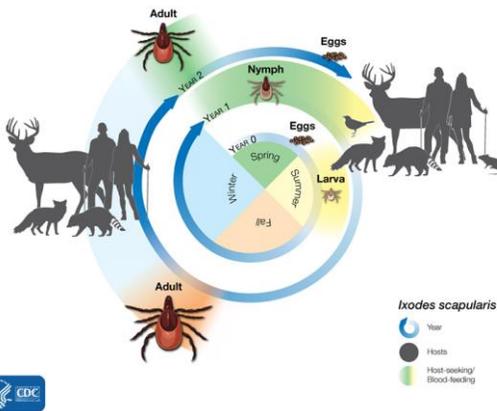
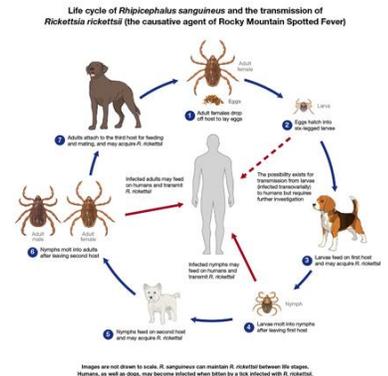
Like moths, most caddisflies undergo complete metamorphosis — the immature stages look very different from the winged, adult stage, and the larvae enter a pupal stage before becoming adults. The pupae are usually protected by their casing, which they simply seal up. When that stage is nearly complete, usually in fall, they cut open the case, swim to the surface, undergo the final molt, and begin flying. As adults, they usually only live for a few weeks, do not eat, and focus only on reproduction.

Ticks!!!

Forecasters are predicting this year's tick populations will be higher than normal. According to pests.org, the Northeast is already a hotspot for Lyme disease, and that risk is expected to grow.

Most ticks go through four life stages: egg, six-legged larva, eight-legged nymph, and adult. After hatching from the eggs, ticks must eat blood at every stage to survive. Ticks that require many hosts can take up to 3 years to complete their full life cycle, and most will die because they don't find a host for their next feeding.

Some tick species, like the brown dog tick, prefer to feed on the same host during all life stages.



Other ticks prefer to feed on a variety of mammals, birds, reptiles, and amphibians. Most ticks prefer to have a different host animal at each stage of their life, as shown on the picture to the left.

Ticks find their hosts by detecting animals' breath and body odors, or by sensing body heat, moisture, and vibrations. Some species can even recognize a shadow. In addition, ticks pick a place to wait by identifying well-used paths. Then they wait for a host, resting on the tips of grasses and shrubs. Ticks can't fly or jump, but many tick species wait in a position known as "questing".

While questing, ticks hold onto leaves and grass by their third and fourth pair of legs. They hold the first pair of legs outstretched, waiting to climb on to the host. When a host brushes the spot where a tick is waiting, it quickly climbs aboard. Some ticks will attach quickly, and others will wander, looking for places like the ear, or other areas where the skin is thinner.

Depending on the tick species and its stage of life, preparing to feed can take from 10 minutes to 2 hours. When the tick finds a feeding spot, it grasps the skin and cuts into the surface.

The tick then inserts its feeding tube. Many species also secrete a cement-like substance that keeps them firmly attached during the meal. The feeding tube can have barbs which help keep the tick in place.

Ticks also can secrete small amounts of saliva with anesthetic properties so that the animal or person can't feel that the tick has attached itself. If the tick is in a sheltered spot, it can go unnoticed.

A tick will suck the blood slowly for several days. If the host animal has a bloodborne infection, the tick will ingest the pathogens with the blood.

Small amounts of saliva from the tick may also enter the skin of the host animal during the feeding process. If the tick contains a pathogen, the organism may be transmitted to the host animal in this way.

After feeding, most ticks will drop off and prepare for the next life stage. At its next feeding, it can then transmit an acquired disease to the new host.



The Tick Research Lab will test ticks using DNA technology for diseases, and the site also has great pictures of the most common ticks. <https://www.ticklab.org/>

According to the CDC, there are six active ingredients you can look for to keep ticks away.

DEET
IR3535
Picaridin
Oil of lemon eucalyptus
Para-menthane-diol (PMD)
2-undecanone

Choose a tick repellent that contains at least 20% (up to but no higher than 30%) of these active ingredients. The American Academy of Pediatrics recommends that repellents used on children should contain no more than 30% DEET specifically. If you prefer to use a more “natural” product, repellents containing oil of lemon eucalyptus are your best choice. According to experts, homemade remedies touted on the Internet are ineffective.

One can also treat clothing with a repellent, or products containing permethrin to repel or kill ticks. Permethrin is often used in pet flea and tick repellents. However, many consumers are suspicious of any pesticides they may come into contact with. It’s a tough choice. At the very least, stay on paths when venturing into wild areas. I always put my socks over my pants when venturing into the forest. Wear long sleeves and pants and a head covering if possible.

Most people know that it is wise to do tick checks during and after hikes. Most folks also know that ticks need to be removed using tweezers.

Clothes can be tossed into the dryer on high heat for at least 10 minutes (or a bit longer if your clothes are damp), to ensure any stragglers are killed.

Contact a physician if a bulls-eye rash develops around a tick site, or if you develop flu-like symptoms after a tick bite.

Hoggles – Demented Cat Logic



*To my caregiver: I am very disappointed in my Internet and cable service. Can you give me contact info for the Canadian beavers that disrupted the Internet and cable? I would like to join forces creating a cat/beaver anti-tech movement that will change the world forever...
Signed Hoggles, a cat bored beyond belief*

To subscribe to this electronic newsletter, send an email to kemeryr7@frontier.com - or text 260-431-6893. I will not share information with others.

Ricky Kemery will not knowingly discriminate in any way based on race, gender etc...