



The Ferrum Nature Society Bulletin

Dedicated to the appreciation and conservation of our natural world

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Nature's events:

June is the beginning of **hurricane season**. As I write this, the remnants of tropical storm Barry are moving over Ferrum and have dropped an inch of rain so far. Scientists have forecasted a busy year. May-September is the rainiest period of the year for our area, mostly due to thunderstorms and tropical systems.

Frogs love the rain, especially **gray treefrogs**. The only species of tree frog in our area, the gray treefrog (*Hyla chrysoscelis*) is often actively calling at night, but can also be heard during the day if humidity levels are high enough.

Sky calendar:

Full moon - June 30, called the hay moon, rose moon, honey moon, or strawberry moon.

Summer solstice - June 21 at 2:06 AM. The longest day of the year in the northern hemisphere.

Planets - Mercury, Venus, Jupiter, Mars, and Saturn can all be seen this month. Venus is an evening star and is the brightest. Jupiter is also bright. Look for Saturn near Venus.

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Lady beetles Jessica Scott



The lady beetle is a member of the Coccinellidae family. This type of beetle is also called the ladybird, but most individuals refer to it as the ladybug.

During the late 1800s, there was an insect introduced by accident in California that invaded fruit producing trees. In order to save the trees, an entomologist traveled to Australia to see why this invasive insect was not destroying their trees. The answer was none other than the lady beetle. With this discovery, the entomologist brought a few of these lady beetles back to California. After countless batches of beetles were brought to the state, the lady beetles ate the invasive insects and the trees thrived. There are more than 3,000 different ladybug species in the world. Most ladybugs eat aphids, but other species prefer to feed on adelgids or other caterpillars, as well as plants. Ladybugs have six legs and come in different shapes, sizes, colors, and have a variety of markings, which make it difficult to distinguish among the different species of ladybugs. For instance, red-colored ladybugs are older than other lighter colored species. The ladybug is the state insect of Delaware, Massachusetts, New Hampshire, New York, Ohio, and Tennessee.

Ladybugs can lay from 50 -1000 eggs in a lifespan. For defense, ladybugs emit a sticky substance from their knee joints which has a slight smell. Ladybugs also tend to play dead to trick their predators. One complaint people have about ladybugs is that some species tend to invade homes in the fall. This happens when the temperature decreases, so ladybugs gather in large groups and try to find warm locations to stay during the winter months. Ladybugs find that homes are the good wintering sites, especially those located in or near wooded areas that have light exterior colorations such as white, beige, or yellow. Once it warms up again around springtime, ladybugs will fly around again in homes trying to find their way back out of the house again. Sometimes after the hibernation period, ladybugs tend to forget how they entered the home in the fall, so they may need a little help getting outside. Since most people do not like ladybugs crawling around their homes, some people want to get rid of them. If the presence of ladybugs is a problem, please do not use pesticides. Use a vacuum cleaner!

Afraid of snakes?

Not this little girl! The vast majority of snakes in our area are harmless and many are also beneficial, controlling rodents around homes and barns. Most snakes are not aggressive and just want to be left alone. If you see them in the road - give them a brake!



Master Naturalist training to begin in August

The Blue Ridge Foothills and Lakes Chapter of the Virginia Master Naturalist Program will offer basic training towards being certified as a Master Naturalist beginning on August 2. Classroom and field training will take place weekly on Thursday evenings from 6-8 PM and on Saturdays from 1-5 PM until the end of October. The deadline for sign-up is July 2. There is a course fee of \$100 for selected participants and a refundable \$5 application fee. For more information, visit the Blue Ridge Foothills and Lakes web site at:

<http://home.earthlink.net/~brfal.vmnp/>



“Tree-of-heaven” might be misnamed

Charles Facchina

Ailanthus (*Ailanthus altissima*) is also known as Tree-of-heaven, Paradise Tree, Chinese Sumac, and Stinking Sumac. It is an introduced species that has become a major threat to native plants in our area. This is partly because it reproduces well, grows rapidly, and is tolerant of poor soil conditions.

The Tree-of-heaven can be identified by its smooth gray bark and stout light brown branches that are covered with large leaf scars. The compound leaves are from one to four feet in length, with 11 to 30 leaflets. Each leaflet has one or more glands at the base. The flowers and leaves of *Ailanthus* give off a distinct smell similar to bad body odor. It is important not to confuse *Ailanthus* with similar looking native trees. It is most often confused with Black Walnut and Sumac.

Ailanthus is dioecious, meaning it has separate male and female trees. Flowering occurs most often in trees over ten years. Males have small greenish flowers while females have larger yellow flowers. Flowering starts in July and runs through September. The fruits are yellow-green in color and are no more than an inch long. They form winged structures called samaras, which allow for seed dispersal by wind. *Ailanthus* produces massive quantities of seeds, approximately 14,600 seeds per pound. Not only can it reproduce by seed, but *Ailanthus* readily resprouts. New stems will sprout from the roots. In addition, if a tree is cut down, the stump will quickly produce new stems. *Ailanthus* growth rates are remarkable. Seedlings can reach heights of six feet in a single season. Large trees can add between one and four feet each year. The average height of a mature tree is 50 feet, but some can reach over 100 feet. *Ailanthus* trees live from 30-50 years.

As in the case with most invasive exotic weeds, *Ailanthus* is well-adapted to poor environmental conditions. It can tolerate climate from subtropical to temperate and even arid lands. Rainfall tolerance levels range from 14-90 inches annually. Extreme cold restricts its range. *Ailanthus* can survive in many different soil conditions. It can live in soils that are extremely sandy, rocky, or with heavy clay and poor levels of nutrients. *Ailanthus* can tolerate a pH range between 4.9-7.5. Because of this ability to live under harsh conditions, it often invades disturbed lands around construction sites and roadways. Originally, *Ailanthus* was planted in America's major cities for its ability to survive; a crack in a sidewalk is all it needs.

As an invasive exotic species, *Ailanthus* poses major environmental threats. It is classified by the National Park Service, Department of the Interior and other state and federal departments as a noxious weed. This means that it poses serious environmental risk and is of high priority for control. *Ailanthus* outcompetes native plants with its vigorous growth, as well as by using an allelopathic toxin. This toxin is released into the soil by roots and from fallen leaves. The toxin restricts the growth of native grasses, herbaceous and woody plant species. This allows for pure stands of *Ailanthus* to invade forests and threaten biodiversity. The roots often crack sidewalks, pipelines and septic tanks. Brittle branches cause problems during high winds and ice storms. Since *Ailanthus* has no natural controls, the only hope for control is continuous removal and treatment with herbicides or the development of biological control agents.



A shade-intolerant tree, *Ailanthus* often gets its start along forest edges .



Removing a large *Ailanthus* tree on campus

The *Ailanthus* webworm - one critter that likes the Tree-of-heaven

Todd Fredericksen



The *Ailanthus* Webworm (*Atteva punctella*) is another exotic species and one that has found a use for the Tree-of-heaven. This moth is native to Central and South America and belongs to a family of mostly tropical moths called ermine moths. *Ailanthus* webworm caterpillars build communal webs in trees of the family Simaroubaceae (although native to China, not the Americas, *Ailanthus* does belong to the family Simaroubaceae). Webs are spun among leaves in the lower crown and, upon hatching, the young caterpillars begin to feed on the leaves of *Ailanthus*. Unfortunately, there is only one generation per year. The webworm has expanded north into the United States with the help of *Ailanthus*. It is often attracted to night lights. Some may not see the resemblance of this species to most other moths. In the resting position, the adults fold their wings around their body.