



The Ferrum Nature Society Bulletin

Dedicated to the appreciation and conservation of our natural world

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**Franklin County
Spring Bird Count
Saturday, May 10**



Help us count birds. Field and feeder watchers needed for this annual count. For more information, contact Todd Fredericksen.

The Vegetation Thickens

Tree leaves reach full expansion and plant growth accelerates to peak productivity for the season. Among the varied plants, beware of the expanding leaves of poison ivy!



Sky calendar:

Full moon - May 19

Planets - Saturn and Mars are up in the evening. Watch for Mercury in the Northwest after sunset early this month.

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The Buzz Surrounding the Honey Bee

Jessica Scott

The honey bee, *Apis mellifera*, is not native to the United States, but originated from Europe. When the European settlers came to Virginia, they did not know how to fend for themselves as well as they had hoped. In 1621, the first recorded shipment of honey bees came to Virginia because honey bees make their own wax. The settlers were used to having wax to make their own candles, having honey to eat, and to have fermented honey to make an alcoholic beverage called mead. Since their introduction, honey bees have spread all over North America.

During the 1700s, it was realized that honey bees pollinate crops. Honey bees account for 80% of the pollination services provided by bees. According to the United States Department of Agriculture (USDA), there are more than 130 agricultural plants that are pollinated by the bees in America. Some examples of those crops include almonds, apples, peaches, corn, melons, and blueberries.

During the 1800s, it was discovered that there was not a king bee that ruled the hive as originally thought but a royal queen instead. A beehive consists of one queen bee, 90% female worker bees, and 10% male drone bees. The queen's main job is to be the ruling mother of the colony, to lay up to 3,000 eggs per day, and to emit pheromones so that her subjects know what to do and also know that she is their queen. The male drone's role is to mate with the queen. After mating, the males die because during mating their genitals are ripped from their bodies; the drones that do not mate remain in the hive eating on the honey and just get in the way of hive activities.

The female workers do all of the work in the hive. They tend and feed the queen, take care of the bee larvae, make honey, make wax, guard the hive, and travel outside the hive to gather pollen, nectar, and water to bring back to the hive.

Since the 1900s, the need for bees to meet the demand of the agricultural business has steadily increased resulting in the shipment of honey bees all over the world through rental services of commercial beekeepers.



In the fall of 2006, there were reports in the news from beekeepers reporting losses of 30-70% of honey bees; a typical loss each year is around 17%. A typical hive consists of 15,000 to 30,000 honey bees. In 2007, a name was associated with this phenomenon called Colony Collapse Disorder (CCD) which has been found in twenty-seven states, Canada, Europe, and Brazil. This disorder involves a gradual loss of the colony through the loss of nectar-gathering worker bees. Adult female worker bees leave the hive on a typical flight to find pollen, nectar, and water to bring back to the hive, but the bees never return. No bodies or remains of those bees are been found near the hive. The queen, the larvae, as well as a few males, are the only ones left behind at the hive. The numerous hypotheses about the cause of this disorder include pesticides, cell phone use, mites or diseases, and poor beekeeping, but the precise reasons for CCD remain a mystery. With more research, it is hoped that a development will surface soon so humans will not be faced with the extinction of the honey bee.

Melodious Month for the Wood Thrush Melanie Justis

The Wood Thrush (*Hylocichla mustelina*) is one of the most common woodland birds of the east coast of North America. This species of thrush is much easier to hear than see because of their size and coloring. An adult Wood Thrush is a medium-sized bird about 7 inches in length. It has the posture



of an American Robin, but with a smaller body. The distinct features of the Wood Thrush are the bright reddish-brown coloring on the crown and the nape. The bird's throat, breast and flanks are white with bold spots. It has a dull white ring around each eye and they have pink legs.

The Wood Thrush is most commonly known for its "flute-like" melody which can be heard during the early hours at dawn and evening hours at dusk. The Wood Thrush has different songs for different occasions. The melodic "tut, tut, ee-oh-lay-oh-leeeee" tune alerts visitors of its presence. The neighboring male population may sing back and forth with such accuracy that the birds are mistaken for a single bird singing. Other calls range from short volleys of light, throaty notes "bup-bup-bup-bup", to very excited, high-pitched, whinny outbursts, but liquid notes lit "pit-pit-pit-pit-pit-pit-pit". The Wood Thrush also has a distinctive night call, which is an emphatic buzzy "heeh", which can be heard throughout the night.

Wood Thrushes breed throughout eastern North America, ranging from southern Canada to as far south as the panhandle of Florida. The Wood Thrush normally goes as far west as the eastern edge of the Great Plains. The bird breeds in the interior of deciduous and mixed forest as well in the edge of these forests, often near water. The Wood Thrush needs moderate to dense understory, shade, moist soil, and decaying leaf litter. The female Wood Thrush builds a nest that is similar in shape and size to that of the American Robin's nest. The female Thrush normally lays three to four pale blue eggs. In any year, a breeding pair may raise two broods of young.

After the breeding season is over in late August Wood Thrushes migrate to Central America to their wintering grounds. Unfortunately, forest fragmentation in North America and increasing nest predation is decreasing the populations of this melodious songbird.

Eastern Redbud Josh Bernard

The Eastern Redbud (*Cercis canadensis*) is a short-lived deciduous tree that is quite conspicuous in the early spring. The tree flowers before it begins to allocate leaves and before the leaves of other tree species expand. Its flowering season is from early March to May. The species produces a very noticeable pink flower that lasts only 2-3 weeks. It is said that winter chills help to enhance the flowering stage of the Redbud.

Eastern Redbud trees are relatively tolerant of an array of climatic conditions. It is found on a variety of sites ranging from dry to moist sites, but it grows best on moist, well-drained sites. Redbud is very tolerant of poor soils, but it will not tolerate an area that has poor soil aeration from flooding. This tree species is a very good competitor with other species in its native range and, when young, it is able to tolerate shade very well once established; however, the more mature it becomes, the less it can tolerate shade.

An understory tree, this species ranges in height from 25-35 feet with a similar-sized canopy width, characterized by a flat-topped crown. The bark is a grayish color that is smooth to touch when younger, but as it matures it becomes scaly with ridges as well as black or brownish black and even small maroon patches. Leaves are usually rich, green 3-6 inches and heart-shaped while also sometimes being hairy on the bottom. The fruit is a leguminous pod with 4-10 seeds. Seed dispersion is usually accomplished by the wind and animal species throughout the fall and winter. Once on the ground, the seeds can remain dormant for several years.



The tolerance of shade decreases as Redbud trees mature and the species is not abundant in closed canopy forests. Although the wood is hard, heavy, and close-grained, it is not a commercial tree species because of its small size and the wood is too irregular in form to be of any value. The Redbud serves a more decorative purpose and they are often planted or retained in yards and public areas. The Redbud is important for the production of honey.