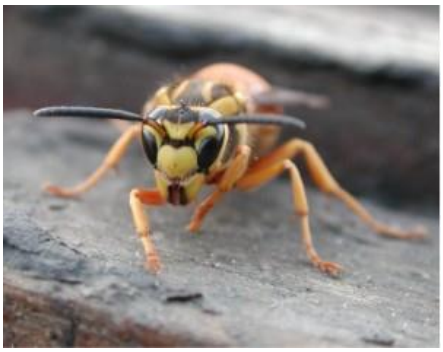
N.I.C.C.

September 2017 Newsletter

Yellow Jackets

Article from Wikipedia



Yellowjackets are sometimes mistakenly called "bees" (as in "meat bees"), given that they are similar in size and sting, but yellowjackets are actually wasps. They may be confused with other wasps, such as hornets and paper wasps. *Polistes dominula*, a species of paper wasp, is very frequently misidentified as a yellowjacket. A typical yellowjacket worker is about 12 mm (0.5 in) long, with alternating bands on the abdomen; the queen is larger, about 19 mm (0.75 in) long (the different patterns on their abdomens help separate various species). Workers are sometimes confused with honey bees, especially when flying in and out of their nests. Yellowjackets, in contrast to honey bees, have yellow or white markings, are not covered with tan-brown dense hair on their bodies, do not carry pollen, and do not have the flattened hairy hind legs used to carry it.

These species have lance-like stingers with small barbs, and typically sting repeatedly,[1] though occasionally a stinger becomes lodged and pulls free of the wasp's body; the venom, like most bee and wasp venoms, is primarily only dangerous to humans who are allergic or are stung many times. All species have yellow or white on their faces. Their mouthparts are well-developed with strong mandibles for capturing and chewing insects, with probosces for sucking nectar, fruit, and other juices. Yellowjackets build nests in trees, shrubs, or in protected places such as inside man-made structures, or in soil cavities, tree stumps, mouse burrows, etc. They build them from wood fiber they chew into a paper-like pulp. Many other insects exhibit protective mimicry of aggressive, stinging yellowjackets; in addition to numerous bees and wasps (Müllerian mimicry), the list includes some flies, moths, and beetles (Batesian mimicry).

Yellowjackets' closest relatives, the hornets, closely resemble them, but have larger heads, seen especially in the large distance from the eyes to the back of the head.[1]

Yellowjackets are social hunters living in colonies containing workers, queens, and males (drones). Colonies are annual with only inseminated queens overwintering. Fertilized queens are found in protected places such as in hollow logs, in stumps, under bark, in leaf litter, in soil cavities, and man-made structures. Queens emerge during the warm days of late spring or early summer, select a nest site, and build a small paper nest in which they lay eggs. After eggs hatch from the 30 to 50 brood cells, the queen feeds the young larvae for about 18 to 20 days. Larvae pupate, then emerge later as small, infertile females called workers. Workers in the colony take over caring for the larvae, feeding them with chewed up meat or fruit. By midsummer, the first adult workers emerge and assume the tasks of nest expansion, foraging for food, care of the queen and larvae, and colony defense.

From this time until her death in the autumn, the queen remains inside the nest, laying eggs. The colony then expands rapidly, reaching a maximum size of 4000 to 5000[2] workers and a nest of 10,000 to 15,000 cells in late summer. (This is true of most species in most areas; however, *Vespula squamata*, in the southern part of its range, may build much larger perennial colonies populated by scores of queens, tens of thousands of workers, and hundreds of thousands of cells.) At peak size, reproductive cells are built with new males and queens produced. Adult reproductives remain in the nest fed by the workers. New queens build up fat reserves to overwinter. Adult reproductives leave the parent colony to mate. After mating, males quickly die, while fertilized queens seek protected places to overwinter. Parent colony workers dwindle, usually leaving the nest to die, as does the foundress queen. Abandoned nests rapidly decompose and disintegrate during the winter. They can persist as long as they are kept dry, but are rarely used again. In the spring, the cycle is repeated; weather in the spring is the most important factor in colony establishment.

The diet of the adult yellowjacket consists primarily of items rich in sugars and carbohydrates, such as fruits, flower nectar, and tree sap. Larvae feed on proteins derived from insects, meats, and fish, which are collected by the adults, which chew and condition them before feeding them to the larvae. Many of the insects collected by the adults are considered pest species, making the yellowjacket beneficial to agriculture.[3] Larvae, in return, secrete a sugar material to be eaten by the adults; this exchange is a form of trophallaxis. In late summer, foraging workers pursue other food sources from meats to ripe fruits, or scavenge human garbage, sodas, picnics, etc., as additional sugar is needed to foster the next generation's queens.[3]

In 1975, the German yellowjacket (*V. germanica*) first appeared in Ohio, and has now become the dominant species over the eastern yellowjacket. It is bold and aggressive, and can sting repeatedly and painfully if provoked. It will mark aggressors, and will pursue them if agitated. It is often confused with *Polistes dominula*, an invasive species in the United States, due to their very similar pattern. The German yellowjacket builds its nests in cavities—not necessarily underground—with the peak worker population in temperate areas between 1000 and 3000 individuals between May and August. Each colony produces several thousand new reproductives after this point through November. The eastern yellowjacket builds its nests underground, also with the peak worker population between 1000 and 3000 individuals, similar to the German yellowjacket. Nests are built entirely of wood fiber and are completely enclosed except for a small entrance at the bottom. The color of the paper is highly dependent on the source of the wood fibers used. The nests contain multiple, horizontal tiers of combs within. Larvae hang within the combs.[*citation needed*]

In the southeastern United States, where southern yellowjacket (*Vespula squamosa*) nests may persist through the winter, colony sizes of this species may reach 100,000 adult wasps.[4] The same kind of nest expansion has occurred in Hawaii with the invasive western yellowjacket (*V. pensylvanica*).[6]

THANK YOU

On Saturday August 26, NICC had a Grounds Maintenance Day. Even though it was a small group of volunteers, they worked like busy beavers attacking several projects. Dead trees and branches were cut down. Thanks to Carl Palucki using his tractor to move a tree that had fallen into the pond next to the pier and move it to a new location in the pond for a habitat for the fish. One of the projects was replacing the two refrigerators that no longer worked with another used one. Laura and Bonnie put on their rubber gloves and have it all ready to use.

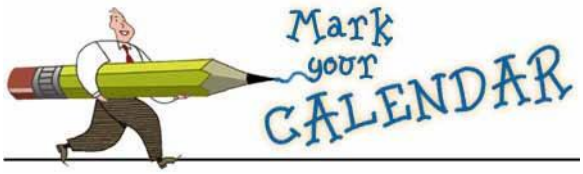
Volunteers were: Ken Golonka, Leonard Dane, Jim Waldow, Eric Herum, Laura Golonka, Ron Lobodzinski, Carl Palucki and Bonnie Letich.

CANS FOR CONSERVATION

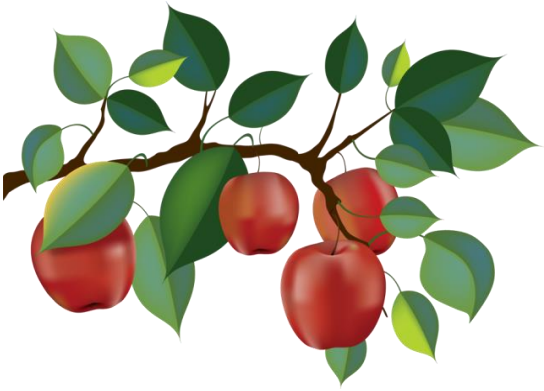
Remember to save your aluminium cans for our Cans for Conservation bin. Cans are to be put into tightly secured plastic bags. Please do not put smaller plastic bags of cans into a larger one. You will find the bin next to the barn. Place the bags into the containers making sure the door is locked so woodland critters can't get in. When enough cans are collected, they will be taken to the recycle center. Money received will be used to maintain our pond.

Don't forget the TRAP SHOOT ON SEPT. 17 10 am – 2 pm

25 clays for $10 BRING YOUR OWN AMMO



Sept. 17 Trap Shoot 10 am - 2 pm
Sept. 23 NICC Greet & Meet
Picnic & Campout 2 pm - ?
Oct. 7 Adopt-A-Highway 10 am
Grounds Cleanup 11 am - ?
Oct. 9 General/Board meeting 7 pm
Oct. 15 Trap Shoot 10 am – 2 pm
Nov. 5 Trap Shoot 10 am – 2 pm



"Don't be afraid to go out on a limb…

that's where the fruit is."

Harry Truman