

# **College of Agricultural Sciences • Cooperative Extension Entomological Notes**

Department of Entomology

# **EASTERN YELLOWJACKET**

Vespula maculifrons Family: Vespidae

The eastern yellowjacket is a ground nesting species found throughout most of the eastern United States - from North Dakota to Texas and east to the Atlantic coast. It is very common in woodlands, pastures, parks and lawns. Occasionally, in northern urban areas, it has been recorded nesting within wall voids of various structures - including homes. Vespula maculifrons, a native species, will aggressively defend its nest and can sting repeatedly. The stings are painful and for sensitive/allergic individuals this can pose a serious health risk.

#### DESCRIPTION

V. maculifrons workers, all sterile females, are approximately 12 mm (1/2 inch) in length; gueens are slightly larger – up to 18 mm. They are black with yellow markings. The first abdominal segment has a wide, anchor-shaped black marking (dorsally) and the cheek (side of the face) has a continuous yellow band that does not completely encircle the eye. (Fig. 1)

### LIFE HISTORY AND BEHAVIOR

In Pennsylvania, overwintered queens begin nest development in May or early June depending on the spring temperatures. Queens select nest sites in forest floors, rock walls, creek banks, lawns and occasionally within structures. The first brood of workers appear in June and from that point onward the founding queen remains within the nest. Males are produced in August/September, closely followed by a brood of new queens. Fertilized queens overwinter in protected locations such as under bark of dead trees or logs, in leaf/forest litter and other protected areas (Fig. 2).

## **MANAGEMENT**

Eastern yellowjackets can be considered a beneficial insect because they reduce populations of unwanted insects such as earwigs and caterpillars. Therefore, unless the nests are located close of an entrance to a building, in the ground of a lawn that is mowed, or in any area where the public is likely to encounter them, the nests can be ignored. However, individuals with known sensitivities to wasp and bee stings should have all nests in close proximity to their homes removed by professional pest management personnel



Figure 1. Eastern yellowjacket worker.



Figure 1. Eastern yellowjacket entering nest.

(pest control companies). Additionally, any nests located within the walls/attic of a home should be treated by professionals because of the difficulties associated with this type of treatment. NEVER attempt to control yellowjackets in a wall by plugging the opening. This can result in the yellowjackets chewing through the interior sheetrock walls and entering the home.

Those individuals without medical concerns and with a degree of daring can kill the colony by dusting the nest opening with an insecticide during the nighttime. The nest should be scouted during daylight to determine the best approach that will not disturb the yellowjackets prior to introduction of the insecticide. DO NOT stand away from the nest and dust only the exterior of the entrance as this will anger the colony and increase the risk of stings during the next several days. Effective control can only be achieved by stealthy approach and then liberally dusting the

material directly down into the nest opening. It is advisable to wear long sleeved clothing, long rubber gloves, goggles and a dust mask to protect yourself from any insecticide that blows back out of the opening. A good practice is to launder clothes and take a shower immediately after application.

Products containing 5% carbaryl dust such as Apicide® is currently labeled for this type of application.

#### WARNING

Pesticides are poisonous. Read and follow directions and safety precautions on labels. Handle carefully and store in original labeled containers out of the reach of children, pets, and livestock. Dispose of empty containers right away, in a safe manner and place. Do not contaminate forage, streams, or ponds.

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