INTRODUCTION

Cockroaches are among the most common of insects. Fossil evidence indicates that cockroaches have been on earth for over 300 million years. They are considered one of the most successful groups of animals. Because cockroaches are so adaptable, they have successfully adjusted to living with humans. About 3,500 cockroach species exist worldwide, with 55 species found in the United States. In Pennsylvania, only four species are common household pests. These are the German, brown-banded, Oriental, and American cockroaches.

The Pennsylvania wood cockroach is considered an occasional nuisance pest in homes in Pennsylvania. It is widely distributed in the eastern, southern, and midwestern states, up to Canada. This species can become a problem when infested firewood is brought indoors, or when it moves into homes from the surrounding woods.

DESCRIPTION AND BEHAVIOR

Adult males are approximately 1 inch long; females grow to about 3/4 inch long. Males are dark brown; the sides of the thorax and the front half of the wings are margined with yellow. Adult males are fully winged, while females have conspicuous wing pads (actually short wings like that of the female oriental roach), which are functionless. Wings of the male are longer than its body, while wing pads of the female cover only one-third to two-thirds of the abdomen. The males fly swiftly but do not have the ability to sustain themselves in the air for long periods.

Nymphs and adults (Fig. 1) are usually found outdoors beneath loose bark in woodpiles, stumps, and hollow trees. Brought indoors on infested firewood, they wander about the house without congregating in any particular room. They can be especially troublesome during the mating season, which is during May and June. Male wood cockroaches frequently travel in large numbers and fly considerable distances. They are attracted to lights at night and may gain entry indoors. Large numbers may also be found in rain gutters of homes.

Pennsylvania wood cockroaches feed primarily on decaying organic matter. Both female and male Pennsylvania wood cockroaches have been found under shingles and on the inside of garages. They rarely breed indoors. However, with the growing use of firewood, the popularity of cedar shake shingles, and the continual building of homes in wooded areas, problems with Pennsylvania wood cockroaches will probably escalate.

LIFE HISTORY

The Pennsylvania wood cockroach has three developmental stages: egg, nymph, and adult. Eggs are laid in egg capsules, produced during the warm months and deposited behind the loose bark of dead trees, fallen logs, or stumps. Egg capsules are yellowish brown and characteristically curved on both sides like a half moon. Capsules are twice as long as wide, each containing up to 32 eggs. The egg stage lasts about 34 days at 80°F, while the nymphal stage typically lasts 10 to 12 months but can last up to 2 years. The normal life span of the female adult is several months.

MANAGEMENT

Structural (and Environmental) Modifications and Repairs

Pennsylvania wood cockroaches are most often carried into homes under the bark of firewood. It is best to not store firewood inside the house. Move woodpiles away from the house to further reduce the likelihood of cockroaches wandering in.

Houses located within woods will sometimes have wood cockroaches crawl under siding; especially homes with cedar shake...
shingles. To cockroaches, the house may represent a fallen tree and a new location for nesting. A wide lawn will inhibit cockroaches crawling from the surrounding woods to the house. The use of window screening and caulking to prevent entry is a good structural tactic.

**Chemical Control** - As breeding populations rarely become established indoors, house interiors should not be treated. Treat exteriors only when wood cockroaches enter homes from the surrounding environment.

Exterior treatments to foundations, around doors and windows, porches, patios and other areas where outside lights are located will help control both the adult males (which will fly to the lights) and the females (which crawl to the house in search of harborage). Use only products manufactured and approved for this purpose and carefully follow the instructions on the labels. Do not use chemicals in areas where small children and pets may come in contact with them. Avoid getting spray on sensitive vegetation. For persistent and difficult-to-treat infestations, contact a professional pest-control service.

**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.