

LAUSD PEST OF THE MONTH PROGRAM

LARGE COCKROACHES

INTRODUCTION

Cockroaches are one of the most successful animals in the evolution of the planet Earth. They are believed to have been associated with humans since the time of cave dwellers. Fossil records show that cockroaches evolved about 350 million years ago sometime in the Carboniferous period long before humans appeared on earth. What is remarkable about this is that the cockroaches of today resemble those of 350 million years ago. They have not changed much in that time.

The Oriental and the American cockroaches will be discussed in this program. These roaches are often referred to by pest management professionals as peridomestic or domiciliary cockroaches because they essentially live outdoors around human habitation and workplaces and only occasionally invade buildings.

ORIENTAL COCKROACH

DESCRIPTION

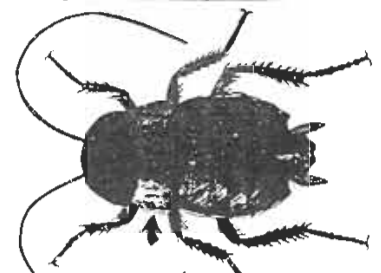
The Oriental cockroach is a large black insect that is often called water bug or black beetle rather than a cockroach by many people. The males have wings which cover about $\frac{3}{4}$ of their bodies. The females are essentially wingless possessing only short wing pads (Fig. 1).

LIFE CYCLE

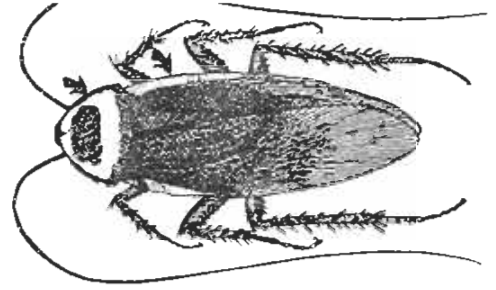
The female Oriental cockroach produces an capsule which contains an average of 16 eggs. During its lifetime, a female may produce about 8 egg capsules. These egg capsules are dropped in water meter boxes and other protected places where the adults live. Development from egg to adult may take from 1 to 2 years. In southern California, the Oriental cockroach has a seasonal cycle, with adults appearing in May and June and dying off in July.

HABITS

In southern California, the Oriental cockroach prefers to live outdoors. It is commonly found in damp, dark, moist, humid places such as water meter boxes, sprinkler irrigation valve boxes, cracks in concrete, under concrete slabs, behind brick veneer voids, behind wood siding of buildings in cold joints and expansion joints in concrete, in weep holes of concrete block walls, in ground cover such as ivy, and in sewers. This cockroach often enters buildings under doorways that are not properly weather stripped. Once these roaches enter classrooms, they often hide under bookcases which are common in the instructional areas of schools. Cardboard boxes used for storage in classrooms provide good hiding places for these roaches indoors.



AMERICAN COCKROACH



DESCRIPTION

The American cockroach is reddish brown except for a pale-brown or yellow band around the edge of the pronotum (the section behind the head). This is the largest of the house-infesting cockroach which averages about 1 1/2 inches in length. Both males and females have fully formed wings but they seldom fly (Fig. 2). The American cockroach is one of the most common roach on ships.

LIFE CYCLE

The developmental period of American cockroaches from egg to adult averages about 600 days. The average life span of a female is about 400 days. The egg capsule contains about 14 to 16 eggs and about one capsule is produced per week with a female producing a total of about 57 egg cases in her lifetime.

HABITS

In southern California, the American cockroach is commonly found in manholes and laterals of the sewer system. They can enter buildings by crawling along plumbing lines. American cockroaches frequently enter buildings through floor drains particularly when these drains dry out. They are also found in basement areas of buildings and in steam tunnels of older structures.

WHAT YOU CAN DO TO HELP

SANITATION

- Dispose of all trash properly and promptly

Make every effort to reduce sources of cockroach food and water both indoors and outdoors

- Repair all water leaks promptly

HARBORAGE ELIMINATION

- Reduce and eliminate clutter indoors and outdoors
- Do not keep paper bags, boxes, newspapers, and cardboard boxes indoors.
- If you have to store materials in classrooms, store them in plastic containers with tight fitting lids (Fig. 3)

EXCLUSION – keeping pests from entering a structure from outside is known as exclusion.

- Caulk, seal, screen, and patch cracks, crevices and other entry points used by outdoor cockroaches to gain entry to structures.
- Weatherproofing of doors and windows, caulking cracks, sealing around plumbing and electrical penetrations in walls, trimming vegetation back from structures, etc. are all important exclusion tasks.

PHYSICAL REMOVAL

Los Angeles Unified School District uses non-toxic, LoLine sticky traps to catch crawling pests. These traps are very effective in catching American and Oriental cockroaches because they use a food attractant to lure roaches to the traps. To be effective, LoLine traps must be placed in the right locations to intercept and entrap roaches. **PLEASE DO NOT** move LoLine traps that were set out by the District's IPM technicians. These traps cost about 65 cents each so **please do not throw them away after they caught a few roaches**. Let the traps fill to capacity before throwing them away. Roaches caught on a sticky trap die slowly and they release an aggregation pheromone in their feces which attract other roaches of the same species to the trap thus increasing the effectiveness of these traps.

VACUUMING

Oriental and American cockroaches found indoors can be quickly and easily removed with a vacuum device. Vacuums that have High Efficiency Particulate Air (HEPA) filters are preferred because they prevent cockroach allergens from becoming airborne where they can be inhaled.

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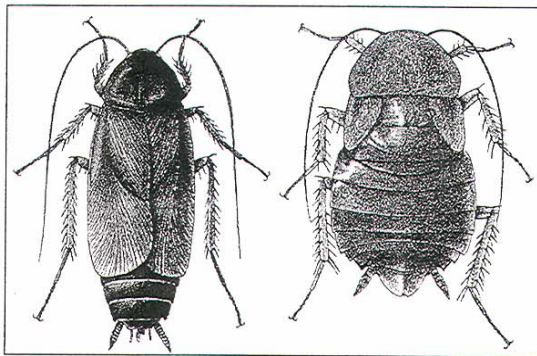


Fig. 3-11. Oriental cockroach: male (left), female (right).

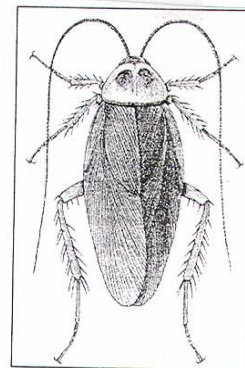


Fig. 3-12. American cockroach.