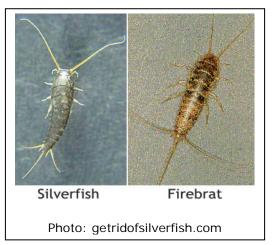


Cornell University Cooperative Extension of Westchester County

3 West Main Street, Suite 112 Elmsford, NY 10523 Tel: 914-285-4620 / Fax: 914-285-4624 E-mail: westchester@cornell.edu Web: www.cce.cornell.edu/ westchester

## SILVERFISH AND FIREBRATS



**INJURY**: The silverfish (*Lepisma saccharina*) and the firebrat (*Thermobia domestica*) cause damage in homes by eating foods and other materials that are high in protein, sugar or starch. They feed on cereals, moist flour, any paper on which there is glue or paste, sizing in paper including wall paper and book bindings, starch in clothing and rayon fabrics.

**DESCRIPTION**: Both silverfish and firebrats are slender-bodied, about 1/2 inch in length and wingless. Their bodies are covered with scales, shiny silver or pearl gray for silverfish, and mottled gray for firebrats. The immature insects look like the adults but are smaller in size. Both have two long antennae at the head end and three long tail-like appendages at the hind end. The appendages are almost as long as the body.

Silverfish and firebrats are common in houses throughout the

United States. Silverfish live and develop in damp, cool places, especially basements. Large numbers can sometimes be found in new buildings in which the walls are still damp. The firebrat lives and develops in hot, dark places such as around furnaces, fireplaces and in insulation around hot water or heat pipes. Both are active at night and hide during the day. In apartment houses these insects follow pipelines from the basement to the rooms on lower floors where they find food. They may be found in book cases, around closet shelves, behind baseboards, and behind window and door frames.

**LIFE HISTORY**: Silverfish and firebrats develop slowly under usual household conditions and produce few young. They are able to live without food for several months. The females lay eggs at any season in secluded places such as behind books or on closet shelves. Silverfish lay eggs singly or only a few at a time, but may deposit several batches over a period of weeks. Firebrats deposit about 50 eggs at one time, and again, may lay several batches. Eggs hatch in 2 weeks or longer and the rate of growth of the young depends on the temperature and humidity in the building. Silverfish and firebrats may reach maturity in 3 to 24 months.

**MANAGEMENT**: Silverfish like cool moist environments. Firebrats like warm moist places. Decrease moisture and humidity where possible. Insecticides that are labeled for these pests have traditionally been available. If pesticide control is chosen, all label directions should be followed exactly as a pesticide label is a legal document. Anything that can be done to close up openings and modify the temperature and moisture levels in the environment would be a more permanent control measure. Be sure to use the proper caulking compounds around heat and hot water pipes.

11/81 Prepared by Carolyn Klass, Sr. Extension Assoc., Department of Entomology, Cornell University, Ithaca, NY (Slightly Revised 1/89). 2/7/19 Slightly revised, by Gerald G. Giordano, Senior Horticulture Consultant/Extension Community Educator, Cornell Cooperative Extension of Westchester County.

Neither Cornell Cooperative Extension, Cornell University nor any representative thereof makes any representation of any warranty, express or implied, of any particular result or application of the information contained herein or regarding any product. It is the sole responsibility of the user to read and follow all product labeling instructions and to check with the manufacturer or supplier for the most recent information. Nothing contained in this information should be interpreted as an express or implied endorsement of any particular products or criticism of unnamed products. The user is responsible for obtaining the most up-to-date pest management information. Contact any Cornell Cooperative Extension county office or NYSDEC Bureau of Pest Management Information Portal (http://www.dec.ny.gov/nyspad/?) pesticide information website. The information herein is no substitute for pesticide labeling. The user is solely responsible for for reading and following manufacturer's labeling and instructions.

filename: silverfish/firebrats.2019.doc

## Building Strong and Vibrant New York Communities