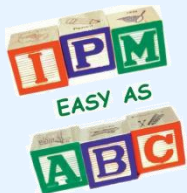




Silverfish, Firebrats, Booklice, and Springtails

Inconsequential insects often found in
sensitive environments

Nebraska Extension

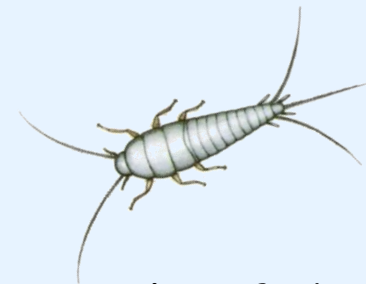


These insects feed on organic matter

- ❖ Paper, book bindings
- ❖ Starchy materials
- ❖ Fabrics and wallpaper
- ❖ Mold



Booklouse



Silverfish



Springtail



Firebrat



Silverfish and Firebrats

- ❖ About $\frac{1}{2}$ " long when fully grown
- ❖ 2 long antennae and a flattened-carrot shape
- ❖ Wingless
- ❖ 3 long appendages on the posterior end



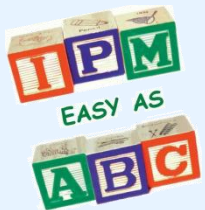
Booklice



- ❖ Tiny, grayish, soft-bodied insect
- ❖ Crawling, often around paper
- ❖ Wingless



Photo: University of Nebraska—
Lincoln Department of Entomology



Springtails

- ❖ Tiny jumping insects
- ❖ Found in damp locations or around potted plants or greenhouses
- ❖ Feed on mold, fungi



Furcula, a forked structure, that helps springtails jump



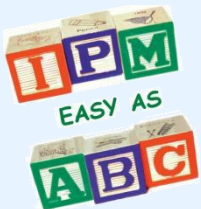
Silverfish and Booklice

- ❖ Associated with cardboard boxes of materials stored in damp places
 - Store materials in plastic bins with tight-fitting lids



Firebrats

- ❖ Look like silverfish, but often brown
- ❖ Prefer moist areas above 90°F
- ❖ Most commonly found in furnace and boiler rooms



Monitoring

Photo: University of Nebraska–Lincoln

❖ Any kind of sticky trap will catch these insects



Non-chemical management is best

- ❖ Fix moisture problems
- ❖ Reduce humidity to <50% in libraries and paper stock rooms
- ❖ Use desiccants, if needed
- ❖ Reduce overwatering of plants
- ❖ Greenhouses may need special attention



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