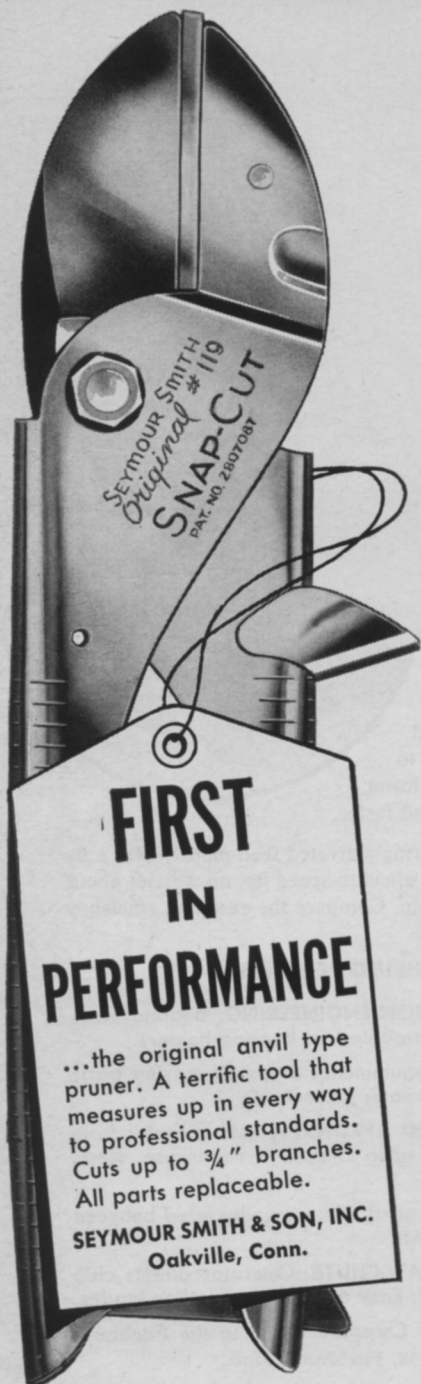


SEYMOUR SMITH  
**SNAP-CUT®**  
PRUNERS

# NO. 1 PRUNER



**FIRST**

**IN**

**PERFORMANCE**

...the original anvil type pruner. A terrific tool that measures up in every way to professional standards. Cuts up to 3/4" branches. All parts replaceable.

**SEYMOUR SMITH & SON, INC.**  
Oakville, Conn.



Lightweight but powerful **MAC 2-10** chain-saw said to make arm's length tree work easier, safer.

## McCulloch Introduces Two Ultra-lightweight Chain Saws

Two power chain saws in the 10-pound class are now marketed by McCulloch Corp. The 10½ lbs. MAC 1-10 and the 10¾ lbs. MAC 2-10 are said to be 25% lighter than saws of comparable performance.

Although "ultra-lightweight" (as McCulloch calls them) and small, the gasoline powered MAC 1-10 and MAC 2-10 perform all cutting jobs where maximum power and handling ease are desirable, McCulloch claims. Other features include a safety-designed slider-type ignition switch and a right hand automatic starter.

Both MAC 10 saws have a fingertip primer which eases starting and an idle control device which ends the need to hold the throttle open when the starter is pulled. Write McCulloch Corp., 6101 W. Century Blvd., Los Angeles 45, Calif., for further information.

## Chemicals Group Meets Oct. 17

The National Agricultural Chemicals Association holds its 32nd Annual Meeting Oct. 17-20 at the Diplomat Hotel, Hollywood-By-The-Sea, Florida.

## Know Your Tree and Shrub Pests

For some time the editors of *Weeds Trees and Turf* have been aware of the need for a color identification chart of insects of ornamental plants. Many requests for sources of color guides and booklets reach WTT offices. Suppliers of fine color printing of insect pests are few, and when one is announced, the agency producing such a guide quickly finds its supplies exhausted by orders.

Hearing that Purdue University, Lafayette, Ind., was preparing a four-color insect guide, the editors arranged to have extra copies printed at the same time so that every WTT reader would receive one in his magazine.

These attractive full-color photo prints are original with Purdue entomologists. Controls recommended on the back are in accord with product directions and the latest test results.

Do you know that there are two color phases of the oyster-shell scale? Or that fall web-worm is a pest in the spring also, because it has two generations per year? Answers to these and other questions may be found on the reverse side of the facing page.

Eleven species and controls are presented in detail. Each section gives the common and technical name of the pest and lists common plants the insects are found on. Plants shown in each color picture are identified.

There are descriptions of each pest's habitat and range, the season when the insect is most plentiful, and some habits of each. Controls included are both mechanical and chemical; chemicals of choice are listed.

Requests for extra single copies will be accepted as long as supply lasts. These are free as a reader service. Write to Reader Service Department, *Weeds Trees and Turf* magazine, 1900 Euclid Avenue, Cleveland, Ohio.

# COMMON TREE AND SHRUB PESTS

FOR SAFE AND EFFECTIVE USE OF INSECTICIDES, ALWAYS IDENTIFY THE PROBLEM CORRECTLY.



1. Oystershell scale



5. Bagworm



8. Elm leaf beetle



2. Flatheaded borer



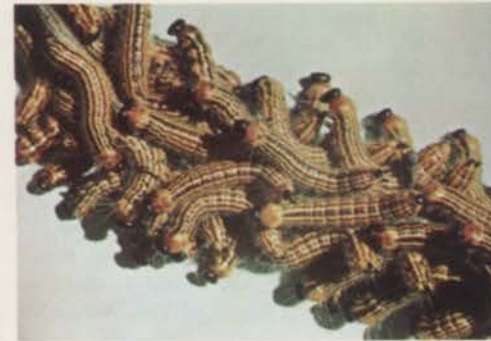
6. European pine shoot moth



9. Twig girdler injury



3. Fall webworm injury



10. Yellow-necked caterpillar



4. Boxelder bug



7. Red-headed or  
LeConte's sawfly



11. Spruce mite injury

# DESCRIPTION AND CONTROL

**1. Oystershell Scale (Brown Race),** *Lepidosaphes ulmi* (L.). Picture shows mature scales on twig.

Commonly found on hybrid lilac, poplar, redbud, dogwood, ash and fruit trees. The insect overwinters as a white egg beneath the scale. There are two generations each year with young scales present in early June and again late July. The grey race (often present on common lilac) has only the spring generation.

Control with oil sprays during dormant season or with malathion or DDT sprays when the young are present.

**2. Flatheaded Apple Tree Borer,** *Chrysobothris femorata* (Olivier). Picture shows mature larva in tree trunk.

A common pest of maple and fruit trees. It often kills trees the first **two** or **three** years after transplanting. There is one generation each year. Adults are present in May and June.

Prevention is better than control. Spray or dust tree trunks with DDT or dieldrin. Wrap trunks of newly set trees with paper or burlap. Fertilize and water adequately.

**3. Fall Webworm,** *Hyphantria cunea* (Drury). Picture shows typical webbing on walnut.

A widely distributed pest that feeds on many kinds of fruit, shade and woodland trees. Hairy caterpillars feed inside the web. This pest has two generations each year. Webs are present in both late spring and early fall.

Damage may be prevented by spraying or dusting with DDT. The insecticide must penetrate the webs.

**4. Boxelder Bug,** *Leptocoris trivittatus* (Say). Picture shows adult and nymph (adult has wings, nymph on left does not).

Adults and nymphs feed principally upon seed-bearing boxelder trees, but are most important as a nuisance in and around homes. In the fall, bugs collect on sunny side of buildings before moving into walls and other protected places to overwinter. They continue to crawl about on warm days throughout the winter.

Control bugs on trees and those which cluster outside buildings by spraying with dieldrin.

**5. Bagworm,** *Thyridopteryx ephemeraeformis* (Haworth). Picture shows overwintering bags on juniper twig.

A common and destructive pest that feeds on both evergreen and deciduous plants. The eggs overwinter in the bags and hatch in late May and early June.

Control by picking off and burning the bags during the fall, winter and spring. Spraying is necessary for large trees or extensive infestations. Use malathion, diazinon, toxaphene, lead arsenate or DDVP. Spray as soon as possible after the eggs hatch.

**6. European Pine Shoot Moth,** *Rhyacionia buoliana* (Schiffmüller). Picture shows overwintering larva in terminal pine bud.

An introduced pine pest of increasing importance throughout Indiana. The brown, black-headed larvae feed in the buds and cause dwarfed, malformed trees.

Control by spraying with guthion or DDT in mid-June and repeat in **ten** days. Prune off and burn infested buds and terminals in early July.

**7. Red-headed Pine Sawfly** (LeConte's Sawfly), *Neodiprion lecontei* (Fitch). Picture shows mature larvae and cocoons on pine terminal.

This is a common species of sawfly which defoliates pine trees by eating the old needles. There are two overlapping generations with colonies of larvae present from late May until late fall. The insect overwinters in brown cocoons.

Control by spraying or dusting with DDT when the larvae are young.

**8. Elm Leaf Beetle,** *Galerucella xanthomelaena* (Schrank). Picture shows adults on damaged elm leaf.

Adults and the small yellow to black larvae skeletonize elm leaves during the summer. Chinese elms are particularly susceptible. There are two generations each year, and damage becomes evident in late July. In the fall, adults move into sheltered places to overwinter, frequently becoming a problem in homes and other buildings.

Control on elm trees by spraying with dieldrin in mid-June and again in late July. Heavier concentrations of dieldrin applied around doors and windows helps prevent migration indoors.

**9. Twig Girdler,** *Oncideres cingulata* (Say). Picture shows girdling damage on oak twig.

Twigs and small branches of nut trees and a few shade trees may be girdled in late summer by grayish long-horned beetles. Trees may be deformed and nut crops reduced.

Control by gathering and burning all severed branches in late fall. These contain the eggs and larvae. Spray with DDT at 2-week intervals starting in late August.

**10. Yellow-necked Caterpillar,** *Datana ministra* (Drury). Picture shows a typical colony of the caterpillars.

These caterpillars attack the foliage of fruit and ornamental trees, especially pin oak. When disturbed, the larvae elevate both ends of the body. There is a single generation each year, and most damage occurs in July and August.

Control by spraying or dusting with DDT.

**11. Spruce Spider Mite,** *Oligonychus ununguis* (Jacot). Picture shows arbor vitae foliage damaged by the spruce spider mite. Note the discoloration, webbing, and eggs. Mites are not insects but are closely related to them.

The spruce spider mite attacks most evergreen trees and shrubs causing the foliage to turn white, yellow or brown. The overwintering eggs hatch very early in the spring. Damage usually starts at the base of the plant and progresses upward and outward.

Control by spraying as needed with a miticide, such as Kelthane, chlorobenzilate, Tedion, or Ovex.

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement of products by the Indiana Cooperative Extension Service is implied.