## Methuselah Of The Insect World To Emerge In Western Pa.

UNIVERSITY PARK (Centre Co.) — One of the world's most mysterious insects is about to invade the skies over western Pennsylvania, but an expert in Penn State's College of Agricultural Sciences said it's not a cause for alarm.

Residents of Allegheny, Armstrong, Beaver, Butler, Cambria, Clarion, Crawford, Fayette, Forest, Huntingdon, Indiana, Lawrence, Mercer, Venango, Washington and Westmoreland counties soon will see an emergence of periodical cicadas, commonly but mistakenly called 17-year locusts. "These insects

are harmless to people, but they can damage shade trees, fruit trees or high-value ornamentals," said extension entomologist Gregory Hoover.

Damage caused by periodical cicadas occurs during egg-laying. Using the blades of a saw-like device on her abdomen, a female will cut several small pockets in the bark of a twig before depositing 400 to 600 eggs. This process can cause small limbs or seedlings to wilt and may provide an opening for disease. Adults live only a few weeks, but the twig injury they cause may be apparent for several years.

"Periodical cicadas are some-

times called nature's pruners," said Hoover. "Although adult cicadas are difficult to control, nursery owners or others with trees at risk may want to apply registered insecticides around the time mating starts — about 10 days after they first hear the males singing." If a pesticide is used, label instructions should be carefully read and followed.

Other protection methods include covering the crown of valuable trees with a fine mesh or delaying the planting of trees until the adult cicadas are gone, usually in early July.

The periodical cicada is native

significant, but even on a small scale it can mean a large economic difference. Saving an extra seven percent of 1,000 tons of forage valued at \$30 per ton is in effect a savings of \$2,100 per year. In large storage situations, the difference becomes drastic.

I urge all producers to look into the source of their information before making a decision with such a large effect.

- Leroy Shefchik Chairman **International Silo Association** Green Bay, Wis.

to North America and exists nowhere else in the world. There are six species of periodical cicadas, three with a 17-year cycle and three with a 13-year cycle. Those found in Pennsylvania are 17-year periodical cicadas.

Adult periodical cicadas are about 1 1/2 inches long with reddish eyes and orange wing veins. They are smaller than their cousins, the annual or dog-day cicadas usually seen and heard in the heat of late summer.

Periodical cicada populations - called broods — are identified by Roman numerals. Each brood is classified by the year in which it emerges. The cicadas surfacing this year are members of Brood VIII, which last was seen in 1985. **Brood VIII distribution includes** 16 counties in western Pennsylvania.

Cicada nymphs spend 17 years from 2 to 24 inches underground, sucking nutrients from plant roots. In late April and May, they burrow to within an inch of the soil surface, where they await an undetermined signal for emergence. If the ground is too damp, they often build small earthen turrets over their holes to protect their escape routes from too much moisture.

When the time is right, usually in late May or early June, the nymphs exit the soil through half-inch holes and climb a foot or more up trees or other objects. Within an hour, they shed their nymphal skins and become adults.

Adult cicadas are clumsy flyers, often colliding with objects in flight. Males begin their constant singing shortly after they emerge, but the females are silent. When heard from a distance, the cicadas' chorus is a whirring monotone, sometimes described as eerie-sounding. On rare occasions when an adult eats, it sucks fluid from small twigs but does not feed on leaves. Ten days following emergence, mating takes place.

Adults live up to four weeks above ground. Six to seven weeks after the eggs are laid, the nymphs hatch and drop to the ground. There, they enter the soil, not to see the light of day for 17 years.

For a free fact sheet on periodical cicadas, visit the Web at http://www.ento.psu.edu/ extension/factsheets/ periodical-cicada.htm or contact the Penn State Cooperative Extension office in your county.



## (Continued from Page A10)

formation since their study began early in 2000. Their data consistently shows average dry matter losses near 10 percent. Informa-tion from Brigham Young University shows similar results. This difference of seven per-

cent of dry matter may not seem

