# Alien insects can be pests

meant to sound unfriendly, but foreign bugs can be the biggest

Whether they're Medflies from Africa, gypsy moths from Europe, fire ants from South America, or other alien insects, they worm, sting, crawl, and chew their way into every corner of the country in a most uncontrollable manner.

On balance, alien creatures cause more damage than native American bugs. At least half of all agricultural losses in the United States - about \$22.9 billion worth a year - are attributable to foreign pests, most of them insects.

Foreign insects do so well on U.S. soil basically because they leave their natural enemies, their "biological control agents," back home. Some are so well established here that there's no getting rid of them. Science simply has not moved as fast as the bugs.

### We're Outnumbered

Scientists admit that the best hope at this point is to try to reduce their numbers to levels that most people can live with. But the insects don't make that job easy. There are more insect species than all species of plants and other animals put together.

So far nearly a million distinct kinds have been described, and an estimated 2 to 9 million more unknown varieties are crawling around out there. The United States has 150,000 to 200,000 kinds, about 600 to 700 of which are foreign in origin.

Only about 5 percent of all insects are considered pests, but about 40 percent of the foreign ones here are. Alien insects are so unwelcome that the only way they can legally enter the country is dead: dried and preserved.

Most of the unwanted live ones -

WASHINGTON - This is not those not issued special visas to be used for scientific research - slip in with returning or visiting travelers. Right up there at the top of the U.S. Department of Agriculture's current "wanted list" of foreign bugs are the various fruit flies: Mediterranean, oriental, and South American.

USDA inspectors intercept more fruit flies than any other bugs. It would take just one infested piece of souvenir fruit to create another California Medfly crisis.

#### **Costly Critters**

Nearly \$100 million has already been spent trying to eradicate the flies from California, the only state besides Hawaii in which they are now found. Medflies have been longtime residents of Hawaii, the probable source of the California infestation.

Officials hope to declare California completely Medfly-free by the end of the summer. Fields have been sprayed, traps put out, and a citizen Medfly program set up. Residents are to turn in any Medflies found in backyard fruit trees. The rice-size Medfly larvae live off more than 200 varieties of fruit and vegetables.

The well-traveled gypsy moths, which arrived here from Europe before the first quarantine laws in 1912, have established residency in the Northeast and are moving south and west, showing up as far away as Florida, California, Oregon, and Washington.

In their voracious caterpillar stage, gypsy moths ate the leaves off a record 5 million acres of trees in 1980 and more than doubled that last summer, defoliating 13 million

"It looks like winter in July in the forests," said entomologist Dr. Warren Johnson of Cornell University. This summer is ex-

Can you unscramble the animal's name in each of these riddles? Here are

some big hints · Each animal belongs to a group of animals with the same kind of feet or limbs (arms and legs) Scientists have given these groups very fancy names

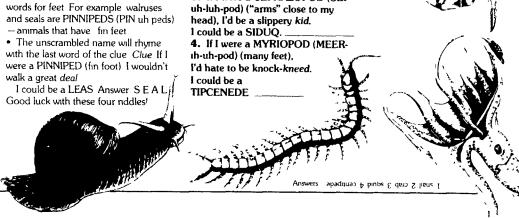
The 'pod' and 'ped parts of the group names come from Greek and Latin

1. If I were a GASTROPOD (GAStruh-pod) (stomach foot), I might creep but I probably wouldn't sail. I could be a NAILS.

**FUN ON FOOT** 

2. If I were an ARTHROPOD (ARthruh-pod) (jointed limbs), it would be easy for me to grab. I could be a RACB.

3. If I were a CEPHALOPOD (SEFuh-luh-pod) ("arms" close to my head), I'd be a slippery kid.



pected to be as bad or worse.

And the gypsy moth is here to stay. It has been in this country so long that it is practically a naturalized citizen. The moths were first brought to Massachusetts in 1869 by a French naturalist who was trying to breed a better silkworm. Some moths escaped from the lab and by 1889 the caterpillars were so thick on the trees that they "stuck together like cold macaroni."

At the rate they're now traveling, they may eventually change the character of some forests, Johnson said. The moths travel long distances on the underside of campers and recreational vehicles, where the non-flying female frequently lays her eggs.

Although the caterpillars like numerous species of trees, they prefer oak. "Oak is no longer going to be the dominant tree in some areas," Johnson said. "One day

there may be no such thing as an oak hardwood floor." It takes a heavy infestation to actually kill a tree, which can survive two or three defoliations.

## Southern Nuisance

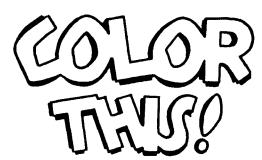
Becoming almost as infamous in the South as the boll weevil, which crossed the border from Mexico in 1892, red fire ants have invaded more than 230 million acres in nine southern states. Officials are trying to keep them from moving farther west across Texas.

The vicious ants, which probably boarded a freighter in Brazil and sneaked into the country through Mobile, Ala., in the 1930s, have made a real nusance of themselves. They sting people repeatedly. They wreck farm equipment by building foot-high nesting mounds that are as tough as tree stumps when dry. Each mature mound swarms with 200,000 ants and there may be 50 mounds per area.

The world's most destructive pest of stored grains, khapra beetles from India started infesting U.S. spice processing plants and warehuses in 1980 and 1981 for the first time since the 1950s.

The return of these hardy beetles, who hitchhike into the country in spice shipments and packing crates, forced the USDA this year to make fumigation mandatory for such things as brassware from India and chili peppers from Pakistan. Inspectors of the USDA Animal and Plant Health Inspection Service intercept the beetles at seaports 150 to 300 times a year.

Not all foreign bugs are bad. Some are actually sought after by USDA agents based in Europe, Asia, and South America. Most are brought here because they like to eat bad bugs. None has turned out to be a pest.



- ORANGE GREEN YELLOW LT.BROWN BROWN 10. LT. GREEN
- THE RHINOCEROS BEE. TLES ARE THE LARGEST BEETLES FOUND IN THE UNITED STATES. THEY ARE ABOUT TWO AND A HALF INCHES IN LENGTH. THE MALES HAVE ODDLY SHAPED HORNS PROJECT-ING FROM THE HEAD. THE PROPER NAME FOR THIS CREATURE IS DYNASTES GRANTII.

