

# Safeguarding, Intervention, and Trade Compliance Officers Confiscate Giant African Snails in Wisconsin

Safeguarding, Intervention, and Trade Compliance (SITC) officers with the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) confiscated more than 80 illegal giant African snails from commercial pet stores and a private breeder in Wisconsin in November. Acting on a tip from the Wisconsin State Plant Health Director's office, Federal regulatory officials moved in and seized the large land snails from two pet stores in Nekoosa and from a residential garage in Appleton, WI.

As part of an immediate national call to find, assess, and delimit the population of the snail in the United States, SITC officers will seize all live snails of the Achatinidae family. Several species of this snail family are capable of becoming agricultural pests here and can pose a serious health risk to humans. The Plant Protection Act prohibits the unauthorized importation, entry, exportation, or movement in interstate commerce of the giant African snail without an APHIS permit. APHIS Plant Protection and Quarantine (PPQ) officials protect American agriculture and natural resources from the risks associated with entry, establishment, or spread of an invasive species such as the giant African snail.

## The Giant African Snail

Scientists consider the giant African snail, *Achatina fulica*, to be one of the most damaging land snails in the world. It is known to eat at least 500 different types of plants, including breadfruit, cassava, cocoa, papaya, peanut, rubber, and most varieties of beans, peas, cucumbers, and melons.

Believed to be originally from East Africa, *A. fulica* has established itself throughout the Indo-Pacific Basin, including the Hawaiian islands. This

mollusk has also been introduced to the Caribbean islands of Martinique and Guadeloupe. Recently, *A. fulica* infestations were detected on Saint Lucia and Barbados.

In 1966, a Miami, FL, boy smuggled three giant African snails into south Florida upon returning from a trip to Hawaii. His grandmother eventually released the snails into her garden. Seven years later, more than 18,000 snails had been found along with scores of eggs. The Florida State eradication program took 10 years at a cost of \$1 million.

## Description and Life Cycle

Reaching up to 20 cm in length and 10 cm in maximum diameter, *A. fulica* is one of the largest land snails in the world. When full grown, the shell of *A. fulica* consists of seven to nine whorls, with a long and greatly swollen body whorl. The brownish shell covers at least half the length of the snail.

Each snail contains both female and male reproductive organs. After a single mating session, each snail can produce 100 to 400 eggs. This amazing creature can duplicate reproduction through several cycles without engaging in another mating. In a typical year, every mated adult lays about 1,200 eggs.



Figure 1—A penny is used to show the size of giant African snail eggs.



Figure 2—Pale color morph of *Achatina fulica* maneuvers in its environment.



Figure 3—Giant African snail infestation on the Caribbean island of Saint Lucia.

Figure 4—Shell of a full-grown giant African snail.

Although this species thrives in tropical and subtropical areas, it can survive cold conditions and snow. In northern areas, the snail would become slow and sluggish, almost in a hibernating state, until warm weather returns.

## Spread

Like other exotic land snails, giant African snails may enter the United States as hitchhikers on imported cargo. However, PPQ has intercepted these pests more frequently at airports from arriving international travelers who may consume the snails as meat or folk medicine, or wish to keep them as pets.

## Damage

Giant African snails—*Achatina achatina* L., *Achatina fulica* Bowdich, *Archachatina marginata* S., and other species in the family Achatinidae (Gastropoda)—are large, terrestrial snails of African origin that cause extensive damage to plants in tropical and subtropical agricultural systems and the environment. These snails are also known to carry organisms that can cause serious diseases in humans, including *Angiostrongylus cantonensis* and potentially *A. costaricensis*. These organisms can be transferred by ingesting improperly cooked snail meat or by handling live snails and allowing their mucus to contact human mucous membranes such as those in the eyes, nose, and mouth.

## Control

Since several species of this snail family are capable of becoming agricultural pests and can pose a serious health risk to humans, PPQ officials have prohibited the unauthorized importation, entry, exportation, or movement in interstate commerce of the giant African snail without an APHIS permit.

SITC officers will confiscate and destroy the snails of anyone without the proper permit. To destroy unwanted giant African snails and their eggs,

- Put in deep freezer at  $-10^{\circ}\text{C}$  for 3 days,
- Boil, or
- Immerse in rubbing alcohol or ethanol for 24 hours

To protect against contracting *Angiostrongylus* worms, snail handlers should wear latex gloves.

## Additional Information

For more information, visit the APHIS Web site at <http://www.aphis.usda.gov/oa/invasive>.

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