



The Giant African Snail (*Achatina fulica*)

Where is the Giant African Snail from?

The Giant African Snail is native to East African coastal regions. While it may have been originally native to this area, it is now widely distributed and can be found on the Asian continent including Bangladesh, China, Indonesia, Malaysia, Philippines Thailand and India among others. It has also spread to several Pacific islands including Hawaii and Fiji. More importantly, within recent times it has spread to countries of the Western Hemisphere as well, including Brazil, Martinique, Guadeloupe, St. Lucia and Barbados. It is not found in Trinidad and Tobago.

How can something like a snail spread so far?

The snail is a land snail. It will drown when submerged in water and will die in salt water. So how is it possible for it to spread so widely to far off countries? The answer is simple. Human activity is the main cause of its current wide distribution. People collect shells while on holiday in foreign countries and carry them home. Some people even deliberately smuggle snails into countries as pets or as a delicacy. Finally the snail can move around in or on containers, (hitchhike) through trade between countries. Were it not for man's involvement this snail may not have moved out of its native regions.

What's important about this snail?

It is polyphagous: Polyphagous means it eats a wide variety of material. It prefers decayed vegetation and animal matter, lichens, algae and fungi. It also feeds on a large number of plants including most ornamentals, and vegetables and leguminous crops. It can also feed on the bark of trees such as citrus, papaya, rubber and cocoa. In vast numbers this snail can cause serious damage to crops and ornamentals.

It can aestivate: What is aestivation? During aestivation the snail withdraws into the shell and becomes dormant for long periods. Under poor conditions it can remain in this state for years. It is a tropical snail, and like most other snails thrives in moist humid conditions. It is able to survive unfavourable dry or cold conditions, even snow, by aestivating. At this time it is possible

to collect the shell thinking it to be empty and move it to other areas. Once the snail finds favourable conditions again, it regains normal activity.

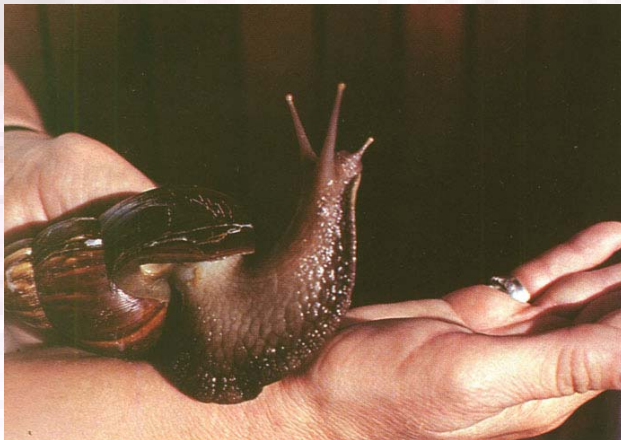
It's a hermaphrodite: A hermaphrodite is an animal which has both male and female reproductive organs. Most snails are hermaphroditic and after a single mating in which sperm is exchanged, both animals are capable of producing several batches of eggs. It can lay eggs over a period of several months after only one mating.

It's very prolific: It can multiply rapidly and establish a new population within a short period of time. It can lay up to 1,200 eggs per year. These eggs hatch within 3 weeks time and the young snails become sexually mature at about one year old. They can live for up to 5-6 years. It is recorded that 20 tonnes of snails were collected on one day in Fiji, just 4 years after its introduction.

Is the snail dangerous to humans?

The snail is not poisonous. It cannot bite and has no defense mechanisms apart from its shell. It is important because it is known to be a vector of a human disease. The disease is a type of Meningitis (Eosinophilic meningitis) which is actually caused by a parasite called the rat lungworm (*Parastrongylus contonensis*) which is sometimes found in the body of the snail. The snail is edible and the parasite is passed to humans through eating improperly cooked snails. These persons then develop meningitis. Meningitis is not contagious to other humans but it is a very dangerous illness.

What does it look like?



The adult snail is very large and can measure up to 20 cm with a shell length of 6 -12.5 cm. Large specimens can weigh up to 1 kg. The shell is relatively long and narrow in shape and can range from 5-20 cm in length.

The shell is usually light brown with reddish brown and light yellowish vertical streaks. The body of the snail is dark brown.

There are 2 pairs of tentacles on the head: a pair of short lower tentacles and a large pair of upper tentacles with round eyes at the tips.



Giant African Snail



Common Local Snail *Orthalicus undatus*

The shell of the Giant African Snail closely resembles that of a common local land snail, known as *Orthalicus undatus*, which is often found in gardens and climbing on concrete walls. Generally the shell of the Giant African Snail is narrower than the common local species.



Giant African Snail Shell

Megalobulimus oblongus is another common local snail which because of its size may be mistaken for the Giant African Snail.

This species however has a shell of even light brown to pinkish colouring, without any obvious stripes or markings.



Megalobulimus oblongus shell

The Giant African Snail is a pest



The giant African Snail prefers to feed on decaying organic matter. It will however feed on vegetables, especially cabbage, cauliflower, cucumbers and legumes. It will also feed on fruit crops like banana, papaya citrus and cocoa.

Snails are inactive during the day and can be seen at night in moist and sheltered areas. They eat away at plant leaves and leave slime trails. In large numbers they will cause significant damage to cultivated crops. It is a serious quarantine pest.

What is being done?

This snail has been observed in Guadeloupe since 1983. Since then it has spread to St. Lucia in 2000 and Barbados in 2001.

A survey conducted in January 2004 found no evidence of the snail in Trinidad and Tobago.

The Ministry of Agriculture, Land and Marine Resources is determined to keep this exotic pest out of our islands.

Quarantine/Inspection staff at all ports of entry has been alerted to the presence of this pest in the region. Inspection of goods and containers for this pest is consistently conducted.

Programmes are being currently developed to minimize the risk of entry of this pest and to effectively manage the pest in the event of an introduction.



What can you do?

The spread of this snail across the globe has been significantly assisted by man. You can do your part to prevent the entry of this pest into our islands.

- × If travelling to Martinique, Guadeloupe, St. Lucia or Barbados - **do not collect shells** and return to Trinidad and Tobago with them. At times aestivating snails can be mistaken for empty shells.
- × **Do not collect shells** from any other country in the Caribbean region or South American mainland. There is active trade between countries in the region and snails can 'hitchhike' on produce and containers and be easily introduced to a previously snail free area. It is quite possible that the pest can be present in a country and not yet officially detected.
- × Report sightings of any unusual snail observed, to the nearest Ministry of Agriculture office.

End.

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