Giant African Snail Experience in Barbados

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Background

- On 27 September, 2000 a visiting Australian entomologist collected a number of snails from Spring Garden, St. Michael
- **Based on her experience in Western Samoa she identified them as** *Achatina fulica*
- Through the auspices of Dr. Gene Pollard of the FAO, samples of shells were sent to Dr David Robinson (USDA) for identity confirmation
- On 18 October, 2000 confirmation was received that the shells were those of the Giant African snail (Achatina fulica)

Proposed workplan

- Baiting with metaldehyde based products Blitzem and Deadline (initiated in 2002)
- Spraying with a solution of metaldehyde powder and metaldehyde emulsion product Slugit
- Baiting with iron phosphate based product Sluggo
- **Free baits provided by MA to general public in GAS infested areas**
- **Special areas e.g. gullies treated using backpack pellet blowers**
- 21 incinerators (converted 50 gal metal drums) provided to community groups to burn collected snails

Proposed workplan

- **Stakeholder meeting held in 2005. GAS Task Force formed**
- Ministry of Health involved in control and public awareness campaign Flash card produced for their vector control officers in the field
- **FAO TCDC project equipment, bait, posters, PR specialist**
- Public awareness programme factsheet on GAS prepared and thousands of copies distributed; Survey of public on perceptions of GAS; Town Hall meetings (15 held); Television infomercials prepared through FAO and aired on local TV station; presentations to schools, community groups, clubs and special events e.g. Arbor Day, AgroFest and B'dos Horticultural Society Flower Show; numerous radio interviews on GAS, meetings with soil and soil mix retailers and transporters and plant nursery operators
- Protocols for the control of the Giant African Snail at plant nurseries, for soil and soil mix retailers, for householders and landscapers, for the ports of entry and for areas of interest have been prepared

Collaborative work with USDA





Series of bioassays conducted in the laboratory and field to determine most effective baits and effect of weathering on bait efficacy



GAS team New initiatives in GAS control



MA initiated a bounty scheme for the control of GAS in early 2009. MA pays 50 cents per pound of live GAS. Snails then burnt at MA headquarters at Graeme Hall

Giant African Snail Bounty Program

The Ministry of Agriculture's Giant African Snail Bounty Program has been in effect since late March 2009. A bounty of 50 cents per pound is paid for snails collected by the general public. Anyone can participate in this program. It is a good way to make money for your personal use, for community groups to raise funds for their projects/activities and for other groups to fund various activities such as charitable donations to institutions and helping persons in need throughout the island.

After you or your group has collected the snails, you can take them to the Ministry of Agriculture at Graeme Hall OR you can call the Entomology Section at 434-5107 and ask that the snails be collected. You are required to give your name, address and contact telephone number. In either option, the collected snails are weighed in your presence and you are given a receipt for them. The Ministry's staff will then take the snails to be burnt at Graeme Hall.

The Ministry's Accounts Section will inform you by telephone when you can collect your money or you can call them at 434-5068.

When you take part in the Giant African Snail Bounty Program you are also helping to rid Barbados of this troublesome pest.

Take part now! Help yourself and our island home!



Entomology Section



GAS team New initiatives in GAS control









GAS Bounty Program

From its inception in late March 2009 to the end of January 2013, the amount of GAS collected and burnt was

392 Tons!!!!

This represents over 12,000,000 snails destroyed

GAS Bounty Program collections

Amount of GAS Collected Monthly in the Bounty Programme



Resources used during the period October, 2000 until March, 2016 to combat the Giant African Snai

Title	Cost (\$)
Town Hall Meetings	9,257.92
Chemicals	1,750,053
Vehicle	67,420.48
Cleaning of area	21,440
Bounty payments	514,568
Factsheets	5,000
Equipment	6,000
Total	2,373,739.40

Reported Predators of GAS in Barbados

 Reports of a number of Predators feeding on GAS on the island are: Mongoose (Herpestes auropunctatus) Blackbird (Quiscalus lugubris) Cattle egret (Bubulcus ibis) Duck (Cairina moschata) Chicken (Gallus domesticus) Millipede (Orthoporous antillensis) Centipede (Scolopendra subspinipes) Firefly or Click beetle (*Aspisoma ignitum*) Rats (*Rattus rattus*) and/or (*Rattus norvegicus*) Toad (Bufo marinus)

Mite parasitic on GAS in Barbados

- A mite, *Riccardoella* sp., has been found to be parasitic on GAS in Barbados (Angela Fields, UWI Biology Dept. Cave Hill). Its specific name is yet to be determined
- Two other species of mite, *Riccardoella limacum* and *R. oudemansi* are known to be parasitic on terrestrial gastropods and impair their development by sucking their blood and body fluids

Empty shells of juveniles at the side of the road -



but, despite treatment, the pest persists.



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Thank you