ACTHA contact details
ACTHA
PO Box 160
Jamison ACT 2614
Inquiries: Margaret on 6241 4065
E-mail: margaretning@iprimus.com.au

ACTHA News
Oct–Nov 2007
Newsletter of the ACT Herpetological Association Inc.

Your Committee

President:	Dennis Dyer
Vice President:	Ric Longmore
Secretary:	Joe McAuliffe
Treasurer:	Margaret Ning
Newsletter Editor:	Mandy Conway
Public Officer:	John Wombey
Excursion Officer:	Ric Longmore
Committee Members:	Chris Brown
	Christian Robertson

In this issue

Western Swamp Tortoise, photo by Arthur Georges

Diary date

The *bi-monthly* meetings of the Association are held on the *third Tuesday of the month* at 7.30pm, Western Districts Rugby Club, Catchpole Street, Macquarie.

Upcoming meeting

Tuesday 16 October 2007

Sarah Ross will be completing her Honour's degree on **the role of frogs in an agricultural ecosystem in NSW**. The research focused on their dietary habitats and potential as a natural pest control. Many interesting herps were also found living in that particular environment and Sarah would like to share her experiences.

ACTHA at Questacon

This article by Margaret Ning

As advised in the Aug-Sept 2007 ACTHA Newsletter, our group was invited to hold a reptile weekend at Questacon. Our display was held on the **weekend of 4-5 August 2007** and was a resounding success.

Coastal Carpet Python

Once again, it had all come together very nicely, and on Saturday morning we were assembled in a generously-sized room in the Questacon building, with seven enclosures containing

lizards, snakes and frogs. And in the middle there was the essential tub of lizards, of course! Our regular herptile slide show was up and running, our posters were festooned around the various walls, there was a handful of chairs to give tired legs a break, and ACTHA volunteers were looking resplendent in their herptile T-shirts.

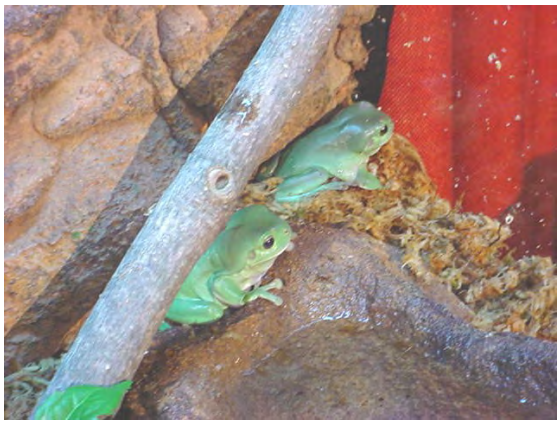
It was actually a slow start, as Saturday morning seems to be the time when the kids go to sport, and families get the chores out of the way before doing the fun things. But soon there was a steady stream of visitors which was a good pace for ACTHA volunteers and their animals to contend with. They came from far and wide. Initially that ranged from Calwell to Gungahlin, but then people from Newcastle turned up and we were finding a very generous smattering of people from Sydney, Brisbane, and the Blue Mountains, etc. Our exhibits included a Children's Python, Carpet Python, Central Carpet Python, Diamond Python, Shingleback, two Central Bearded Dragons,

Questacon staff discussing the attributes of some of the animals on display

four Eastern Blue Tongues, two Water Dragons, a Spiny Tailed Monitor, a Central Netted Dragon and three Green Tree Frogs. We have added to our range of ACTHA posters; and they now include seven posters put together by Geoff Robertson on Southern Tablelands snakes, lizards, and turtles (photos only), and four by Mandy Conway on 'lizards', 'more lizards', 'dragons' and 'turtles' (photos and text).

The Sunday started off a little slowly too, a luxury we are definitely not used to. ACTHA volunteers chatted amongst themselves, and discussed the latest happenings either with their animals or the state of the world. Some young Robertson relatives got to know each other a lot better, taking advantage of being at such a wonderful venue and going for a very good wander. By the end of the day, many more hundreds of visitors had passed through the display, and we all knew that we, and our animals, had been 'on duty' for a long time.

Spiny-tailed Monitor



Green Tree Frogs

It was a different crowd to the people that come to the Botanic Gardens every January for *Snakes Alive!*, as very few of them were aware of our annual display. They were a very polite crowd who were absolutely thrilled to have an opportunity to get up so close to live snakes, lizards and frogs. Many of the visitors completed Questacon's evaluation form at the end of their stay, and it provided us with some interesting insights. When asked what other small animals they were interested in seeing, they mainly reported that they would like to see even more live reptiles, or frogs or spiders.

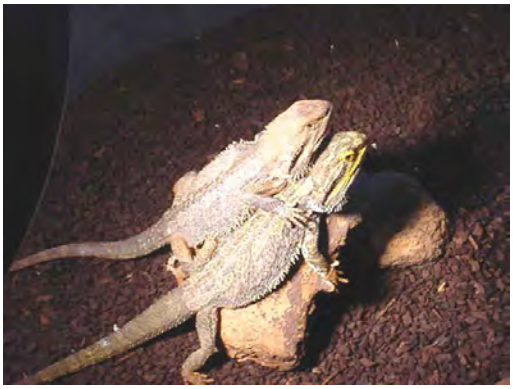
The quote of the weekend was from one young girl who asked one of our ACTHA volunteers if she (the young girl) could take home the blue tongue he was handling, and when he said 'no, it's my daughter's', she responded with 'can I be your daughter then?' Another cute young girl was so impressed with the display that she created a whole new category, of '6', for one response on the evaluation form, as the range of 1 to 5 was inadequate to express her feelings! A couple of delighted young lads very excitedly informed me that they could feel my blue tongue's (very slow!!) heart beat!

At close of business on the Saturday, Gerard, our contact at Questacon, explained that over the last seven years, an average of 1500 visitors passed through the building on the first Saturday in August, and he then delightedly reported that the visitor numbers on our Saturday were 2375. Of course, not all these visitors attended our little exhibition, but I think we can take the credit for some of the increase as the display was reasonably well advertised! Sunday's attendance was 1375.

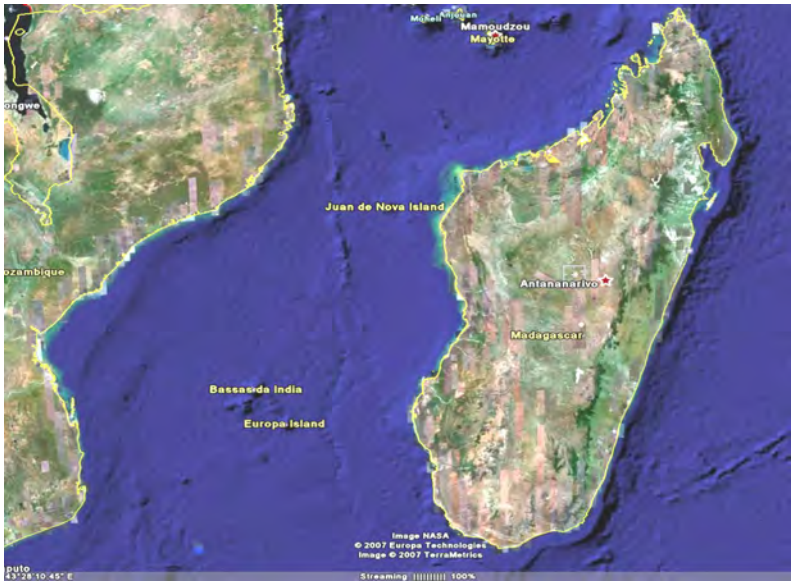
We were very well looked after by our Questacon hosts, who provided us and our animals with comfortable conditions and a sumptuous array of sandwiches for lunch. Of course, once again, we could not have even contemplated making the commitment to go to Questacon without the contribution made by Peter Child of Canberra Exotic Pets. The majority of the animals came from him as did most of the enclosures. The latter are so professional with their glassy exterior, creative backing and lighting/ heating. The animals are highly visible and our informative labels let the crowd know what they are looking at.

Many thanks go to the ACTHA members below who volunteered their animals and time over the weekend.

Joe McAuliffe, Jake McAuliffe,
Conner McAuliffe, John Wombey,
Ric Longmore, Dennis Dyer, Greg Cover,
Margaret Ning, Geoff Robertson,
Phil Robertson, Chris Robertson,
Mark Robertson, Liam Robertson,
Grant Robertson, Emma Robertson,
Nathan Robertson



Timone and Pumba, Central Bearded Dragons



Madagascar, an island which is home to a huge diversity of flora and fauna

Herping in Madagascar

Geoff Kay, School of Botany and Zoology, ANU

This article by Margaret Ning

It wasn't a huge ACTHA audience, but they were certainly all glad they had ventured out for the evening of Tuesday 21 August by the time Geoff Kay of the ANU's School of Botany and Zoology had finished.

First we had Dennis' introduction to put us in the mood….. "Madagascar is a part of Australia that got away", he said, referring to Madagascar's Gondwanan origins.

Geoff introduced Madagascar to us. It is the fourth largest island in the world, the seventh poorest country in the world, and one of the world's top 25 biodiversity hotspots, meaning that it has a huge number of species found nowhere else in the world. It broke off the coast of Africa 120 million years ago, though it still has some animals in common with Africa, especially frog species. Huge diversity and endemism, ie species particular to that location, exist in both its flora and fauna.

Flat-tailed Gecko Genus *Uroplatus*

Apparently there are 6000 species of plants in Madagascar (remember Australia has 700-800 species of Eucalypts), ninety per cent of which were endemic. 346 species of reptiles have been found there and 200 plus species of amphibians. Geographically the country is roughly divided into three parallel north-south zones: the western dry spiny desert, a deforested central plain and the eastern rain forest. It was in the latter that Geoff spent most of his time.

The area under national park in Madagascar has to be expanded by 300% by the end of next year, and after that, it will be open slather for mining concessions. The task Geoff was associated with was documenting the conservation values of part of the north-eastern rain forest area and that information will contribute to the government's ability to create the national parks in the right places.

Dwarf Chameleon *Brookesia superciliaris*

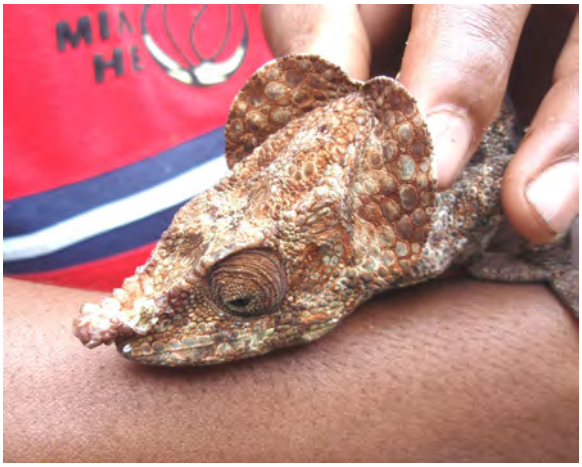
Apart from being really engrossed by the content of Geoff's talk, I also thought he had a very clever way of structuring the pics he showed to us. After all, there are only limited ways in which to present one's photos, and it was at this stage of the evening that Geoff grouped the remainder of his photos under the following 11 headings.

1. **Do anything to get there!** Hitchhike?
2. **Get to know the local gardeners.** Even though they spoke no English!
3. **Watch your step: look carefully!** Many cryptic, very well-camouflaged species.
4. **Once you've found something, don't look away for a second!** It might be the moment that the chameleon does his thing!
5. **Remember, (almost) nothing is poisonous.** Though there was the Green-backed Mantella!

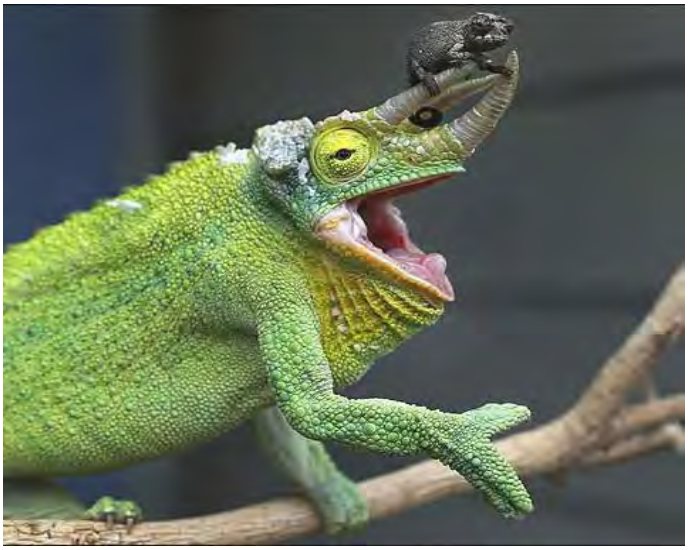
Geoff Kay with a local snake

6. **Expect the unexpected.**
7. **Get to know your chameleons.** Absolutely gorgeous colour shades and size variation.
8. **And your geckos!**
9. **Get used to being the only one wanting a hold.** Madagascans are especially superstitious re the eyes of chameleons, which they regard as being able to see into the future and back to the past simply because they are so pivotal.
10. **Get used to eating rice, lots of rice!**
11. **Whilst you're there, spare a tiny bit of time for the rest of Madagascar's beauty.** Other significant wildlife Geoff photographed included a 1.5m Cayman crocodile.

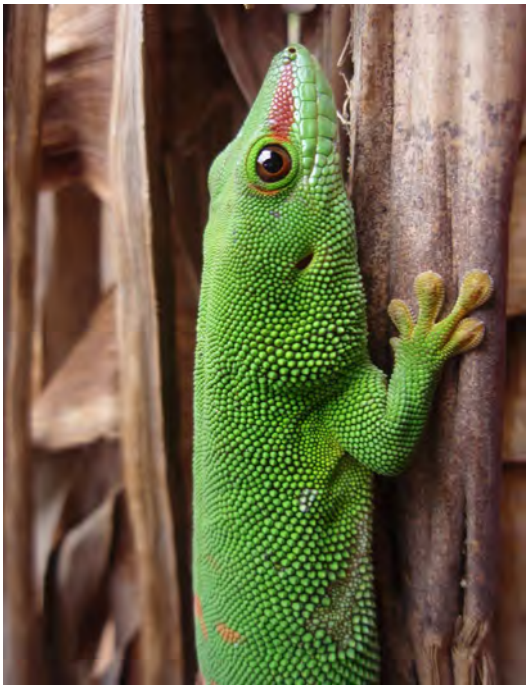
Geoff also gave us an overview of his honours project, and started by showing us the other 24 biodiversity hotspots in the world, one of which is south-western Australia. That area has been hard hit by agriculture, and although its flora is well known, its fauna is not. It is essential to identify high diversity for both flora and fauna when conserving a biodiversity hotspot, and it is critical for conservation to understand the evolutionary origins of south-western Australia species. What historical activity has caused the hotspot? How might climate change affect the biodiversity hotspot? Geoff hopes to determine some answers to these questions in the course of his honours study.



Elephant Chameleon *Chameleo brevicornis*



Jacksons Chameleon *Chamaeleo jacksonii*



Day Gecko Genus *Phelsuma*

Limestone Plains Group

Isobel Crawford

In July 2007, a group of Canberra biologists and ecologists formed the 'Limestone Plains Group' to lobby for the effective long-term management and conservation of local grassy ecosystems. The name refers to the term formerly used to describe the grassy plains often found in the valleys in the Canberra region. Native grasslands and box-gum woodlands attracted the early explorers and supported the sheep grazing industry that followed.

The group includes scientists from the Australian National University, the University of Canberra and CSIRO, and consultants, all with a wide range of relevant experience in biological surveys, botany, invertebrates, reptiles, mammals, veterinary treatment of kangaroos, and threatened species conservation and management. Supporting community groups include FOG, National Parks Association, Canberra Ornithologists Group, Field Naturalists Association, ACT Herpetological Association, Australian Native Plants Society and the Conservation Council.

The group was formed in response to the current debate on how to conserve two of the best quality patches of *natural temperate grassland* in the ACT, at the Belconnen Naval Transmitting Station and the Majura Training Area. These grasslands are also habitat for six listed threatened plant and animal species: Ginninderra peppercress, button wrinklewort, perunga grasshopper, golden sun moth, striped legless lizard and grassland earless dragon.

Overgrazing by eastern grey kangaroos is seen as the principal cause of damage to these grasslands at present. Culling was initially accepted as the solution by both the ACT Government and the Department of Defence. Pressure from an animal rights group, Queanbeyan Wildcare, on Defence led to a temporary reversal of this decision, announced on 5 July 2007.

For Belconnen, in June 2007, in response to an invitation from Defence, Wildcare had proposed instead to translocate to NSW 50-100 kangaroos in vehicles the size of a Mazda van, costed at $350,000, and sterilise 200, costed at $80,000. This work was to be done over a period of 194 working days (28-39 weeks). Payment to Wildcare for project management was additional.

The Wildcare proposal for Belconnen was poorly thought out. In March 2007, the kangaroo population was estimated by ACT Government researchers to have been about 500. Wildcare proposed to reduce it by 100, rather than to 100, which is what is needed to reduce the grazing pressure so that the grassland can begin to recover this spring.

No alternative to culling was offered for Majura. There the kangaroo density is about half that of Belconnen, but the population is far larger (about 9,000), and less than half of the vegetation is grassland. The Majura population of grassland earless dragons has crashed to a level where the possibility of extinction is likely. It is one of only two populations left of this endangered grassland specialist in the ACT region. At present, we are awaiting the results of a tour of Belconnen by four scientists selected by Defence to provide additional advice on managing the Belconnen population of captive kangaroos.

The Limestone Plains Group looks forward to helping to develop better methods for resolving such wildlife management issues in the future.

Western Swamp Tortoise

A little history

The Western Swamp Tortoise is Australia's most endangered reptile. It is the sole surviving member of its genus that dates back to 15-20 million years and is the most primitive of its family.

Only 2 populations are left in the wild on the Swan Coastal Plain within the Perth metropolitan area. They live in habitats of shallow, winter-wet swamps during winter and in summer and autumn aestivate (similar to hibernation) due to the high temperatures. It is at this time they are most susceptible to fires and predators, such as the

Western Swamp Tortoise, photo by Perth Zoo

European Red Fox.

The Western Swamp Tortoise was once thought extinct, then in 1953 it was rediscovered when a Perth boy found one crossing the road and took it to the Western Australian Naturalists' Club Wildlife Show. The number of Western Swamp Tortoises in the wild has dropped from about 200 in the 1960's to about 30 in the 1980's. This brought the species very close to the edge of extinction.

Due to conservation efforts such as re-establishing habitat within reserves and securing of the swamps from feral predators the numbers have slowly increased to an estimated 110 in 2001. The Threatened Species Network has funded a project that will help the local community to restore those managed habitats and eradicate the threats to the tortoise within them.

In 1988 Dr Gerald Kuchling initiated a captive breeding program at Perth Zoo. WWF is one of the organisations that have contributed to maintaining the program and today over 170 tortoises have been successfully reared at the zoo. The challenge now is relocating the captive bred tortoises to their natural habitats to increase the wild population and the recent release at Mogumber Nature Reserve is one step in the process of achieving this.

WWF would like to commend the Western Swamp Tortoise Recovery Team for their efforts to conserve the Western Swamp Tortoise including Perth Zoo, University of Western Australia and the WA Department of Conservation and Land Management.

11 August 2007 - Population boost for Australia's most endangered reptile

Australia's most endangered reptile - the Western Swamp Tortoise - had a population boost when 25 captive-bred tortoises were released by Friends of the Western Swamp Tortoise outside Perth on Saturday 11th August.

Jan Bant, Chairman of the Friends of the Western Swamp Tortoise said wild western swamp tortoise populations have struggled against a number of threats to their survival since European settlement, including habitat loss, introduced predators and climate change.

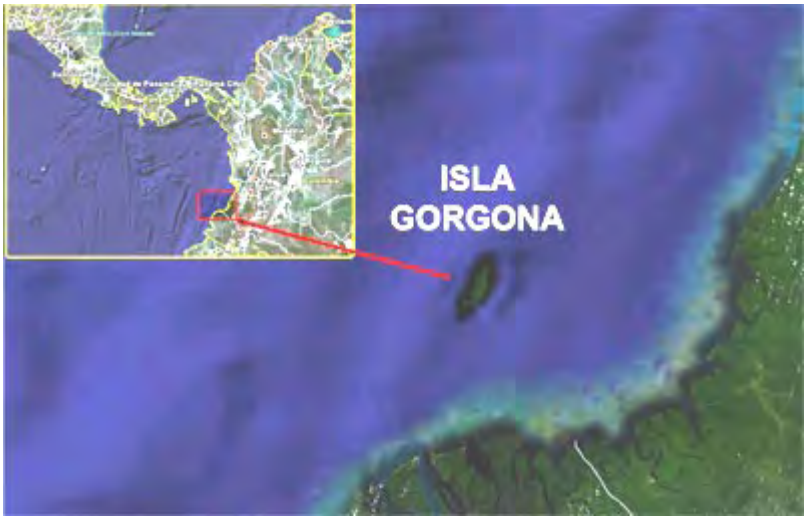
"Such threats have put them in critical danger. At one point in the late 1980s, the species dwindled to less than 50 wild tortoises, however after a successful captive breeding program at Perth Zoo, their numbers have increased significantly to over 300," Mr Bant said.

Gorgona Blues: world's only pure blue lizard at risk of extinction

By Tina Butler and Rhett Butler, MONGABAY.COM

***MONGABAY.COM** seeks to promote appreciation of wildlands and wildlife, while examining the impact of emerging local and global trends in technology, economics, and finance on conservation and development.*

High above the forest floor on the remote Colombian island of Gorgona lives a lizard with brilliant blue skin, rivaling the color of the sky. *Anolis gorgonae*, or the blue anole, is a species so elusive and rare, that scientists have been unable to give even an estimate of its population. Due to the lizard's isolated habitat and reclusive habits, researchers know little about the blue anole, but are captivated by its stunning coloration.



Approximately 35 miles off the Pacific coast of Colombia lies Gorgona, an island with a unique past and an uncertain future. A high security prison colony was maintained on the island beginning in the 1950s until its closure in 1984. Because the island is separated from the mainland by an underwater depression 270 meters deep, Gorgona maintains some endemic biodiversity. In 1985, the island reemerged as a national park to protect the rare species that thrived in the delicate ecosystem.

The blue anole is truly stunning to behold--it is pure blue, with no color differentiation between males and females. The largest visual distinction is the male's dewlap, like other anole species, except in this case the dewlap is bright white, making the blue contrast ever more dramatic. In spite of this striking color, few humans have been lucky enough to spot the world's only pure blue lizard.

Princeton University researcher Maria Margarita Ramos has studied *A. gorgonae* in its natural habitat. Ramos experienced firsthand the difficulties of getting an accurate assessment of the species, which has proven to be quite elusive. During her most recent study, Ramos only observed seven individuals. Fellow scientist Nicholas Urbina of the Universidad Nacional Autónoma de Mexico (UNAM) faced similar problems, seeing on two specimens during his time on the island. With such a small sample, it is difficult to draw conclusions about the species.

In spite of troubled efforts to get a definitive population estimate for the species, local expert herpetologists agree that the blue anole is a threatened species. The primary threats appear to be habitat destruction through deforestation and over-collection by zealous admirers of the beautiful and uniquely colored lizard. Deforestation is a particular threat as the blue anole is an arboreal species, with only the females venturing to the forest floor on the occasion to deposit their eggs.

Fernando Castro, a biologist at the Universidad del Valle who has studied the reptiles of Gorgona, told mongabay.com that much of the deforestation that occurred on Gorgona took place when the island was a prison.

"The population relied heavily on the collection of fuelwood," said Castro.

Further, he says, habitat modification may disrupt the delicate ecological balance of the island, putting some species at a disadvantage to their natural predators.

"Today we really know very little about the ecological needs of this species," explained Castro. "We do not know the carrying capacity of its present area of habitat or whether

biological and ecological relationships -- like predator-prey relationships -- have shifted. It is possible that *A. gorgonae*'s natural predators, including birds, monkeys, or other reptiles, have better adapted to the changes."

An added threat, due to the isolated nature of the island and its fragile equilibrium of species, are invasive organisms. Such "alien invasives" have caused severe ecological havoc on island environments around the world.

Finally. growing interest in Gorgona as a tourist destination is a concern. Recently part of the island was privately concessioned for tourism and Castro says it is unlikely that tour operators will be overly concerned about the well-being of a small lizard.

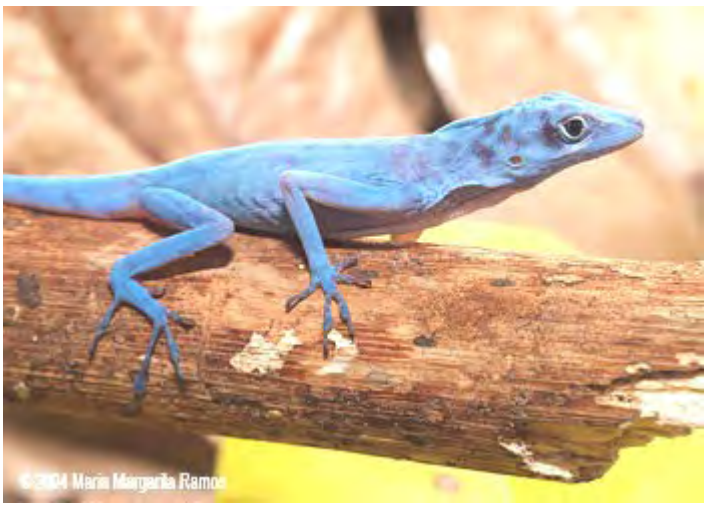
A proposal for saving the blue anole

Given the restricted geographic distribution and obvious aesthetic appeal of the blue anole, the species may be a good candidate for a captive breeding program that could also reap rewards for Gorgona's other species. Under a carefully managed system, a limited number of blue anoles could be auctioned to the public to finance conservation and rehabilitation efforts on Gorgona. The blue anole would serve as a charismatic example of a flagship species that could ensure the preservation of ecosystems on the island.

A similar project organized by the National Geographic Society (NGS) has met some success. Last year the organization announced it would offer specimen of the Wollemi Pine, one of the world's oldest and rarest trees, to consumers in the United States. NGS figured that the sales would be an opportunity to conserve and propagate the species. Some of the proceeds also went towards conservation efforts of the prehistoric species in its native habitat in Australia.

Castro says that a captive breeding program could be an effective way to prevent the extinction of the species, noting that *Anolis carolinensis*, a related species, is regularly bred in the United States for the pet trade.

"While it would be technically illegal to remove lizards from Gorgona under current Colombian law since *A. gorgonae* is a protected species, the reproductive techniques used in the U.S. could be applied here on Gorgona to help increase the population of the species," said Castro.



B&W photo (unfortunately) of Blue anole by Maria Margarita Ramos: a graduate student at the Ecology and Evolutionary Biology Department at Princeton University, Ramos studied Anolis gorgonae on Gorgona in 2004 and notes that the lizard spends most of its time near the tops of trees where boas and other arboreal snakes are its natural predators.

However he warned that only a minimal number of wild anoles should be captured for any sort of captive breeding program.

He added that *in situ* conservation strategies, based on the island of Gorgona, are preferable to *ex-situ* approaches which would remove the species completely from its natural habitat.

"We need to devise *in situ* research -- not *ex-situ* -- to improve our understanding of the entire Gorgona ecosystem. If you think saving *A. gorgonae* is going to be difficult, wait until you try to preserve all the species on the island."

Castro has a good point. Nevertheless, using *A. gorgonae* as a symbolic species for the conservation of Gorgona as a whole could help the island's other species avoid singing the blues.

[Note: there are other species of lizard with blue coloration -- including the Blue Iguana (*Cyclura lewisi*), which is also critically endangered; various chameleons, African agamids, among others -- but *A. gorgonae* is the only species with "pure" blue coloration head-to-tail]

Some Web sites worth looking at:

http://frogs.org.au/

www.aussiereptilekeeper.com

www.mark.org.au

www.canberraexotics.com.au

http://www3.environment.nsw.gov.au/pdfs/hygiene_protocol_snakes.pdf

http://www.cdc.gov/healthypets/animals/reptiles.htm

http://www.tams.act.gov.au/live/environment/native_plants_and_animals/licensing_of_plants_and_animals/reptile_policy

AGM has been postponed

The 2007 Annual General Meeting of the ACT Herpetological Association has been postponed until the December Meeting.

Any queries? Please feel free to contact either:

Margaret Ning (margaretning@iprimus.com.au)
or
Joe McAuliffe (joe.mcauliffe@deh.gov.au)

Editor's Note

The Editor takes full responsibility for summaries of presentations by Guest Speakers at ACTHA Meetings and any editing of other contributions. The views expressed by contributors and authors are not necessarily those of ACTHA. Please feel free to contact the Editor with regard to any queries.

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PO Box 160
Jamison ACT 2614