

CALL FOR VOLUNTEERS & STUDENTS



Research Program: Frogs on Broughton Island

Co-ordinator: Prof Graham H. Pyke

Frogs have been declining in distribution and abundance throughout the world and these declines are presumably telling us something about environmental quality and how this has been changing through human activities. Frogs are, in particular, ideal animals for monitoring the effects of fluctuations and long-term changes in climate. The magnitude of short-term fluctuations will, however, determine the magnitude of long-term changes that might be detected. Frogs are also sensitive to other kinds of habitat perturbations. This project aims to evaluate the yearly variation in a number of population parameters and to determine the relationships between this variation and commensurate variation in climatic conditions. This project also aims to determine how other habitat attributes affect frog population biology. This research should enable us to better understand and prepare for the effects of climate change and to better protect and manage the environment.

We have therefore established a long-term project that focuses on two frog species, the highly endangered Green & Golden Bell Frog and the widespread and abundant Striped Marsh Frog, occurring on Broughton Island. Surveys of frogs, tadpoles and habitat conditions have been ongoing there since 1998, providing an excellent basis for understanding trends in population size in relation to changes in habitat and climate. We presently carry out five research trips to Broughton Island each year, have appreciated volunteer assistance since the project began, and included numerous student projects based on the project.

I currently seek students and/ or volunteers to participate in this research program over the next frog season (i.e., Sep to Apr). Field trips to Broughton Island are scheduled as follows:

- 1-5 Sep 2017
- 27-31 Oct 2017
- 15-19 Dec 2017
- 9-13 Feb 2018
- 30 Mar – 3 Apr 2018

If you are interested in joining us, as a student or volunteer, please contact me:

Graham.Pyke@uts.edu.au

0408-474-021

General information re trips to Broughton Island

Aug 2017

- Experience/ Training

No particular experience necessary, just an interest and desire re participation. All participants will receive appropriate training, as required. Catching and handling frogs is pretty easy. Those interested may be trained to process frogs (e.g., measuring, weighing) and subsequently, if appropriate, to microchip frogs so they can be individually identified.
- Transportation

If travelling with me from Sydney, I usually pick people up (at around 9:30am) and drop them off at Turramurra Railway Station; other arrangements are possible. We drive to Nelson Bay.
Some may choose to get themselves to Nelson Bay.
We travel from Nelson Bay to Broughton Island via boat operated by one or other boat tour company (e.g., Let's Go; Imagine). Ride takes about 45min, with arrival around 3pm. I cover the costs of scheduled boat rides.
We generally depart Broughton Island for Nelson Bay at around 2pm on the last day, getting us back to Sydney by about 6-7pm.
- Accommodation

Cabin owned and maintained by NPWS with 8 bunk beds, gas-powered cook-top, gas-powered fridge, hot/cold running water including for showers, flush toilet.
Each person should bring his/ her own bed linen (e.g., pillow, sleeping bag), towel etc.
- Food

We bring all food for a trip with us, allowing for an extra day in case return to Nelson Bay delayed by weather conditions.
Each person is responsible for his/ her own food, but may team up with others.
Communal food preparation can work.
- Clothing & Equipment

Light & flexible; shorts or long pants for working during the day; long pants generally preferable for night work; jacket or vest for night work, as may be cool then; veg can be a little prickly; closed shoes that can get wet, gumboots can be good; suitable raingear, as it can be very wet.
Headlamp or equivalent; for spotting frogs and walking between locations.
Snorkling or fishing gear may prove useful.

- Other
 - Protection from sun, wind & biting/ annoying insects. There are no venomous snakes.
 - Care & appropriate footwear when walking through the 'bush' as terrain is rocky and uneven, and steep in few places.
 - Carry mobile phone at all times, in case of emergency.
 - See associated risk form. Available from Prof. Graham Pyke
- Routine
 - Upon arrival we walk across island (about 2km) to set up a tent with tables and chairs; this is where we process most frogs at night.
 - Each night we head off from the cabin at around sunset and spend generally about 4-6 hours capturing and processing frogs.
 - For the first 2-3 days, we measure various water attributes at ponds and survey tadpoles; this generally takes 4-5 hours per day. The last morning is generally free.
 - There is time to do other things such as snorkel, fish or explore the island; it is a beautiful place.
- Costs
 - As indicated above, participants in Broughton Island should have only to meet their costs re food, getting to and from any agreed rendez vous locations , getting to and from Nelson Bay (if travelling there via own transport), and any unscheduled boat rides between Nelson Bay and Broughton Island (e.g., arriving late or departing early)