

Two of our nation's iconic creatures: the cassowary renews our forest through seed dispersal and the world's largest egg-laying mammal, the long-beaked echidna, faces extinction. We need to work together as stewards of PNG's biological diversity to regain ecological balance.

Who We Are:

- A PNG-based not for profit association formed to ensure a biologically sustainable future for PNG.
- We conduct research, train PNG biologists & conservationists , and ensure information is shared with policy makers, landowners and PNG citizens
- We seek to integrate traditional knowledge & customs with modern concepts of conservation.



Background/History:

- Founded in 2008 to continue training & research programs started in 1996.
- Program funders have included:
 - *The Christensen Fund*
 - *Conservation International*
 - *Wildlife Conservation Society*
 - *Fondation Hans Wilsdorf (FHW)*
 - *UNDP GEF Small Grants*
 - *Mama Graun Conservation Trust Fund*
 - *US Embassy Fulbright Specialist grant*
 - *New England Biolabs Foundation*
- 100% of our core scientific staff are graduates of the past training program, complete their graduate studies overseas, returned to form the PNGIBR



Our Vision:

- To be a leading institution in PNG, made up of scientific colleagues dedicated to conserving our country's flora, fauna and ecosystems to ensure a biologically sustainable future.



Our Mission:

To effectively contribute to the conservation of Papua New Guinea's biological diversity and sustainable future. We will:

- Conduct useful biological research in collaboration with relevant stakeholders to ensure a rich national heritage for our society's livelihood and spiritual well-being.**
- Train aspiring national biologists to ensure that PNG citizens have the skills they need to conserve their biodiversity in an effective way.**
- Disseminate our research findings to the scientific community, to the people of PNG, and to policy makers for use in conservation and management efforts.**



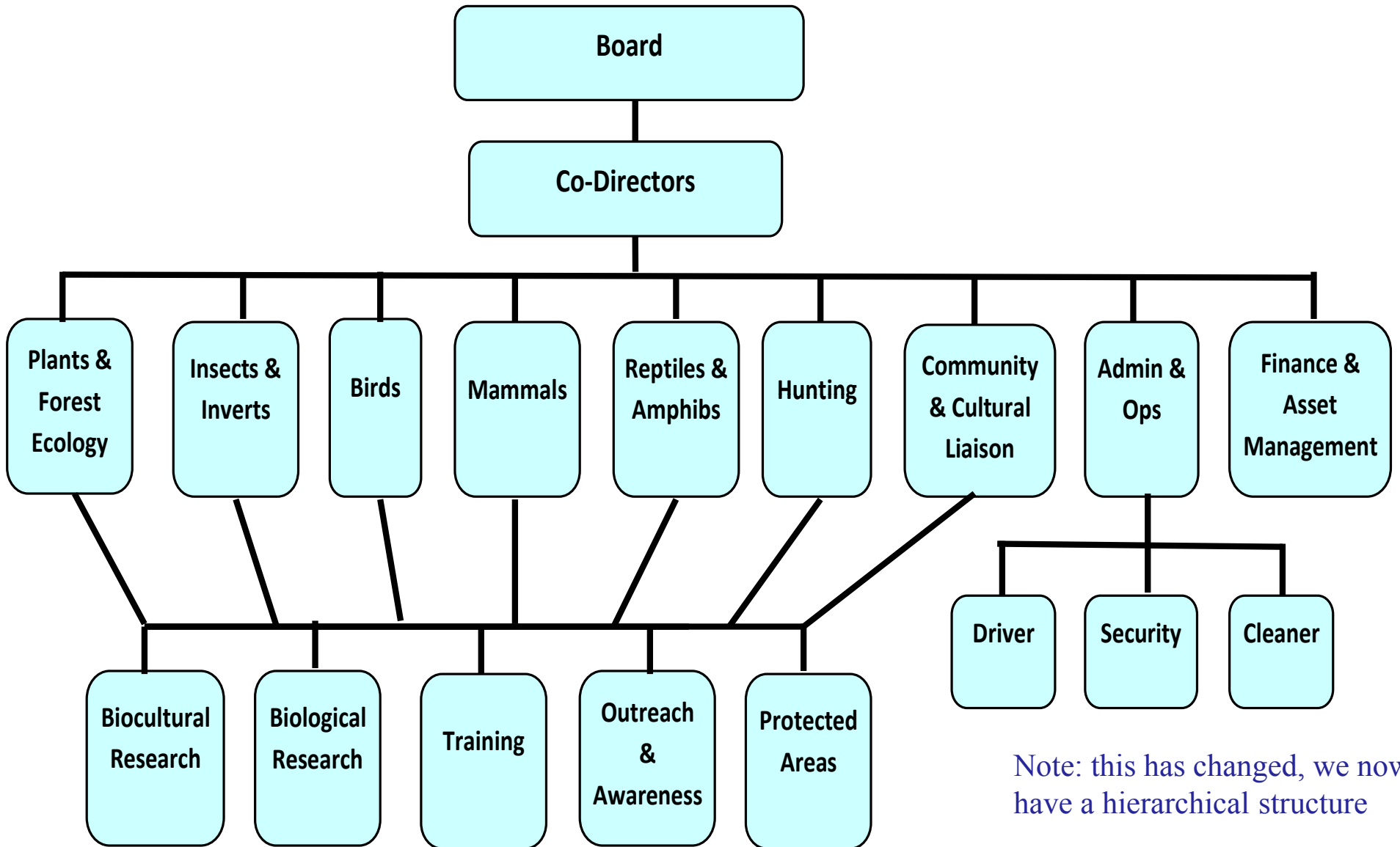
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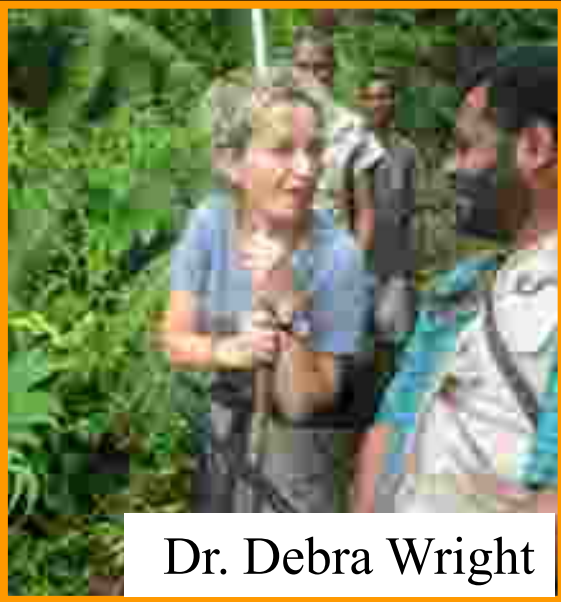
- **Respect the cultural differences among the people and communities we work with and integrate their traditional ecological knowledge and traditions with modern concepts of conservation to come up with culturally sensitive models that will work in PNG.**
- **Collaborate with and aid others who can contribute to this mission.**



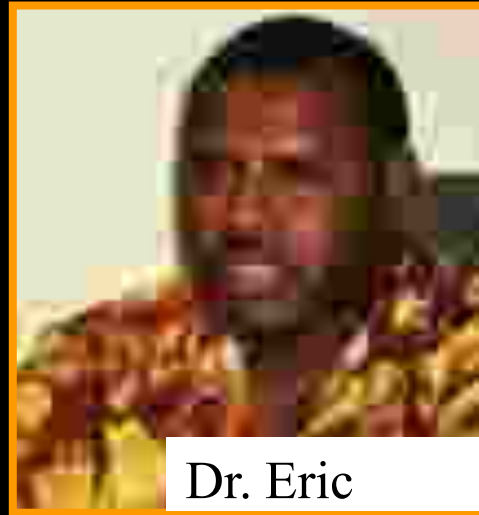
al Structure



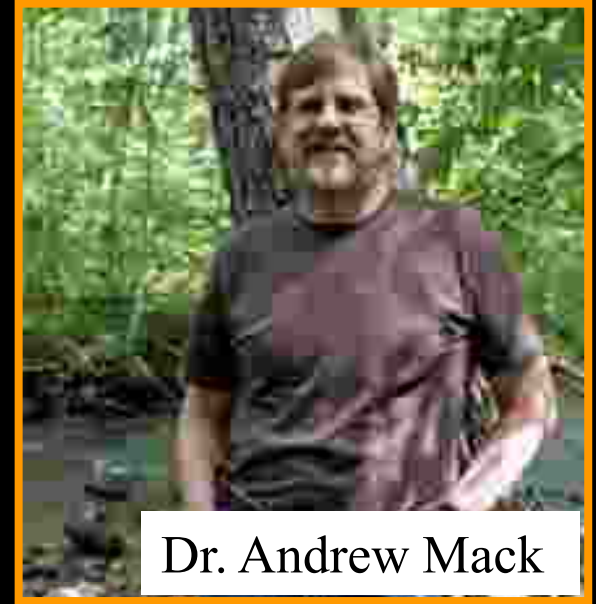
Note: this has changed, we now have a hierarchical structure



Dr. Debra Wright



Dr. Eric

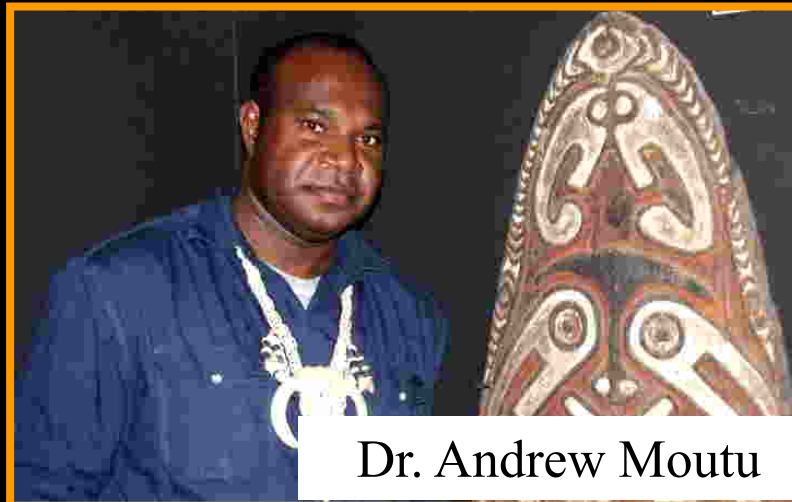


Dr. Andrew Mack

IBR BOARD

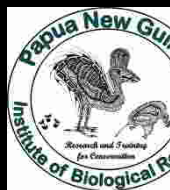


Dr. Paige West



Dr. Andrew Moutu

New additions
include Muse
Opiang, Banak
Gamui, & Miriam
Supuma





Banak Gamui, M.Sc.

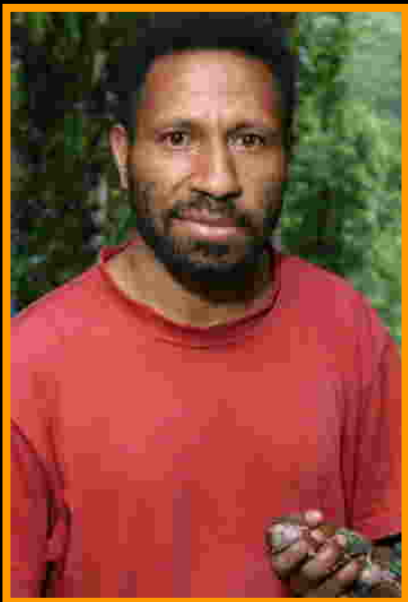


Muse Opiang, PhD candidate



Miriam Supuma, M.Sc.

IBR SENIOR STAFF



Enock Kale, M.Sc.



Katayo Sagata, PhD candidate



Michael Kigl, M.Sc.



Mellie Samson Jr,
M.Sc.



Junior Novera, M.Sc.



The late Paul Igag, M.Sc.



Samoa Asigau, M.Sc.

IBR SENIOR STAFF



Kore Na'au, B.Sc. Honors





Anna Koki – Accounts,
Admin & Logistics

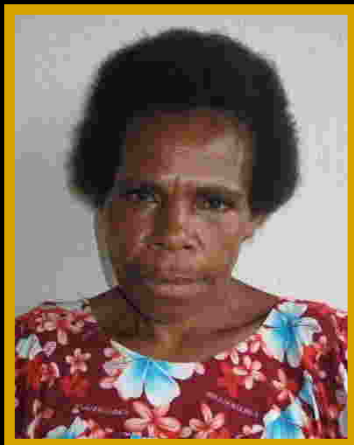


Tony Mule – Admin Assistant

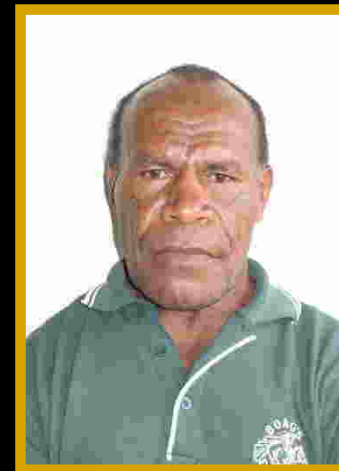


Onika Okena, Driver

IBR SUPPORT STAFF

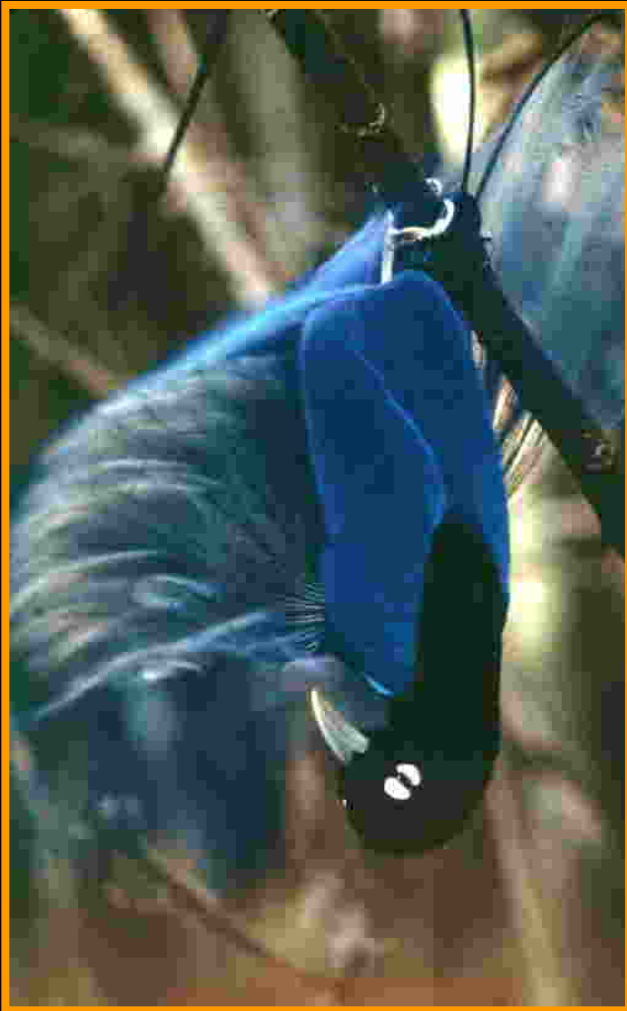


Sisera Yoriene, House Keeper



Kamena Yoriene, Security

Core Programs:



1. **Biological Research**
2. **Scientific Capacity Building & Training**
3. **Conservation Outreach & Awareness**
4. **Bio-culture**



IMPROVED SCIENTIFIC CAPACITY

EFFECTIVE CONSERVATION



What do we mean by scientific capacity?

1. Skills and expertise of biologists & conservationists
2. Data, information & literature
3. Infrastructure - research stations & sites, technology, training center/base

All are necessary to guide effective conservation and management of biodiversity and natural resources



RESEARCH

Critically endangered Long-Beaked Echidnas



Hunting Sustainability and Extension Study/Program



Nest Box Occupation to Mitigate Tree Felling



Wildlife Cultural Artifact Surveys



Biodiversity Inventory Surveys - including CI RAP Surveys



Permanent Plant Plots- YUS Conservation Area



Biological Monitoring for Protected Areas:

- Mount Gahavisuka Provincial Park - EHP
- Mekil Conservation Initiative – Telefomin District, Sandaun Province
- Crater Mountain Wildlife Management Area, EHP/Simbu
- Hogave Conservation Project – Mt. Michael, EHP
- YUS Conservation Area – Huon Peninsula Morobe



Research Projects:

Critically endangered
Bulmer's fruit bat



Ground Cuscus



Frogs on Manus



Research Publications:

IBR Staff members have published:

- 19 Scientific papers
- 10 Honors theses
- 3 Masters theses

(other Masters degrees via coursework)



TRAINING



PNG NEEDS MORE TRAINED PROFESSIONALS

The country has only a handful of qualified biologists and conservationists.

The loss of even one individual is a major blow for PNG.



Late Paul Igag, M.Sc.

PNG's first professional ornithologist

till 29th Oct 2010

PNG NEEDS MORE TRAINED PROFESSIONALS

- Almost all taxa are under studied
- Growing interest by PNG Government – signing onto international treaties
- PNG is now at a cross road:
 - among last 4 remaining major rainforest countries
 - more and more extractive industries, e.g., logging, mining, natural gas, etc.
 - needs well informed decision makers



Annual training courses:

1. Field Biology Techniques

- Mist-netting, handling, specimens for birds and bats
- Trapping, handling, specimens for mammals
- Surveying and specimens for frogs and reptiles
- Inventory plots and vouchering for plants
- Data analysis and write-up

2. Research Project Design

- Biological research project design
- Proposal writing
- Field data collection
- Statistics and analysis
- Report write-up
- Oral presentation

Each course is 4 weeks long and usually held in remote forest.

Participants

- About 75 % are PNG University students & staff
- The rest are NGO and Government professional staff , e.g.
 - Department of Environment & Conservation
 - PNG Forest Research Institute
 - Museum Personnel

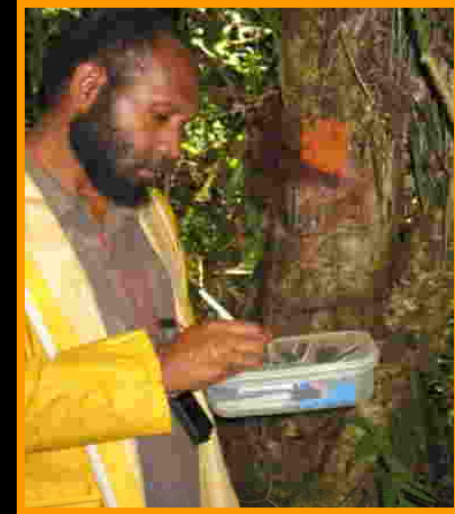


Training

When asked what the most important things learned in the courses were, respondents said:

- data analysis
- proposal writing
- designing projects
- report writing
- research techniques
- to think and reason better
- how to present papers
- to critically review published papers
- patience in collecting data

A quarter of the respondents stressed that this was the first time they had used theory in actual practice, even though they were not asked this question.



In addition to IBR board members and staff we bring in overseas experts to help teach courses, e.g.



Steve Richards - Herpetologist



Sylvia Lomascolo-Bat specialist with students on training course

We are now beginning specialized courses:

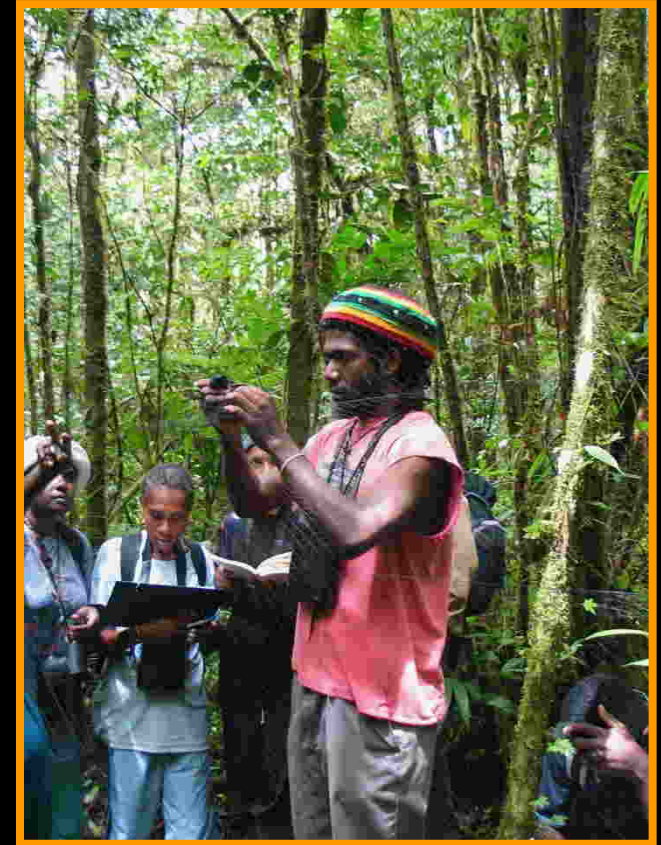
(e.g. 2011 Mammalogy and 2012 Ornithology Course)



We hope to run more specialized courses in the future

Honors/ Internship program

- Top university students from training courses selected for Honors Program
- Each student does a 1-2 year research project (field and literature)
- Writes essays and thesis for university grading
- Manuscripts submitted for publication in scientific journals)



Honors Training Program:

Past Students

- 24 Honors degrees
- 17 overseas Masters degrees
- 2 current PhD candidates



Diatpain Warakai- wildlife use of tree cavities and nest boxes



Aileen Sagolo – spatial analysis of hunting using GIS



Samoa Asigau – effects of subsistence gardening on small mammal populations

Honours Training Program:

Current Students-(outgoing)



Daniel Solomon: anthropogenic threats to the critically endangered Long-Beaked Echidnas (*Zaglossus* spp.)



Bega Inaho: Plant diversity, population structure, and forest characteristics along an altitudinal transect

Honours Training Program:



2012 Interns

Tania Areori

Home range, habitat utilisation and characteristics of tree cavities used by two tree cavity dependent mammals: *Petaurus breviceps* and *Phalanger sericeus* in the Highlands of Papua New Guinea.



Heather Taitibe

Behavioral and Ecological Characteristics of Endemic Frog Species on Manus Island, Papua New Guinea, in Relation to Threats from Climate Change.



Yolarnie Amepou

Assessing the effectiveness of managed fringing reef flats for sea cucumber populations in New Ireland Province, Papua New Guinea.

Ben Ruli (photo unavailable)

The Roles of Natural Environment in Shaping Culture and Life Cycle of the Gimi People

Short Internships Abroad

- 1 at National History Museum (London)
- 2 to Australia for statistics courses
- 2 in US for Mark-Recapture course
- 1 for Harvard/CTFS Borneo field course
- 1 to Costa Rica for ant course
- 1 to Panama for raptor course
- 1 to Fiji for women in conservation course
- 4 attended online population modeling courses with USGS
- 3 internships at Smithsonian Institution (NMNH)

These were extremely useful for our staff and students. We are continuously seeking more of such opportunities!

OUTREACH & AWARENESS



Outreach/Awareness Activities:

- 2 BBC Documentaries
- World Environment Day School Awareness Talks
- Goroka Show – PNGIBR Stall and Information booth
- Village Meetings/Workshops
- Radio/TV Talks/Interviews
- Website & Facebook
- Annual Reports
- Guests lectures at UoG, presentation at institutions/Depts such as UPNG



Please visit our website (www.pngibr.org) to learn more

Bioculture

Biocultural Research & Training:

Diversity on display – Spot the Birds!

Stephanie's Astrapia (*Astrapia stephaniae*)
least concerned

Brown Sicklebill (*Epimachus meyeri*)
least concerned

King of Saxony (*Pteridophora alberti*)
least concerned

Blue Bird of Paradise (*Paradisaea rudolphi*)
vulnerable

Papuan Lorikeet (*Chamosyna papou*)
Least Concerned

Raggiana Bird of Paradise (*Paradisaea raggiana*)
Least concerned

Vulturine Parrot (*Ptilinopus fulgidus*)

Superb Bird of Paradise (*Lophorina superba*)
Least concerned

Dwarf Cassowary or Northern Cassowary
feathers around neckline
(*Casuarus bennetti* or *unappendiculatus*)
Near threatened and vulnerable

· Appreciate our Cultural Diversity
· Extend the life of our cultural diversity by preserving our traditional ornamentation or 'bilas'. This means less hunting of wild populations.
· and be environmentally conscious

Note: The population status of the above birds' plumage worn as head dress were taken from version 3.1 of the The International Union for Conservation of Nature (IUCN) Red List of Threatened Species. The bird's status in the wild is written in italic like font below their names above.

- **Biological research – we document traditional ecological knowledge**
- **Hunting Studies - we document traditional knowledge of game, hunting methods, etc..**
- **Cultural artifacts surveys - during Goroka Shows**
- **Honours Student research - Gimi culture & life cycles – relationship to their environment**

Protected Areas

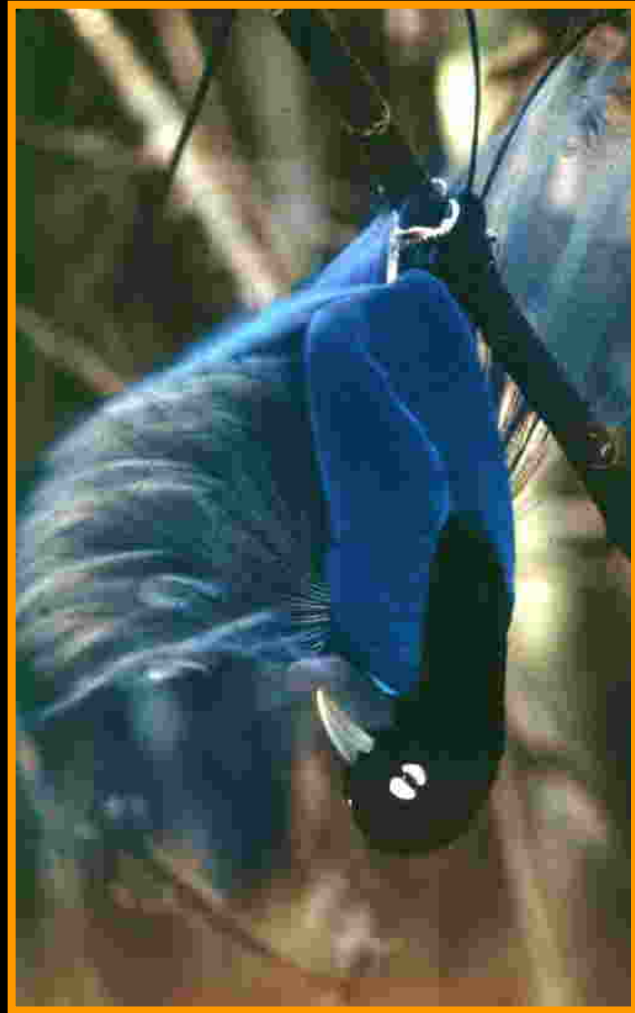


Protected Areas

All the

1. Biological Research
2. Scientific Capacity Building & Training
3. Conservation Outreach & Awareness,
4. Bio-cultural work

Leads to



*Biologically
Sustainable
Future!!!*

**EFFECTIVE
CONSERVATION!!**

Protected Areas

Current Work with Protected Areas:



1. Mt. Gahavisuka Provincial Park – EHP
2. Supa LBE Conservation/Crater Mountain WMA – EHP & Simbu
3. Mekil Conservation Initiative – Sandaun
4. Hogave Conservation Initiative – EHP
5. YUS Conservation Area – Morobe
6. Pokili WMA, West New Britain Province



Challenges

- Fundraising
- Loosing skilled personnel to better paying jobs
- Loosing interest of locals due to better paying jobs
- Safety of personnel out in the field (guns in remote communities now)
- Remoteness of field sites (lack of or inadequate basic services, eg Aid Posts, Communication)
- Achieving conservation in PNG is a working progress (e.g: complex land tenure , participation of landowners)

Thank you!