

ENMPG24: Tropical Ecology and Conservation – Gabon field course 2017

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Module Aim

The field course will cover the underlying ecological and socio-economic theories in tropical forest ecology and conservation, which not only shape the management decisions at Lopé National Park, but are highly significant to global tropical ecology and conservation. The following five topics will be covered in the course:

1. Biodiversity assessment and flagship species conservation
2. Land use change and climate change
3. Nutrient flux and trophic cascades
4. Invasive species
5. Sustainable resource use

Upon completing this course, students should understand tropical forests from two angles: their conceptual underpinnings (lecture series) as well as practical techniques (field sessions) for decision making in a complex world (discussion sessions, presentations). They will be equipped with a flexible kit of ecological and socio-economic tools for carrying out data collection, analyses and interpretation in tropical forest systems, including how forests interact with human impacts such as hunting, forestry and protected areas. This will enable students to make decisions based on scientific evidence to formulate policy and develop management plans for a sustainable future.

The practical course will introduce students to the real-time challenge of managing a significant protected area, enabling classroom taught skills and knowledge acquired during the MSc courses to be applied and tested in an inspiring situation in Lopé National Park. The course will also expose students to the wide benefits of the long-term, multidisciplinary research carried out by Stirling in Lopé and provide a platform for development of further research project ideas.

Teaching will cover the major conservation issues that shape management strategies, the science that is required to underpin good policy decisions on those issues, the data collection and analytic techniques that support that scientific enquiry and finally the challenges associated with presentation of science to the range of professional and civil society stakeholders affected by protected area management.

Learning outcomes

Students should be able to:

- Provide a broad overview of tropical forests and what drives and regulates them and discuss implications for management
- Integrate theory and practice of tropical forest management and conservation.

Field course programme

7th Jan leaving Edinburgh morning, arriving Libreville evening

8th Jan Libreville to Lope

9th – 13th Jan

8-9am Lecture

9am-3pm Field work

7-9pm Discussion session

14th – 17th Jan

Individual projects including presentations. Individual projects will be discussed during the first week in Lope.

17-18th Jan

Lope to Libreville

18th – 19th Jan

Libreville to Edinburgh

Course Assessment

Oral presentation of 20min length to critically assess a major challenge in tropical ecosystems and propose alternative management and conservation actions. This will be delivered in the field (30%).

One 2500 word report that analyses the data collected and critically evaluate current management and conservation actions and make recommendations for future improvements. This will be submitted electronically to Succeed (no paper copy) within 4 weeks after returning from Gabon (70%) with a deadline of midnight 27th March 2016.

Reading list

Kellmann, MC, Tackaberry, R (1997) Tropical Environments and Management of Tropical Ecosystems. Routledge

Montagnini, F, Jordan CF (2005) Tropical Forest Ecology: The Basis for Conservation and Management. Springer.

Ghazoul, J, Sheil, D (2010) Tropical rain forest ecology, diversity, and conservation. Oxford University Press.

Feedback on coursework

Please find the feedback policy of the University of Stirling under this link:

<http://www.stir.ac.uk/feedback/>

Cost

£1,800 including flights, accommodation, food, transport, visa, teaching, field assistants, operation. Does not include vaccination costs.