



## Important Information for participating in future field work for staff training in MuEuCAP (WP2.3)

### Please Prepare a 'Project Outline'

Deadline to complete task: 26 February, 2019

You are eligible for participating in the field training, since you participated in the first round of training workshops. Before we finally can decide on your participation, we need you to do some HOMEWORK.

This is VITAL because it helps you to learn about the processes of designing a project. It is the time when **YOU HAVE TO THINK FOR YOURSELF!** This is always more difficult than listening to others but is essential if you are to become a good/great scientist. Please give yourself plenty of time to think about this task. It is not an easy one.

The homework task is to prepare a 'Project Outline'.

- It is for practice purposes ONLY.
- It should not exceed 2 pages.
- It MUST include:
  1. Title
  2. Research question
  3. Author (name, address....)
  4. An Introduction, which includes background information to your chosen study
  5. Research hypothesis
  6. Methods
  7. Study design
  8. Reference list
- It must be sent as one attachment by email to: [swen.renner@boku.ac.at](mailto:swen.renner@boku.ac.at), cc to [pjjbates@hotmail.com](mailto:pjjbates@hotmail.com) and [seinlinu@gmail.com](mailto:seinlinu@gmail.com)
- The subject line of the email and the title of the attachment MUST include the following information
  1. Your name
  2. Your department
  3. Your university.

### Detailed instructions are included below:

First: open a new and empty WORD document.

Second: READ the text below and ADD the information in your blank document. Do NOT copy/paste anything from this document, except for one of the 12 titles (or you may include your own title).

Third: save the file as instructed above (with your name, department, university in the title) and send as an attachment to [swen.renner@boku.ac.at](mailto:swen.renner@boku.ac.at), cc to [pjjbates@hotmail.com](mailto:pjjbates@hotmail.com) and [seinlinu@gmail.com](mailto:seinlinu@gmail.com).

#### 1: Title

Either select **ONE** title from the 12 listed below **OR** create your own title but it must include an aspect of biodiversity **WITHIN** an urban context:

1. Bird diversity (species richness, diversity, relative abundance) in relation to human population density in Myanmar cities
2. Bird diversity (species richness, diversity, relative abundance) in relation to aquaculture in Myanmar
3. Bird diversity (species richness, diversity, relative abundance) in relation to urban green spaces in Myanmar cities
4. Urbanization and stress: feather quality, feather growth rate and stress levels in birds along an urbanization gradient in Myanmar
5. Study of avian haemosporidian infection along an urbanization gradient in Myanmar
6. Effects of urbanization in the abundance of disease vectors in Myanmar
7. Effects of urbanization in the defensive mechanisms of birds in Myanmar
8. Differential influence of urbanization on intestinal parasite infection in avian species from Myanmar
9. Effects of urbanization on avian physiology: a study of paired urban and rural populations from Myanmar
10. How is land use affecting mangroves in Myanmar?
11. Plant diversity (species richness, diversity, relative abundance) in relation to urbanization in Myanmar.
12. How are air pollutants and plant parasites interacting in Myanmar cities?

**2: Research question** – formulate your research question based on the title that you have chosen

**3: Author** – include Your name, academic position, University address (including Department), phone/email

**4: Introduction/ background information** –

- Go to [www.scholar.google.com](http://www.scholar.google.com) and type in the key words/concepts from your selected research question (the one you selected from the 12 above)
- Select 2-3 key scientific papers on the topic, which are open access and summarise (concisely) the contents in your own words. Cite/include these (and any others that are particularly relevant) in the Reference Section (examples how are given below).
- Write in short, simple sentences that are easy for you and others to understand.
- Your introduction should:
  - introduce the reader to the background of your project topic
  - explain how this has influenced you in selecting your research question and hypothesis
  - explain what are the existing gaps in our knowledge of the subject (globally and/or in Myanmar)
  - explain how your proposed study will decrease these gaps in our knowledge – i.e. what is your contribution to the study of the subject.

**5: Research Hypothesis** - please clearly state your research hypothesis as deduced from your research question.

**6: Methods** - select and describe:

- your study area in Myeik, Mawlamyine or Mandalay respectively (including habitat types, environmental structure etc.)
- your methods of observation/sampling OR describe the experiments that you would carry out in the laboratory
- the statistical methods that you would use for the analysis - identify dependent and independent variables

Please mention what YOU would do (this is your study!). If you do not know the methods (for field/laboratory or statistics), please mention that.

## **7: Study design -**

Describe:

- how you would perform the study in the field
- where would you go
- what would you do
- what data would you collected
- how many times with how many repetitions and replicates
- estimate your sample size.

If possible, suggest what Figures and/or Tables you might include.

## **8: References cited**

ONLY list all reference cited in the text. Follow one style throughout and be congruent. Double check that the citations and references cited match up.

*Journal articles:* Always cite all authors followed by the year, title, journal, volume, pages, and DOI, for example:

Renner, S.C., Lüdtkke, B., Kaiser, S., Kienle, J., Schaefer, H.M., Segelbacher, G., Tschapka, M. & Santiago-Alarcon, D. 2016. Forests of opportunities and mischief: disentangling the interactions between forests, parasites and immune responses. *International Journal for Parasitology* 46, 571-579. (doi:10.1016/j.ijpara.2016.04.008).

*Books:*

Valkiūnas, G. 2005. *Avian malaria parasites and other Haemosporidia*, CRC Press.

*Book chapters:*

Renner, S.C. & Markussen, M. 2005. Human impact on bird diversity and community structure in a tropical montane cloud forest in Alta Verapaz, Guatemala, with special reference to the Quetzal (*Pharomachrus mocinno*). In: *Valuation and Conservation of Biodiversity: Interdisciplinary Perspectives on the Convention on Biological Diversity* (eds. M. Markussen, R. Buse, H. Garrelts, M.A. Máñez Costa, S. Menzel & R. Marggraf), pp. 373-390. Heidelberg, Berlin, Springer.

*Webpages and unpublished reports:* Do not use and do not cite.