# ENVS 84 -2018 SEMINAR ON ENVIRONMENTAL ISSUES OF SOUTHERN AFRICA

# **ENVS 84 Social-ecological System**

Riparian Wildlife

vegetation

Desert Hills Gobabeb Traditional Authority

Topnaar Dartmouth

Desert

Namibia !Nara

Ministry of

Environment & Livestock

**Tourism** 

This figure represents some of the major components of the social-ecological system (there could be others) that you will be entering in ENVS84. Note that "Dartmouth" (representing our FSP, you) is part of the system. So we want to be self-reflexive and aware of our position in this dynamic system. What we are asking you to do in ENVS84 is to engage in this system in a thoughtful, productive and scholarly way. In the broadest sense we are asking you to be curious about this entire system – all the components.

You can begin to reach a deeper understanding of the system by rigorously examining the relationship among any two (or more) of these components. What questions can you ask about the relationship between the Nara and the Namib, between Gobabeb and the Topnaar, between Dartmouth and the Topnaar, etc.? You can also deepen your understanding by investigating the complexity within each component.

As with the rest of the FSP the great challenge of 84 is to try to synthesize the theoretical with the empirical. Ask yourself what formalism you can bring to bear from your academic background to give you the means to describe and understand these relationships?

It's important to consider the nature of this project. Just to be clear, this is a research project. It is not a service project, though it could be of service to some in the Topnaar community or at Gobabeb. This is not a development project, though it could inform those efforts also. It's important to recognize that this is real research not a "canned" research experience. It will require that you all take ownership of this project. You will be the primary drivers of the project. However, you also must keep in mind that this is a collaboration between you, me and other Dartmouth instructors, Gobabeb and the Topnaar community. So it's best to think of this as a

coproduction of knowledge. Also, recognize that, as with all research projects, there are constraints on what you can do. Some of those constraints are logistical and involve limitations in terms of time, manpower, money, facilities etc. Other constraints are intrinsic to working with partners. We have to be sensitive to their opinions and priorities. We will have to reach consensus with them about what activities are feasible, ethical and productive. This is an opportunity to engage constructively with a real social-ecological system. So, we must all remain flexible, fully engaged, good-humored and alert to the opportunities for doing useful work.

We will be working with many members of the Gobabeb staff, including Director Dr. Gillian Maggs-Kolling, and Research Coordinator Dr. Eugene Marais.

### Also joining us:

<u>Dr. Julie Snorek</u>, a post-doctoral researcher at Dartmouth specializing in rural community development in Africa

**Dr. Tom Kraft**, a post-doctoral researcher at U.C.S.B. specializing in biological anthropology of hunter-gather societies as well as research on non-human primates.

## **Learning Objectives and Outcomes**

- Learn about and practice conducting original research related to the themes of conservation and development
- Participate in community-based research
- Identify and reflect on ethical issues associated with engaging in communitybased research
- Respond to constructive criticism about research design and analysis
- Recognize opportunities for constructive engagement in complex, messy social-ecological systems,
- Collectively act on those opportunities by engaging in the system, with a balance of ambition and humility

At the conclusion of this portion of the trip, students will develop the following skills:

- 1. Ability to conduct original research, including problem identification, study design, data collection and analysis, and solutions development
- 2. Negotiation skills working with other actors in the system to identify research projects
- 3. Ability to identify ethical considerations of community-based research and action in novel cultures and contexts
- 4. Capacity to work collaboratively to accomplish goals, particularly in dynamic and largely unfamiliar environments
- 5. Ability to analyze and develop solutions to/make progress on complex problems, particularly related to conservation and development

What are the products of your group effort?:

- 1. A *final presentation* at Gobabeb on November 12. More on this later.
- 2. Group papers or other products. One objective is for you to help pave the way for future FSP groups and others interested in this system. In addition to future FSPers the audience for these papers includes Gobabeb staff and interested members of the Topnaar community. See the papers from the 2013-2017 groups. You will have access to the Gobabeb library and internet while there and internet access in Swakopmund for 5 nights after our stay at Gobabeb to further contextualize and develop your ideas. Once we enter this phase you will be given deadlines for submitting drafts. The final paper is due before we return to Gobabeb for the presentations.

#### **Individual products:**

1. **Subjective reflective mini-essays**. Toward the end of our time at Gobabeb you will be given four prompts for reflection. Each reflection is only a paragraph in length. The purpose of these reflections is to help you consolidate some of the lessons you take away from 84 as well as the rest of the program. More on this later. Due: the last full day of the program, Nov. 15.

### **Approximate contributions to final grade:**

Contributions to the group effort and final presentation	75%
Final essay	25%

#### Past FSP student projects at Gobabeb

- Economic potential of commercial !Nara harvest
- Designing and piloting a long-term study of the factors affecting !Nara productivity
- Pollinators of !Nara
- Factors influencing the spatial distribution of !Nara
- Community mapping with !Nara harvesters
- Assessment of GTRC/Topnaar capacity development initiatives
- Socio-political analysis of Topnaar-Gobabeb relationship
- Seasonal resource use by Topnaar livestock and implications for climate change adaptation.
- Domestic and wild herbivores of !Nara and their effects on growth and fruit production.
- Social, biological and economic study of Topnaar livestock practices.