

Environmental Field-Based Research: A Kenyan Perspective

It is a major challenge to train US students to conduct useful, high quality environmental research, particularly in international settings. While many students possess the ability to do so, it is critical that they be trained to understand not only technical research procedures, but also the community context in which they are working. Serious attention must be given to helping students understand the interrelationship of the technical research they are producing and the social/political dynamics of the communities in which they are working.

Fortunately, in our experience in Kenya, the great majority of our students possess the intelligence, energy, and commitment to the community to produce research papers and recommendations that are strong intellectually and provide a concrete service to our client communities. The work produced by Megan McNaught, is an excellent example.

The challenge of preparing and supporting students to conduct high quality research in the field involves not only training them on the content of the work, but also acknowledging from day one the critical task of orienting them to the social, political, and linguistic culture of the local population and region. This challenge is heightened by governmental practices and tribal culture and conflicts of East Africa. Students need to be supported in learning and understanding that each of these factors will very likely exert some degree of impact on the work to be accomplished. These are 'real world' conditions that students may not like but with which they must learn to deal.

The SFS Center in Kenya is purposely located in an area of strong environmental tension, focusing on the very real conflict of an increasing human population within the historical wildlife migration areas. We work in Maasailand in Southern Kenya between Amboseli, Chyulu Hills, and Tsavo national parks. In this area human settlements on group ranches are expanding rapidly. At the same time, elephants and other species for which Kenya is famous, and through which it derives its tourist dollars, need to migrate seasonally in order to survive.

The Kenya government, Kenya Wildlife Service, and the Maasai group ranches leadership each understands the need to address this contentious issue. Through the mechanism of our Center's fiveyear research plan (which forms the context for each SFS center's academic and research work), these clients have asked SFS-CWMS to provide data, studies, and recommendations to assist in the resolution of this problem, including development of a land use management plan for the whole region.

In order to prepare our students to undertake this directed research we help them to understand a number of issues. These include:

- an understanding of the local/regional culture, history, politics, and context of the issues they will study;
- a working knowledge of the technical aspects and steps necessary to conduct field-based research. The great majority of students (even natural science students) have never conducted field research, and thus are not familiar with the skills necessary to do so;
- utilization of statistical methodologies, spreadsheets, etc. – all the tools needed to properly conduct applied research;
- the understanding that data collection is not the end of the job, but simply the beginning;
- the awareness that field-research is not a clear, straightforward process. Weather, animal presence or absence, local sense of time (for meetings), equipment failure, etc. are all real-world factors that are frustrating, but must be anticipated and accounted for. Flexibility is key;
- an understanding that while, in our case, our clients and stakeholders really want the output derived from faculty and student research, it does not mean that they will immediately act on anything that is produced.

This last point is one of the most important ‘lessons’ that our students learn. Like everyone, our students ‘want to make a difference’ and they would like to see immediate, or at least short-term results from their research efforts. The valuable lesson they learn is that the real world moves at its own pace. Timing relative to everything else going on in our client communities is a key in terms of the relative acceptance of the technical ideas and recommendations we put forward. In some cases, our students have seen their output immediately acted upon. Many times, our students have also seen their work ‘taken under advisement’ to be considered in at some point in the future .

As a Maasai myself, I appreciate the approach that SFS takes with our students; namely, that issues are very complex, and effective work on them *must* involve an interdisciplinary approach that melds natural science with an understanding of the economics, politics, and real-world power conflicts of any issue. As Megan’s work attests, she has clearly gained an appreciation of this dynamic.

Simon ole Seno, Ph.D.

Center Director

The School for Field Studies —

Center for Wildlife Management Studies