Field Research and Work-Life Integration

By Mary E. Blair, PhD (AWIS Member since 2011)

The assistant director for research and strategic planning at the American Museum of Natural History’s Center for Biodiversity and Conservation, Mary Blair conducts lab- and field-based research on the evolutionary biology of primates to inform their conservation. She wrote about her most recent expedition searching for slow lorises in Vietnamese forests at night for the New York Times’ “Scientist at Work” column. Dr. Blair teaches at the Richard Gilder Graduate School at AMNH, and is a recent recipient of a fellowship from the National Science Foundation to study wildlife trade and illegal trafficking in Vietnam.

Mary Blair (right) and colleagues in Vietnam, marking a trail to survey at night for lorises.
Photo by Minh Le.

A pygmy slow loris found during a night survey at No Nang Nature Reserve in Northern Vietnam.
Photo by Minh Le.
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I left the bitter, windy cold of New York City this morning to embark on my second field season in Vietnam searching for elusive and endangered nocturnal primates – slow lorises. During my first field season, I wrote a New York Times ‘Scientist at Work’ blog, reflecting on the challenges of finding slow lorises in the dark forests of Vietnam at night, and of studying an animal that is threatened with extinction.

At this time, as I set forth on my journey, I find myself reflecting on how the field research itself plays such a major role in the work that my colleagues and I do at the American Museum of Natural History. Across divisions and disciplines at the Museum, from Earth Sciences and Invertebrate Zoology to Anthropology and even Astrophysics, we Museum scientists seem to hold a shared passion for fieldwork that is tempered by an understanding of the unique challenges it presents.

As the Assistant Director for Research and Strategic Planning at the Center for Biodiversity and Conservation at the Museum, I am a research scientist but I also fall into the non-academic track. Although I conduct primary research and publish frequently, my work is highly interdisciplinary and also directly applied to problems in biodiversity conservation; these are research characteristics that are sometimes undervalued in academic departments. I teach through my appointment as an Affiliated Professor at the Museum’s Richard Gilder Graduate School, for the PhD. Program in Biotic Science. I love having the opportunity to teach at the graduate level, and my teaching requirements are minimal and quite flexible – and overall, my position at the Museum allows me to have more time to do what I love, which is primary scientific field research for conservation action.

All of us who enjoy fieldwork recognize that it has unique challenges; this is especially true for women and other scientists seeking to successfully integrate work and life.

Work-life integration is hard enough already, but field research presents even more of a challenge for several reasons. For example, in the field, it can be extremely difficult to take days off from working, often finding myself saying, ‘The lorises are out every night, so I’m working.’ Otherwise, I’m just losing data! But it’s important to remember that everyone needs a break – it improves your focus, provides perspective, gives you time to plan and strategize, and can help improve and build team relationships. So take a day or an evening or two to appreciate where you are and what’s going on around you, or even just relax and do nothing.

Another related and widely discussed challenge of fieldwork is balancing and negotiating travel and time away from family and loved ones. Do you bring your family with you? Even young children? Do you leave them behind, and make extra trips to go back and visit so you’re not away too long? Do you take several short trips rather than one long trip? It’s a contentious topic.

In April of 2012 there was an infamous and volatile Ecolog-L listServ discussion on this topic. EcoLog is the email listServ related to (but not officially tied to) the Ecological Society of America. An explosion of posts erupted on the listServ after a graduate student posted to the list asking for advice for carriers to use with her baby during field research. At first, people replied with useful suggestions, but unfortunately, others replied with reprimands and cautions about bringing an infant into the field. The discussion spiraled downward into rants about women and parents in ecology and academia. Rather than comment on the appropriateness of various posts from the discussion as others have elsewhere, I would like to draw your attention to the intersection of fieldwork and family as the key tether point in this divisive, explosive discussion. It might seem obvious, but the integration of work and family is particularly challenging when that work involves long bouts in the field. Take advice, there is wisdom in the words you hear, but each of us comes into an experience with our own unique situation, and only you can determine what’s best for your family.

For my part, I am grateful every day for the wonderful group of men and women I work with, the combination of peer mentors, and our AWIS chapter members for engaging with me and each other in open discussions about these issues, providing support and advice for how to address the joys and challenges of fieldwork in different ways across our diverse families and lives.

There is no one way to address the challenge of fieldwork, but a common theme seems to be the following: the first step is to make sure you are not framing the balance around how to manage your life to be least obtrusive to your work, but the other way around.

As President of the Association for Women in Science chapter based at the American Museum of Natural History, the New York Women in Natural Sciences chapter, I have the privilege of convening and interacting with our diverse chapter members. Our members represent nearly all of the scientific divisions and disciplines at the Museum – and other scientists at cooperating institutions. Our members include those who are in tenure-track Museum curator positions as well as other scientific researchers pursuing non-tenured career tracks.

The diversity of our chapter’s membership reflects the broadening of AMS overall to include women pursuing scientific careers in a variety of ways. It is true that persistent and unique barriers remain for women pursuing academic careers in science specifically, but women pursuing science through other paths face challenges as well – and we can certainly learn from each other’s experiences and support each other. Our chapter’s members include women in the Education, Exhibitions, and Communications wings of the Museum in addition to research scientists. Many of these women have degrees in science and are now focusing on communicating science to the public through the Museum’s outreach and education programs. Even though they may not do field research like the research scientists, they play a major role in producing online and print materials that document field research, making results accessible and understandable, and amplifying the impact of our work both in the scientific realms and to the broader public.

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Prior to going into the field, try to look at some of the blogs out there in academic and non-academic settings, including ones on the type of fieldwork you are doing. Investigate if the place you are traveling to will have internet connection and if there are any Internet restrictions on blog platforms (like Google’s Blogger, Wordpress.com, etc.).

If your field work is part of an academic or governmental field excursion or if funded by agencies, do check with the respective parties about disclaimers. Some might require disclaimers that your blog does not represent the institution or is funded by a certain grant.

Traditionally blog posts are 250 – 650 words and are written in a casual style of writing.

Anything you post must adhere to the disclaimer rules and you must make sure you have clearances to post your content. When setting up a blog, turn off the GPS/GIS coordinates, because if you find anything or could be at risk, this is an easy information disclosure you could prevent.

Typical posts could cover:
- Findings from your work
- What is important or interesting about your fieldwork
- Photos that you or a member of your team has taken (as a reminder, follow the institutional review board, human subjects, and/or cultural/governmental rules concerning photography.)

Blogging from the field is a great way to engage others in your work.

Make sure you cite/reference the research of others, as the rules of plagiarism avoidance and professional writing ethics still apply, even if blogs seem less formal or structured.

Decide if you want to keep your blog password protected, private, public, or a combination of settings. See if any of your colleagues in the field want to keep a blog together, as group blogging is a growing area of collaborative writing too.

Let audiences know about your blogging intentions, so you have audience interaction, feedback, and comments coming in while you are at work.

If you are writing for the general public, be cautious to consider that there might be non-STEM audience members so keep all levels/types of readers in mind as you write.

Save blogging for non-field hours, as it will help lessen the pressures and time constrictions in balancing writing with your fieldwork.
**Tips from the Field:**

Thinking about going out into the field to do your research? Here are some general tips on what to do before your trip (consult with a colleague for more discipline-specific tips).

**Prior to going out in the field, you must do quite a bit of preliminary work.**

Consult with senior faculty members on campus. Make contacts with professionals in your discipline. Fieldwork preparations should not be done in isolation.

Conduct extensive library and background research and formulate your research questions and related hypotheses.

Identify what resources, equipment and other factors you will need in order to complete your fieldwork.

Prepare grant proposals inclusive of preliminary realistic budgets for your project, and start recruiting colleagues and/or any support needed.

Find out the institutional review board and/or human subjects responsibilities in your discipline and follow them down to the last line, no exceptions.

If traveling abroad, check with the U.S. State Department’s travel website and consult with medical clinics to see what vaccinations or preventative treatments might be necessary. Check on passport, visa, and even fieldwork-related permits, as many of the governmental forms will take time not just to complete but also to receive approval and official notification upon.

If conducting your work within your home country, investigate what limitations or restrictions there might be on access to the lands/resources you wish to conduct research upon. Inquire what permits or other paperwork are needed, and what restrictions might apply by federal, state, and local governments/jurisdictions.

If conducting research on endangered, protected, or invasive species, find out what limitations might be in place. If excavating, make sure the previous maps, records, and even utility records are accounted for.

Make certain all ethical rules and responsibilities are adhered to and that you have recruited both sufficient and prepared staff, should you need or require assistants. Any language or material barriers need to be identified and remedies need to be negotiated (whether you take a course in the local language, make bilingual points of contact within the local community, etc.).

Identify fallback plans should political, environmental/weather, or military reasons recall you from the area of research.

Line-up someone for your lab, your courses, or your personal affairs (such as handling mail, any bills, etc.) and have contingencies worked out should you need anything paid for or money wired.

Make sure you have extra allowances and means for having equipment shipped or paid for should anything break, be lost, or found to suddenly be needed while you are in the field.

Determine what materials need to be shipped and best means for doing so early, so that you do not have to wait long in the field without needed items.

Check that you have any power/voltage converters, and any technological needs worked out well in advance and with alternate plans should items not work.

If going out domestically, or to countries where potable safe water is limited or in short supply, make sure you work out treatment plans for the resources or alternative preparations.