

Hello everyone! I am a new post-doc in David Post's lab and I am excited to let you know about a number of potential research/travel opportunities. My research focuses on the study of species-rich food webs, and especially how these webs are impacted by human activities. Most of my work is in aquatic systems, especially with fishes of all shapes and sizes. My dissertation research was conducted in Venezuela where I studied the food web of a large tropical floodplain river. I focused on large predators in the system, including peacock bass and piranha, and employed methodologies ranging from whole-system manipulations to isotope analyses to diet analyses to hook-and-line fishing. I also have an extensive research program in the Caribbean, in which I study how fragmentation of estuaries affects food web structure and function. This work involves underwater visual surveys (i.e. snorkeling), tagging and tracking individual fish, diet and isotope analyses, and restoring estuarine systems by removing blockages such as footpaths and roads.

If any of these projects interest you, I would be eager to talk with you more about your interests and potential ways to work with me. When I work with undergraduates, I follow a general strategy (although it is different with every student). The first stage is typically lab work (with tropical field sites, it is not feasible to jump directly into field work) in which I train students in a particular technique or sample processing routine, while at the same time talking and interacting with he or she concerning the conceptual framework and ecology behind the work we are doing. I always strive for this interaction to lead the students own project. I am always looking for especially inquisitive, hard-working students that eager to take this work to the next level. For such students, a realistic goal is traveling to either the Caribbean or Venezuela, and working with me on any of a variety of projects, as well as pursuing the student's own component of the work.

At the present time, I have one project that I am especially interested finding a hard-working student to become involved in. This past January, I started a project in a small Venezuelan River with a research group from Cornell and the University of Wyoming. This work was focused on a hot topic in ecology which is often referred to as a "spatial food web subsidy". In this case, emerging aquatic insects from the river provide a food source, the "subsidy" to various terrestrial predators that frequent the river (spiders, lizards, birds, and bats). I especially focused on the riparian spiders, a diverse and fascinating group of shoreline predators. This work was conducted in conjunction with an isotopic labeling study. Label nitrogen isotope is added to the water and is taken up by algae and organic matter in the river, which is then consumed by larval aquatic insects. As these insects emerge from the water as adults, many are eaten by the spiders, and the label then is passed to these predators. Thus, by looking at the level of the label in spider tissue, the spiders that target emerging aquatic insects can be identified.

I have collected hundreds of spiders, as well as the emerging insects, and want to find a student to take the lead on identifying and processing them. This work will be conducted in David Post's lab in the OML building. An additional opportunity is that we would need to go to the Smithsonian in September to learn to identify these samples, as I have little previous experience working with anything that doesn't have gills. I would pay for all trip expenses to Washington DC. This work has tons of potential, and it is likely that

either this or next January we can return to Venezuela and extend this work. One drawback is that I will be in the Bahamas from August 1 until I travel to the Smithsonian in September. Thus, most correspondence will have to be over email. If you are interested, however, and are on campus now, please let me know and we can talk more before I leave.

You can read more about my research on my web page:
<http://www.eeb.yale.edu/layman/index.htm>

Please contact me directly if you are interested or have any questions (email: cal1634@yahoo.com; phone: 203 314 4402).