Curriculum Vitae
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Lawrence E. Reeves

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Education

- B. S. 2006. State University of New York - College of Environmental Science and Forestry
  Major: Conservation Biology

Professional Experience

- 2006. Lubee Bat Conservancy. Gainesville, Florida
  - Captive care and maintenance of flying foxes
- 2007-Present. Greathouse Butterfly Farm. Earelton, Florida
  - Insectary management
  - Artificial diet development
  - Comprehensive insect rearing experience
  - Field collecting
  - Night collecting
  - Lepidopteran disease recognition and management

Internships

- 1999. Negros Forest and Ecological Foundation Inc., Bacolod, Philippines
  - Wildlife husbandry
  - Conservation of Philippine biodiversity
- 2005. Gopher Tortoise Conservation Initiative, Archer, FL
  - GPS techniques
  - Data collection
  - Tortoise husbandry and breeding methods

Volunteer Work

- 2004 – 2006 Florida Wildlife Care
- 2008-Present. McGuire Center for Lepidoptera and Biodiversity, Gainesville, FL
  - Preparing specimens, including micro-lepidoptera
  - Night collecting
  - Specimen curation

Publications

- Reeves, L. E. 2008. An overview of the testing methods and prevention of the parasitizing Neogregarine, *Ophryocystis elektroscirrha*, in monarchs and queens. Proceedings of 2008 Invertebrates in Conservation and Education Conference.
- Reeves, L. E. 2009. Dutch elm disease, chestnut blight …and laurel wilt: Potential effects of an introduced pathogen on laurel-feeding swallowtail populations. Proceedings of 2009 Invertebrates in Conservation and Education Conference.

Seminars

- 2010. "Lepidoptera and the Biodiversity Crisis: The Role of Museums and Collections" San Carlos University, Cebu City, Philippines.

Presentations at Scientific Meetings

- 2008. "An overview of the testing methods and prevention of the parasitizing Neogregarine, *Ophryocystis elektroscirrha*, in monarchs and queens." 2008 Invertebrates in Education and Conservation Conference, Rio Rico, AZ.
- 2009. "Dutch elm disease, chestnut blight …and laurel wilt: Potential effects of an introduced pathogen on laurel-feeding swallowtail populations." 2009 Invertebrates in Education and Conservation Conference, Rio Rico, AZ.

Conferences, Workshops and Scientific Meetings Attended

- 2007. Invertebrates in Education and Conservation Conference. Rio Rico, AZ.
- 2007. Insect Rearing Workshop. Mississippi State University
- 2008. Invertebrates in Education and Conservation Conference. Rio Rico, AZ.
- 2008. International Butterfly Breeders Association, San Jose, Costa Rica
- 2008. Insect Rearing Workshop. Mississippi State University
- 2009. Invertebrates in Education and Conservation Conference. Rio Rico, AZ.
- 2009. Southern Lepidopterists' Society/Association for Tropical Lepidoptera Annual Metting. Gainesville, FL.
- 2009. Insect Rearing Workshop. Mississippi State University.

Teaching Experience

- 2006. Undergraduate Teaching Assistant: EFB 485: Herpetology (SUNY-ESF, instructor: James P. Gibbs)
- 2008. Workshop Leader: Management of Microbes and Contaminants in the Insectary.
- 2010. Lecture: "Moths and Collecting in North Florida" University of Florida, Art and Ecology class.

Professional Memberships

- Southern Lepidopterist's Society
- Sonoran Arthropod Studies Institute

- International Butterfly Breeders Association

Photography

- 2007. 1st and 3rd place; Sonoran Arthropod Studies Institute Photography Contest.
- 2009. Photographs, mounted insects and preserved specimens featured in "Volta Autonomous Natural History Museum" art show. Volta Coffee, Gainesville, FL.

Travel Abroad

- 1995 – Philippines
- 1999 – Philippines
- 2000 – Bahamas
- 2002 – Philippines
- 2007 – Peru
- 2008 – Italy, England, Spain
- 2008 – Mexico
- 2008 – Costa Rica
- 2009 – Peru
- 2009 – Costa Rica
- 2010 – Philippines

Lawrence Reeves
Statement of Purpose

Throughout our history, humans have had a major effect on the planet and its biodiversity. One of the most affected countries has been the Philippines. Of the forests that once entirely covered the islands, less than 7% remain. Remaining forest is quickly being harvested for timber and converted into farmland. The country is one of only a few classified as both a biodiversity hotspot and a megadiverse country. Because of its extraordinary number of endemic species, the Philippines has been described by Dr. Lawrence Heaney as "the Galapagos times ten." Its exceptional biodiversity is under severe threat. Worldwide, resources for conservation are limited. This is especially true in the Philippines. Here, as in much of the world, it is largely charismatic megafauna receiving the attention of conservationists. The importance of invertebrates has been acknowledged only recently. Conservation of invertebrate aims not only to conserve species, but also the ecosystem processes they are responsible for. Therefore, many taxa could qualify as umbrella groups. I have been working with the biology department of the University of San Carlos to assess Philippine Lepidoptera, which can serve as flagship taxa for insects and other arthropods. Through Lepidoptera, conservation of invertebrates can be popularized.

In my graduate studies at the Department of Entomology and Nematology at the University of Florida, I would like to formalize this project. The project I would like to conduct involves creating a database of the Lepidoptera collection at the University of San Carlos and identifying the localities that were historically most heavily collected. Many specimens in the collection are 20-30 years old. The identified localities could then be revisited and collected. Comparison of historic and current species composition data would be highly useful in determining ecological and population trends for specific areas. For example, many endemic species have specialized habitat preferences and require fairly undisturbed habitats. The presence or absence of such species could serve as an indicator of forest health. Conversely, the presence of widespread, generalist species, especially if such species were historically absent, could signal habitat degradation. Additionally, through interviewing the local population at collection sites, it may be possible to determine the changes, anthropogenic or otherwise, which have occurred at each locality over time. I believe the University of Florida's Department of Entomology and Nematology, with its close proximity to the McGuire Center for Lepidoptera and Biodiversity would be ideal for a project such as this.

Ultimately, I would like to use this project to generate additional studies on Philippine Lepidoptera and using this information, further the goals of biodiversity conservation in the Philippines. There are numerous facets to Lepidopteran diversity in the Philippines. Information on the country's species richness is incomplete and the complex geologic history makes it a fascinating setting for biogeography studies. Rigorous biogeographical studies are important for developing optimal conservation strategies. With its high level of ecological issues,

mainly stemming from deforestation, the Philippines should be a high priority for evolutionary and conservation biologists. Unfortunately, the archipelago does not receive the attention it deserves. Thus, there is a niche that my proposed studies would fill.

Ecological issues in the Philippines have particular meaning to me. My mother grew up in the Philippines. As a child, I was enchanted by stories of crocodiles, monkeys and parrots inhabiting the river and land surrounding my family's home in the Philippines. By the time I arrived, crocodiles had been extirpated from the entire island and monkeys and parrots were only found in the few remaining pockets of inaccessible highland forest. Traveling around the country, the effects of habitat destruction and conversion of native habitat to farmland are evident. I first began collecting insects during early childhood. In elementary school, I visited the Philippines for the first time and was overwhelmed by its biodiversity. Early this year, for the first time in almost a decade, I returned to the island of Negros in the Philippines and as a result of my studies in conservation biology at SUNY-ESF and experiences both at the Greathouse Butterfly Farm and the McGuire Center for Lepidoptera and Biodiversity was able to look with "new eyes" at the island's arthropod diversity and habitat loss. In Florida, I have curated my own collection of several thousand native Lepidoptera specimens ranging from Gelecheoids to Saturniids. I realized that even a small collection of Philippine Lepidoptera, similar to my own north Florida collection could yield useful information. Many regions of the islands are in need of basic biodiversity inventories, giving high value to even simple collections. I believe the resources of the University of Florida's Department of Entomology and Nematology and the McGuire Center for Biodiversity and Lepidoptera would be ideal for carrying out this sort of research. The study I am proposing also would complement other projects being conducted by the McGuire Center in the Indo-Pacific region.

Through studies at the University of Florida's Department of Entomology and Nematology I hope to further my goals of studying Philippine Lepidoptera and working to further their conservation.