MS Assistantship – Life history and spatial ecology of *Ophidiomyces* in Indiana/Michigan

Description

Outstanding candidates are sought to fill a graduate student position in the Department of Biology at Purdue University Fort Wayne (PFW) to investigate interactions between the life history and spatial ecology of *Ophidiomyces ophiodiicola*, the causative agent of snake fungal disease, and that of imperiled Massasauga Rattlesnakes (*Sistrurus catenatus*). The student will be responsible for the collection, processing, isolation, and analysis of DNA from environmental samples (eDNA) as well as collection of associated environmental and habitat data. The student will also conduct visual surveys for Massasauga Rattlesnakes and assist with analysis of spatial and environmental data.

Field site location: Field work will occur primarily at Camp Grayling Joint Maneuver Training Center in Grayling, Michigan, an active National Guard training installation. Camp Grayling is located ~4.5 hrs from the university, and students should expect to spend their summers near the field site. Fieldwork conditions may be demanding at times, with heat, humidity, and biting insects in both wetland and upland habitats.

Additional collaborative opportunities in conservation and herpetology exist with additional Purdue University Fort Wayne faculty, particularly involvement with the PFW Environmental Resources Center (http://erc.pfw.edu/).

Receipt and continuation in such positions are contingent upon acceptance and successful progress through the MS Biology program at Purdue University Fort Wayne (https://www.pfw.edu/departments/coas/depts/biology/graduate/).

Timeline and compensation

The position will begin no later than mid-May 2019 and include at least two seasons of fieldwork. Preference will be given to applicants that can start on or before May 1, 2019. Support will come in the form of a Graduate Research Assistantship during the academic year, partial fee remission, and a summer salary. Travel to and from the field will be compensated, and summer housing will be provided near the field site.

Qualifications

Minimum qualifications:

- Earned four-year degree from an accredited college or university (biology, wildlife, ecology, or a related field)
- Excellent written and oral communication skills
- Ability to collaborate and work with a multi-institutional team
- Fieldwork experience
- Ability to work independently for long hours in unfavorable weather conditions
- GPS navigation
- Driver’s license

Exceptional applicants will have field and laboratory experience with reptiles, experience with basic molecular biology techniques (gel electrophoresis, PCR), including analysis and interpretation of genetic data, knowledge or a willingness to learn statistical analysis in R and ArcGIS/QGIS, and have a strong drive to publish results.

Contact

Qualified applicants should email an explanation of interest, their date of earliest availability, and include a CV that details academic background, relevant experience, and the names and contact information for three references to Dr. Mark Jordan (jordanma@pfw.edu, http://users.pfw.edu/jordanma/) and Dr. Evin Carter (CarterE@ORNL.gov, www.evincarter.org). Applications will be accepted until April 1, 2019.