## MSc Assistantship – Genetics and Movement Ecology of Swift Fox Following Establishment of a Translocated Population.

Department of Ecology, Montana State University Smithsonian Institution National Zoo and Conservation Biology Institute Fort Belknap Fish and Wildlife Department

We are seeking one Master's student to work in collaboration with Montana State University, Smithsonian Institution National Zoo and Conservation Biology Institute, and Fort Belknap Fish and Wildlife Department on a research project investigating the genetics and movement ecology of swift foxes located on the Fort Belknap Indian Reservation in northern Montana. This project aims to assess genetic diversity, gene flow, kinship, dispersal, and home ranges of a newly established population of swift foxes reintroduced to the study site following translocation efforts during 2020-2023. Fieldwork is expected to include camera-based surveys to detect foxes, combined with live-trapping efforts to collect genetic samples and deploy tracking collars. The study site consists of a remote grassland habitat primarily occurring on lands owned and managed by the Fort Belknap Indian Community.

The student will begin by September 1, 2025 as an intern with the Smithsonian's Great Plains Science Program in order to gain experience with the study system and survey protocols from other ecologists assisting with the project. The student will start classes on campus at Montana State University (Bozeman, MT) in Spring 2026. The student will be supported by a combination of internship stipends, Research Assistantships, and Teaching Assistantships. This will include a stipend of ~\$2,000/month during the Fall 2025 internship phase and a stipend of ~\$2,400/month, plus tuition, tuition fees, and health insurance once the student is enrolled at Montana State University starting January 2026. Housing will be provided while in the field. The student will pursue a 2-3 year MSc at Montana State University in the Department of Ecology (https://www.montana.edu/ecology/), co-advised by Justine Becker Dr. (https://www.beckerecologylab.org/) and Dr. Ethan Linck (https://elinck.org/). The student will also work in close collaboration with Smithsonian Research Biologist/Ecologist Dr. Nucharin Songsasen and Jesse Boulerice, as well as members of the Fort Belknap Indian Community.

## **Required Qualifications:**

- B.S. in wildlife science, ecology, zoology, or closely related field
- Average GPA of 3.0 in biology courses; 3.0 average in courses taken during the junior and senior years; and 2.5 average in chemistry, physics and mathematics courses
- A strong work ethic, drive, and motivation to succeed
- Aptitude for modelling and quantitative ecology / evolutionary biology
- Aptitude or interest in scientific programming and bioinformatics
- Strong verbal and written communication skills
- Experience in field-based wildlife research, preferably in remote grassland ecosystems.
- Experience in basic laboratory techniques.
- Ability to work independently and as a productive member of a research team

## **Preferred Qualifications:**

- Experience programming in R and conducting statistical analyses
- Background or interest in conservation, population, or evolutionary genetics / genomics, movement ecology, and animal behavior
- Experience working and communicating with wildlife management agencies, tribal organizations, and the public
- Experience trapping and handling small to medium-sized mammals
- Experience in a wet lab environment and/or with the handling and processing of biological samples
- Experience in leadership roles, especially associated with leading field crews

Start Date: September 1, 2025

Application Deadline: July 15th 2025.

**To Apply:** Please send the following materials via email with "**Swift Fox MSc Assistantship**" as the subject line to Justine Becker (<u>justine.becker1@montana.edu</u>) and Ethan Linck (ethan.linck@montana.edu): (1) cover letter describing the applicants qualifications, career goals, and academic interests, (2) resume/CV with contact information for ≥3 references, and (3) unofficial copies of transcripts.