The Institute for Applied Ecology (IAE) is a non-profit started in 1999 with a mission to conserve and restore native plants and their habitat through restoration, research, and education. Our vision is a world where all people and wildlands are healthy and interact positively, biological diversity flourishes, and environmental challenges are met with a social commitment to solving problems with scientific principles.

Our Southwest Office (IAE SW) works in New Mexico and Arizona. We cultivate partnerships to facilitate large-scale, regional conservation projects, develop ecologically appropriate sources of native seed, offer native species education opportunities and materials, provide technical assistance to restoration and management planning and implementation, and conduct on-the-ground habitat restoration and applied research.

IAE values diversity and equity, and we encourage applications from all groups of people. We recognize that the strength of IAE is in our people, and we believe that every employee has the right to work in surroundings that are free from all forms of unlawful discrimination and harassment. IAE does not and will not discriminate in employment and personnel practices, and our commitment to equal employment opportunity applies to every aspect of the employment relationship.

Southwest Rare Plants Ecologist

Start Date: 3/4/2024  
Location: Santa Fe, NM  
Status: Regular, full-time  
Job classification: Ecologist 1  
Supervisor: Assistant Branch Director

Compensation: $23-25/hour, depending on experience  
Plus, competitive benefits package, travel expenses associated with overnight field work (food and lodging), paid holidays, sick leave, and overtime pay.

Position Description

The Southwest Rare Plants Ecologist will lead the rare plants field crew and demography research for the New Mexico Bureau of Land Management’s (BLM) Rare Plant Monitoring Initiative, operated by the Institute for Applied Ecology. More information about the program can be found [here](#) and in [this](#) blog by the 2023 crew. During the field season (April – October), the Ecologist will lead a crew of two technicians to monitor demography of rare plants on BLM lands across NM following established protocols, particularly in areas where multiple-use land management (i.e. energy extraction) impacts on rare plants are expected. Crews will be required to drive to remote areas throughout New Mexico, camp overnight for 2-7 consecutive days, hike up to several miles a day, and return to the office for equipment and data management. Following the field season, the Ecologist will develop population models from the field collected data and prepare written reports and presentations. While rare plant inventories are the focus, the Ecologist will support other plant conservation program projects depending on the candidate’s interests and experience. These projects may include native seed collection, pollinator monitoring, floristic diversity surveys and native plant restoration.
This is a full-time, regular position that requires overnight camping and non-traditional work hours sometimes inclusive of weekend and evening hours.

Specific Responsibilities

**Project management (35%)**
- Adhere to existing monitoring protocols based on project objectives
- Plan overnight camping and field work schedule
- Communicate with land managers or partners to facilitate access to monitoring sites; represent IAE in a professional manner
- Coordination or supervision of others
  - Supervise, support and work alongside 2 field technicians
  - Train technicians to collect and manage data in ArcGIS products (e.g., Survey123)
  - Prioritize safety; adhere to check-in/check-out procedures and communications via cell phone or GPS device to ensure crew safety

**Data collection (30%)**
- Collect and manage data with ArcGIS products (e.g., Survey123) and troubleshoot issues that arise
- Identify and monitor target species
- Independently perform data QA/QC and design simple queries to extract data from database

**Data analysis (20%)**
- Perform data quality control and analysis in Microsoft Excel and R
- Design population models and viability analyses for multiple rare plant species in NM

**Writing (15%)**
- Contribute to and edit scientific reports and/or peer-reviewed publications
- Contribute to IAE newsletters and social media posts

Studies have shown that Black, Indigenous and People of Color (BIPOC), women and other marginalized groups are less likely to apply for jobs unless they believe they meet every one of the qualifications as described in a job description. We are most interested in finding the best candidate for the job, and that candidate may be one who comes from a less traditional background. If you are interested in applying, we encourage you to think broadly about your background and qualifications for the role.

Minimum Qualifications

- A positive attitude with an interest in ecology and botany
- Plant ID skills using technical keys
- 2+ field seasons performing plant identification and vegetation sampling
- Previous leadership experience leading a group of two or more people
- Effective oral and written communication skills and experience working on a team
- Experience with project management
- Organized and detail-oriented
- Basic computer skills
- Ability to use R software for data wrangling, analysis, and visualization, or the ability and self-motivation to learn
- Self-motivated and able to work independently with limited supervision after initial training period; must be capable of performing well in an office setting, as well as the field
- Familiarity with basic plant taxonomy, including major families and botanical vocabulary
Willingness to spend multiple days (2-7 days at a time) car-camping in remote areas; familiarity with and willingness to adhere to best practices for field safety and Leave No Trace principles

Able to conduct frequent bending, kneeling, and standing

Able to work in a variety of adverse weather conditions, which may include extreme heat and sun exposure, monsoonal rains, flash flooding, lightning, and hazardous wildlife (i.e. rattlesnakes, scorpions, bears)

A valid driver’s license with the ability to drive a 4WD vehicle off-highway

Preferred Qualifications

- Knowledge of plants of the Southwest
- Experience with ArcGIS Online interface and ArcGIS tablet applications (Collector and Survey 123)
- Experience developing population models from field collected data
- Coursework/training in botany and/or degree in botany or related field
- Current CPR, First Aid, Wilderness First Aid or Defensive Driver Training Certificates
- Able to lift up to 40 lbs.
- Able to hike up to 6 miles a day

How to Apply

Please email the following PDF documents to humanresources@appliedeco.org by 11:59pm, Monday, January 1st, 2024.

- Brief cover letter describing your interest in the position and how this position aligns with your goals and experiences. This should be a single page document with 2 – 3 paragraphs.
- Resume identifying relevant experience. Paid or unpaid experience.

We also ask that you answer all questions in the online application form. The contact information of 2 – 3 references can be provided on the online application form but can be changed at any time in the hiring process. References will be contacted upon completion of the interview.

If you have any questions or concerns, please refer to our FAQ or direct them to humanresources@appliedeco.org and we will get back to you as quickly as possible.