Title: Postdoc in American kestrel hierarchical modeling and decision analysis
Agency: New Mexico State University
Location: Flexible (see description)
Job Category: Post Doctoral Appointments
Salary: $52,000/year with benefits (funded for 20 months)
Start Date: 5/15/2022 (negotiable)
Last Date to Apply: December 3rd for full consideration, though the position will remain open until a suitable candidate is found.

Description:
Background: Our team is excited to announce a postdoctoral research opportunity to examine American kestrel population trends at the continental scale, and lead a decision analysis to identify future research priorities. Kestrels have been declining across most of their North American range at a steady rate for several decades due to factors that remain unclear, despite extensive study. Until the causes of the kestrel decline are identified, effective corrective management actions that could prevent a potential ESA listing cannot be initiated. Our study will construct a series of integrated population models that will draw upon existing data sources (Bird Banding Lab, Breeding Bird Survey, eBird) to elucidate the drivers of kestrel declines at continental and regional (flyway) scales. During the study, we will host a rapid prototyping workshop with species experts and USFWS decision makers to use the continental-scale results as the basis for developing regional-scale hypotheses that can be tested through management actions and prioritized using a value of information analysis.

The postdoctoral researcher will lead the modeling component of the project and co-lead a workshop with the principal investigator team. The postdoc will be supervised by Dr. Abby Lawson of the USGS New Mexico Cooperative Fish and Wildlife Research Unit based at New Mexico State University, and will work closely with fellow PIs from the USFWS National Raptor Program (Drs. Paige Howell, Brian Millsap, Guthrie Zimmerman), USFWS Science Applications (Dr. Matt Boggie), USFWS Migratory Birds Southwest (Kristin Madden), and the Cornell Lab of Ornithology (Dr. Orin Robinson).

The postdoctoral researcher will be expected to:
(1) Assist in the development of a continent-scale kestrel integrated population model that incorporates large, broad-scale datasets
(2) Co-lead a series of standing calls and webinars with PIs and stakeholders to keep them apprised of study progress
(3) Co-lead a stakeholder rapid prototyping workshop with stakeholders (species experts and agency decision makers) to elicit hypotheses and conduct a value of information analysis
(4) Develop a series of regional-scale (flyway) integrated population models that incorporate both large-scale demographic data sets and local-scale spatial covariates/remote sensing data to test hypotheses identified during the rapid prototyping workshop

Position structure:
The position is funded for 20 months through a USFWS Science Support Partnership grant. The successful candidate will have the option to be based out of New Mexico State University (Las Cruces, NM) or any remote location of their choosing, though we are unable to adjust the salary for local cost of living. The start date of 5/15/2022 is negotiable.

The postdoctoral researcher will be provided an annual salary of $52,000 plus benefits, a desktop computer (based at NMSU) with high processing speeds, and travel funds to attend the workshop and a national conference. This position is an excellent opportunity to engage with agency professionals and conduct cutting-edge quantitative research.

Qualifications:

Minimum qualifications:
1. Ph.D. degree by start date in Wildlife, Ecology, or related field by the anticipated start date (May 2022)
2. Expertise in R coding language and previous experience constructing Bayesian hierarchical models.
3. Demonstrated desire and proven ability to publish in peer-reviewed journals.
4. Excellent written and personal communication skills
5. The ability to work both independently and collaboratively, and to meet deadlines.

Desired qualifications:
Competitive candidates will have a background in data integration, structured decision making/decision analysis, experience in facilitation and leading workshops with diverse stakeholder groups around contentious environmental issues.

How to apply:
Email the following as a single PDF document: (1) a letter (no longer than 1.5 pages) describing background, research interests, and career goals— the letter should address specifically how the applicant meets both the minimum requirements and desired qualifications; (2) curriculum vitae; and (3) names and contact information (phone and email) for three references and “AMKE Postdoc” in the subject to Dr. Abby Lawson (ajlawson@nmsu.edu). Apply by December 3rd for full consideration, though the position will remain open until a suitable candidate is found.