

# Solar Wildlife & Ecosystems

## RESEARCH MEETING

NOVEMBER 17-20, 2025 | SCOTTSDALE, AZ



### Research Topics

Specific areas of interest for abstracts include, but are not limited to, the list below.

- 1. Solar-Wildlife Ecological Interactions**
  - a. Short- & long-term effects on habitat
  - b. Population-level studies - demography, behavior, & genetics
  - c. Community Studies – composition, diversity, abundance, species interactions, etc.
  - d. Cumulative effects & landscape considerations
  - e. Monitoring techniques, standardization, data management & accessibility
- 2. Studying Solar Farms through the Lens of Ecosystem Function & Service**
  - a. Ecosystem responses to different construction practices, vegetation establishment & management strategies
  - b. Wildlife compatibility with dual-use solar & agrivoltaic systems
  - c. Nutrient cycling, soil-plant interactions, & microclimates
- 3. Evaluating the Efficacy of Mitigation Strategies Associated with Solar Buildout**
  - a. Avoidance - strategies avoiding impacts amidst constraints & multiple interests
  - b. Minimization - onsite practices & design features reducing impacts & providing benefits
  - c. Compensatory strategies – implementation, evaluation, & lessons learned
- 4. Water Resource Management**
  - a. Water use & conservation
  - b. Short and long-term effects on hydrology, water quality, wetlands, & aquatic wildlife
  - c. Stormwater best management practices & regulations
  - d. Ecological effect of floating PV solar
- 5. Climate Change, Solar Energy, & Wildlife Ecology**
  - a. Counterfactuals to assess solar-wildlife interactions
  - b. Modeling effects of climate change & solar buildout on wildlife populations
  - c. Interactions among climate change, microclimates, & regional weather
- 6. Placing Science in Context**
  - a. Common community concerns re: solar-wildlife-ecosystem interactions
  - b. Engaging community representatives in the full research process
  - c. Disseminating research in a dialogue with community stakeholders
  - d. Lessons learned/case studies/future needs