

## Work scope details:

**Title:** Biological and Sensitive Species Surveys

**Work Scope Summary:** This work plan outlines the activities related to wildlife management on the Oak Ridge Reservation (ORR), focusing on ecological research and ecosystem monitoring. Activities include animal surveys, live trapping, and wildlife management, with strict adherence to safety protocols and training requirements.

### Key Work Scope Components:

- Conducting ecological surveys in upland and aquatic habitats.
- Utilizing various trapping methods for small mammals and other species.
- Handling and documenting live and dead animals.
- Performing biodiversity assessments and collecting tissue samples.
- Ensuring compliance with relevant permits and safety protocols.

## Relevant previous events and lessons learned:

Event Title	Event Summary	Lessons Learned	Reference Link
Wildlife Handling Incident	A researcher was bitten while handling a bat without proper PPE, leading to rabies exposure.	Always use appropriate PPE, including gloves and masks, when handling wildlife.	<a href="#">N/A</a>
Trapping Accident	An employee sustained injuries due to improper handling of live traps, resulting in a sprained wrist.	Ensure all personnel are trained in proper trap handling techniques and use of safety equipment.	<a href="#">N/A</a>
Exposure to Zoonotic Diseases	A team member contracted Lyme disease after failing to use insect repellent while working in a tick-infested area.	Implement mandatory use of insect repellent and regular health checks for field workers.	<a href="#">N/A</a>
Slip and Fall Incident	A researcher slipped on wet rocks while conducting surveys near a stream, resulting in a minor injury.	Conduct thorough site assessments for trip hazards and provide adequate training on navigating uneven terrain.	<a href="#">N/A</a>
Euthanasia Procedure Error	An incorrect euthanasia method was used, causing unnecessary suffering to an animal.	Ensure all staff are trained and certified in humane euthanasia techniques before engaging in such activities.	<a href="#">N/A</a>

## Missing Hazards:

Hazard	Missing or Inadequate Mitigation in Current Work Control Document	Recommended Mitigation for Revision	Reference Link	SBMS Link
Trip and Fall Hazards	Not addressed	Conduct site-specific hazard assessments and provide training on navigating uneven terrain.	<a href="#">N/A</a>	<a href="#">N/A</a>
Exposure to Zoonotic Diseases	Inadequate training requirements	Mandate pre-exposure rabies vaccinations and training on zoonotic disease prevention.	<a href="#">N/A</a>	<a href="#">N/A</a>
Heat Stress	Not addressed	Implement a heat stress management plan, including hydration breaks and monitoring.	<a href="#">N/A</a>	<a href="#">N/A</a>
Insect Bites	Not addressed	Provide mandatory training on insect bite prevention and ensure availability of insect repellent.	<a href="#">N/A</a>	<a href="#">N/A</a>
Euthanasia Procedures	Inadequate training documentation	Require documented training and certification for all personnel involved in euthanasia.	<a href="#">N/A</a>	<a href="#">N/A</a>
Equipment Failure	Not addressed	Regularly inspect and maintain all trapping and handling equipment to prevent failures.	<a href="#">N/A</a>	<a href="#">N/A</a>
Communication Failures	Not addressed	Establish clear communication protocols, especially when working in remote areas.	<a href="#">N/A</a>	<a href="#">N/A</a>
Allergic Reactions	Not addressed	Ensure all workers disclose allergies and have access to emergency medications (e.g., EpiPen).	<a href="#">N/A</a>	<a href="#">N/A</a>

### Failure mode analysis:

Current Control	Failure Mode of the Control	Effect of Failure	Cause of Failure	Recommended Action
PPE Requirements	PPE not used or inadequate	Increased risk of injury or disease exposure	Lack of enforcement or training	Conduct mandatory PPE training and audits.

Current Control	Failure Mode of the Control	Effect of Failure	Cause of Failure	Recommended Action
Permit Systems	Permit not obtained or expired	Legal repercussions and project delays	Poor tracking of permit status	Implement a tracking system for all required permits.
Training Programs	Inadequate training for handling wildlife	Increased risk of injury or disease	Lack of resources for training	Develop a comprehensive training program with regular updates.
Communication Protocols	Poor communication during fieldwork	Delays in emergency response	Lack of established protocols	Create and enforce clear communication protocols for all field activities.
Emergency Response Procedures	Emergency procedures not followed	Increased risk during emergencies	Lack of drills or training	Conduct regular emergency response drills and training sessions.
Equipment Maintenance	Equipment failure during use	Injury to personnel or animals	Lack of regular maintenance checks	Schedule routine inspections and maintenance for all equipment.
Hydration Management	Failure to monitor hydration levels	Risk of heat stress or dehydration	Lack of awareness or enforcement	Implement mandatory hydration breaks and monitoring.
Wildlife Handling Procedures	Improper handling techniques	Injury to personnel or animals	Inadequate training or supervision	Require certification for all personnel involved in wildlife handling.

This risk assessment report provides a comprehensive overview of potential hazards associated with the Biological and Sensitive Species Surveys work plan, along with actionable recommendations to enhance safety and compliance with established protocols.