Zoo Animal Care

Risk Assessment

CONTACT DETAILS

IN AN EMERGENCY CALL:

Lead:	**Primary Contact:**
Participants:	

SERVICE/ACTIVITY DETAILS

Purpose:	**Date:**

Benefit: Educates the public on wildlife diversity and ecosystem importance. | Encourages species preservation through captive breeding programs. | Enhances biodiversity knowledge by studying different species from around the world. | Promotes awareness of ethical animal care through public engagement. | Provides safe and controlled environments for research on animal behavior and biology. | Supports conservation efforts by caring for and rehabilitating endangered species.

HAZARDS

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Animal bites or scratches	Bites, scratches, infections	Allows for close interaction necessary for medical care and enrichment activities, enhancing animal welfare and facilitating health monitoring.	Implement comprehensive training programs for staff on animal behavior and safe handling techniques. Ensure the use of appropriate personal protective equipment (PPE) and establish clear protocols for interaction with animals. Regularly review and update safety procedures. **(ALL)**	Staff, visitors	Before Measure: **High** After Measure: **Med**
Animal escapes	Injury to staff, injury to visitors, damage to property	Provides animals with enriched environments that mimic natural habitats, supporting psychological well-being.	Design enclosures with secure barriers appropriate for each species. Perform regular inspections and maintenance to identify and repair potential escape points. Develop and drill emergency response plans for escapes, including staff training and public safety measures. **(ALL)**	Staff, visitors, animals	Before Measure: **High** After Measure: **Med**

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Chemical exposure	Skin irritation, respiratory issues, poisoning	Ensures a clean and hygienic environment for animals and visitors, essential for health and safety.	Store chemicals securely and maintain clear labeling. Train staff on proper handling, usage, and disposal of chemicals. Implement spill response procedures and provide appropriate PPE. Conduct regular audits to ensure compliance with safety regulations. **(ALL)**	Staff, visitors, animals	Before Measure: **High** After Measure: **Med**
Contaminated food sources	Foodborne illnesses, nutritional deficiencies, poisoning	Ensures nutritional integrity and prevents illness, supporting overall animal health and longevity.	Source food from reputable suppliers and conduct regular quality checks. Implement strict storage and handling procedures. Train staff on food safety and contamination prevention. Maintain records of food batches and expiry dates. **(ALL)**	Animals	Before Measure: **High** After Measure: **Med**
Drowning risks for staff or animals	Drowning, hypoxia, fatalities	Allows aquatic and semi-aquatic species to thrive in environments that mimic natural habitats.	Install secure barriers around deep water features. Train staff in water safety and rescue procedures. Provide exit ramps in enclosures with water features. Regularly inspect and maintain water structures. **(ALL)**	Staff, animals	Before Measure: **High** After Measure: **Med**
Electrocution from faulty equipment	Electrical shocks, burns, fatal injuries	Allows for the safe use of heating, lighting, and water filtration systems necessary for animal welfare.	Conduct regular inspections and maintenance of electrical systems. Ensure proper grounding of electrical components. Train staff on recognizing faulty wiring and handling electrical emergencies. Use waterproof and tamper-proof covers for outdoor electrical equipment. **(ALL)**	Staff, animals	Before Measure: **High** After Measure: **Med**

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Fire hazards	Burn injuries, structural damage, loss of animals	Protects the facility, animals, staff, and visitors, ensuring continuity of operations and safety.	Install and maintain fire detection and suppression systems. Conduct regular fire drills and training for staff. Store flammable materials properly and enforce no-smoking policies. Develop and communicate emergency evacuation plans for animals and personnel. **(ALL)**	Staff, visitors, animals	Before Measure: **High** After Measure: **Med**
Hazardous waste exposure	Biohazard infections, chemical exposure, contamination risks	Maintains hygiene and disease control, creating a safe environment for animals, staff, and visitors.	Implement strict protocols for the disposal of animal waste, medical supplies, and cleaning chemicals. Train staff on handling biohazard materials safely. Provide appropriate PPE and secure waste disposal containers. Conduct regular audits for compliance. **(ALL)**	Staff	Before Measure: **High** After Measure: **Med**
Injury from enclosure maintenance	Falls, cuts, animal attacks	Ensures enclosures remain secure and well-maintained, supporting both animal safety and exhibit longevity.	Establish strict lockout/tagout procedures before entering enclosures. Provide appropriate tools and safety gear. Train staff in safe enclosure repair techniques. Conduct routine maintenance to prevent structural failures. **(ALL)**	Staff	Before Measure: **High** After Measure: **Med**
Injury from tools and equipment	Lacerations, puncture wounds, improper tool use	Allows for necessary repairs, habitat improvements, and enrichment installation, ensuring high standards of animal care.	Provide training on the proper use and storage of tools. Require PPE for all maintenance tasks. Regularly inspect and maintain equipment. Enforce lockout/tagout procedures when servicing machinery near animal enclosures. **(ALL)**	Staff	Before Measure: **High** After Measure: **Med**
Injury from transport of animals	Animal stress, injury to handlers, escape risk	Enables relocation for breeding, conservation efforts, and veterinary care, essential for population management.	Use secure, species-appropriate transport containers. Train staff in safe loading and unloading procedures. Ensure vehicles are equipped for climate control and emergency stops. Plan transport routes to minimize stress and handling time. **(ALL)**	Animals, staff	Before Measure: **High** After Measure: **Med**

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Public safety incidents	Injuries, animal attacks, legal liabilities	Allows public engagement with wildlife, fostering education and conservation awareness.	Establish clear visitor guidelines and enforce supervised interactions with animals. Provide adequate barriers and signage. Train staff in crowd control and emergency response procedures. Monitor high-risk areas through surveillance systems. **(ALL)**	Visitors, staff	Before Measure: **High** After Measure: **Med**
Unsupervised volunteer or intern actions	Mishandling of animals, safety breaches, liability issues	Allows for valuable hands-on learning experiences and additional support for animal care operations.	Provide thorough training and supervision for all volunteers and interns. Assign mentors and limit access to high-risk areas. Establish clear guidelines on interactions with animals and use of equipment. Regularly review performance and adherence to protocols. **(ALL)**	Volunteers, staff, animals	Before Measure: **High** After Measure: **Med**
Vehicle movement in zoo grounds	Collisions, pedestrian injuries, animal stress	Facilitates efficient delivery of food, medical supplies, and enclosure materials, essential for daily zoo operations.	Establish designated routes for vehicles with clear signage. Implement speed restrictions and enforce pedestrian priority areas. Train staff on safe vehicle operation. Restrict non-essential vehicle movement during peak visitor hours. **(ALL)**	Staff, visitors, animals	Before Measure: **High** After Measure: **Med**
Venomous bites or stings from zoo animals	Toxic reactions, allergic reactions, fatalities	Enables the safe display and conservation of venomous species, supporting education and biodiversity research.	Implement strict handling and containment protocols for venomous species. Provide emergency medical treatment plans and anti-venom supplies. Train staff in first aid response. Limit handling to trained personnel only. **(ALL)**	Staff	Before Measure: **High** After Measure: **Med**

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Water quality issues	Contaminated water, disease outbreaks, dehydration	Supports the health of aquatic and terrestrial species, essential for their well-being and the integrity of exhibits.	Regularly test water sources for contaminants. Maintain filtration and purification systems. Establish protocols for immediate response to water quality issues. Train staff on the importance of water quality and proper maintenance procedures. **(ALL)**	Animals	Before Measure: **High** After Measure: **Med**
Zoonotic disease transmission	Disease spread, infections	Enables educational programs and public interactions that promote conservation awareness.	Conduct routine health screenings for animals and staff. Enforce strict hygiene practices, including regular handwashing and sanitization of enclosures. Provide PPE and training on disease prevention protocols. Isolate and treat infected individuals promptly. **(ALL)**	Staff, visitors, animals	Before Measure: **High** After Measure: **Med**
Aggression between animals	Injuries, stress, fatalities	Allows social species to engage in natural behaviors, promoting psychological health and naturalistic exhibits.	Assess compatibility before housing animals together. Monitor interactions closely, especially during initial introductions. Provide ample space and resources to minimize competition. Develop protocols for separating individuals if aggression occurs. **(ALL)**	Animals	Before Measure: **Med** After Measure: **Low**
Allergic reactions in staff	Severe allergic reactions, anaphylaxis	Allows staff to work closely with a variety of species, enriching their professional experience and improving animal care.	Conduct pre-employment health screenings to identify potential allergies. Provide training on recognizing and managing allergic reactions. Ensure availability of medical supplies, such as antihistamines and epinephrine auto-injectors, and establish emergency response protocols. **(ALL)**	Staff	Before Measure: **Med** After Measure: **Low**

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Cold stress in animals	Hypothermia, frostbite, illness	Enables the care of species from warmer climates, enhancing biodiversity and educational opportunities.	Provide heated shelters and bedding materials. Monitor temperatures and adjust heating systems as needed. Limit exposure to cold environments and modify feeding practices to increase caloric intake during colder periods. **(ALL)**	Animals	Before Measure: **Med** After Measure: **Low**
Enrichment-related injuries	Injuries from enrichment activities, behavioral stress	Enhances animal mental stimulation and natural behaviors, contributing to overall well-being.	Design enrichment devices and activities that are safe and appropriate for each species. Supervise initial interactions with new enrichment items. Regularly assess and modify enrichment strategies based on animal behavior and feedback. **(ALL)**	Animals, staff	Before Measure: **Med** After Measure: **Low**
Falling objects (tree branches, enrichment items)	Head injuries, fractures, enclosure damage	Allows for naturalistic enclosures with climbing structures and foliage, enhancing animal enrichment and well-being.	Conduct regular inspections of enclosures and surrounding trees. Secure enrichment devices properly. Train staff to identify and address structural hazards. Relocate animals temporarily when performing high-risk maintenance. **(ALL)**	Staff, animals	Before Measure: **Med** After Measure: **Low**
Heat stress in animals	Dehydration, heatstroke, organ failure	Allows housing of diverse species, including those sensitive to temperature variations, supporting conservation and educational goals.	Monitor environmental temperatures and provide climate control in enclosures. Ensure access to shade and water. Adjust animal routines during extreme weather conditions. Train staff to recognize signs of heat stress and respond appropriately. **(ALL)**	Animals	Before Measure: **Med** After Measure: **Low**
Inadequate nutrition	Malnutrition, illness, weakened immune system	Maintains animal health and longevity, supporting conservation efforts and educational displays.	Collaborate with veterinary nutritionists to develop species-specific diets. Monitor animal health and adjust diets as needed. Train staff in proper food handling and storage to prevent contamination. Keep detailed records of feeding schedules and dietary changes. **(ALL)**	Animals	Before Measure: **Med** After Measure: **Low**

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Manual handling injuries	Back strain, muscle injuries, repetitive strain injuries	Enables effective enclosure maintenance, animal transport, and habitat modifications essential for high-quality animal care.	Train staff in proper lifting techniques and use of lifting aids where possible. Implement team lifting for heavy loads. Regularly assess tasks to reduce strain and prevent repetitive motion injuries. Provide ergonomic equipment and encourage rest breaks. **(ALL)**	Staff	Before Measure: **Med** After Measure: **Low**
Noise-related stress in animals	Behavioral stress, reduced reproductive success, health issues	Allows for necessary zoo operations and visitor engagement while maintaining animal welfare.	Monitor noise levels in enclosures and restrict loud activities near sensitive species. Provide sound-dampening materials in enclosures. Train staff and visitors on minimizing disturbances. Adjust exhibit layouts to separate noisy areas from animal habitats. **(ALL)**	Animals	Before Measure: **Med** After Measure: **Low**
Pest infestations	Spread of disease, contamination of food, stress in animals	Prevents disease transmission and protects food supplies, maintaining the health of animals and staff.	Implement integrated pest management strategies, including habitat modification, exclusion techniques, and, when necessary, safe use of pesticides. Regularly inspect facilities for signs of pests and respond promptly. Train staff on pest prevention and control measures. **(ALL)**	Animals, staff	Before Measure: **Med** After Measure: **Low**
Public feeding of animals	Digestive issues, poisoning, behavioral changes	Enhances visitor engagement and education, fostering a connection to wildlife and support for conservation.	Implement controlled feeding programs with appropriate food items. Supervise public feeding interactions and provide clear instructions to visitors. Educate the public on the dangers of unauthorized feeding. Monitor animal health for signs of dietary issues. **(ALL)**	Animals, visitors	Before Measure: **Med** After Measure: **Low**

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Slips, trips, and falls	Fractures, sprains, head injuries	Facilitates efficient daily operations and animal care activities.	Maintain clean and dry walkways. Use non-slip flooring materials in high-risk areas. Conduct regular inspections to identify and address hazards. Provide staff training on safe movement practices and proper footwear. **(ALL)**	Staff, visitors	Before Measure: **Med** After Measure: **Low**
Stress in animals from handling	Behavioral changes, reduced immunity, injuries	Supports necessary veterinary care and behavioral research while ensuring minimal disruption to natural behaviors.	Train staff in low-stress handling techniques. Minimize unnecessary handling by using remote monitoring and medical training methods. Ensure enclosures have hiding spaces to reduce anxiety. Develop handling protocols for each species. **(ALL)**	Animals	Before Measure: **Med** After Measure: **Low**
Unpredicted risks	Illness, injury, death		Continuous risk monitoring conducted by all staff. Any unforeseen hazards must be reported promptly to supervisors or management, with immediate corrective action taken as necessary. **(ALL)**	All	**N/A**

NOTES

Extra notes & activity evaluation:

Completed by	Reviewed/Approved by	Risk Assessment Date	Review Required Date