

National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP)
Current Best Practices in Animal Emergency Management

Animal Search and Rescue (ASAR)





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Preface

The evolution of disaster response over the last decade was the catalyst for revising animal emergency management practices. The United States Department of Agriculture's (USDA) Animal and Plant Health Inspection Service Animal Care funded a cooperative agreement with the University of Kentucky.

This agreement was to collaborate with the National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP), the National Animal Rescue and Sheltering Coalition (NARSC), the American Veterinary Medical Association (AVMA), and other key stakeholders to update, consolidate, and create animal emergency management best practices.

The 2023 NASAAEP Current Best Practices in Animal Emergency Management documents are the result of extensive work by subject matter experts (SMEs) over a 24-month period. Document topics and content development were guided by the Best Practices Working Group (BPWG) Steering Committee and subjected to a rigorous external peer review process. The documents include:

- Incident Command and Coordination
- Planning and Resource Management
- Community Engagement and Outreach
- Animal Search and Rescue
- Disaster Veterinary Medical Response
- Decontamination
- Household Pet Evacuation and Transportation
- Equine Evacuation and Transportation
- Mass Care and Sheltering

NOTE: Links to external resources are denoted by underlined text.

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Executive Summary

Animal search and rescue (ASAR) can be included within the overall incident command structure and follow best practices from the Incident Command System (ICS) and National Incident Management System (NIMS). It should be integrated and coordinated with other operational functions at all levels and in all types of incidents.

ASAR teams may be comprised of animal rescue responders who have been trained with the appropriate animal and/or human Search and Rescue (SAR) competencies or trained in animal handling competencies. They may also have experience working as part of a human/animal-integrated SAR team.

The advantages of integrating ASAR into the overall incident response include:

- Responder safety/accountability
- Preservation of human life
- Animal safety/accountability
- Protection of property and environment
- Public health and safety
- Addressing public, social, and media concerns regarding animals in distress
- Utilization of local animal resources
- Effective outcomes through the assignment of individuals with the appropriate expertise/experience
- Costs potentially eligible for FEMA Public Assistance cost sharing in some incidents



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Definitions

Within every community or recognized geographic region managed by a form of government, there will be an Agency Having Jurisdiction (AHJ) responsible for the care of animals following a disaster. In most communities, the AHJ is animal control.

In smaller communities, animal control may be contracted out to the county animal control program from another county or to a non-governmental organization such as a humane society. It's important to note that even if an agency has animal control responsibilities, that same agency may not have ASAR capabilities following a disaster.

In large-scale disasters, the AHJ may get pulled away from daily community animal responsibilities to address human issues in addition to disaster-related issues. In this case, externally requested ASAR teams can be utilized to handle disaster-related surge response issues to support the AHJ animal control routine community issues.

ASAR is tasked by the AHJ and supported by emergency services, animal care and control, and trained responders. Tasks during an emergency surge response for ASAR personnel may include locating, stabilizing, extricating, and evacuating animals that are lost, abandoned, sick, stranded, or otherwise compromised.

In some situations, the ASAR team may determine that it is in the best interest of the animal, owner, and animal welfare community for the animal to be cared for in-place through daily visits to provide feed, water, and other daily care.

ASAR functions may include:

- Providing the resources and expertise to effectively execute animal rescue operations
- Providing pre-event and post-event animal evacuations at owners' request
- Conducting assessments
- Providing situational awareness to assist in coordination of animal rescue efforts
- Capturing, confining, packaging, and transporting animals believed to be in distress or adversely affected
 - May include technical animal rescue (e.g., removal of animals in hazardous situations such as flooding, debris, or collapsed structures)
- Triaging and providing emergency/stabilizing first aid for animals
- Collaborating with sheltering-in-place and feeding teams to identify appropriate operational areas and access and egress routes
- Documenting activities throughout the process (where, when, status, and disposition of animal, etc.)

Planning Assumptions

The AHJ is responsible for setting up an effective animal response, meeting the needs of their agencies, and supporting and assisting partner agencies and organizations. When considering activating ASAR resources, the AHJ should recognize the different levels of capabilities outlined in the FEMA ASAR resource typing to meet the needs of the disaster. Non-governmental agencies may play a key role in response and recovery while assisting the local jurisdictions.

AHJ can consider the following when ordering or adding ASAR resources to their planning:

- The ASAR team has the capability and authorization to perform ASAR functions for all species as defined by the FEMA animal resource typing
- Primary focus on activities to find, secure, care and remove (if necessary)
 - Companion animals, including household pets, service animals, and assistance animals
 - Livestock, including food or fiber animals and domesticated equine species
 - Wildlife, captive wildlife, or zoo animals (non-domesticated animals)
 - Laboratory animals
- AHJ has the authority to request an ASAR team
- Additional resources needed to support ASAR are in place
- ASAR is incorporated into the ICS organization structure
- The local authority can request additional ASAR resources through various mechanisms.
- ASAR requests/missions are being tracked
- ASAR Teams will be comprised of animal rescue responders who have been trained with the appropriate ASAR competencies as identified in the FEMA Animal Resource Typing guidelines

Animal Resource Typing

The FEMA Resource Typing Library Tool website contains detailed information about positions relevant to animal search and rescue:

- [Animal Search and Rescue Technician](#)
- [Animal Search and Rescue Team](#)
- [Animal Care and Handling Specialist](#)
- [Animal Control/Humane Officer](#)
- [Animal Decontamination Specialist](#)
- [Animal Emergency Response Team Leader](#)
- [Animal Evacuation, Transport and Re-Entry Team](#)
- [Veterinarian](#)
- [Veterinary Assistant](#)

Key Tasks and Training

Below are the minimum NIMS/ICS training requirements:

- IS-100.x – Introduction to Incident Command System
- IS-200.x – ICS for Single Resources and Initial Action Incidents
- ICS-300.x – Intermediate ICS for Expanding Incidents (for team leads)
- IS-700.x – NIMS: An Introduction
- IS-800.x – National Response Framework: An Introduction

Operational Capability Levels

The three operational capability levels identified in the National Fire Protection Association (NFPA) 1670 Standard on Operations and Training for Technical Rescue Incidents are Awareness, Operations, and Technician Levels. These operational levels are described as follows:

- **Awareness:** This level represents the minimum capability of a responder who, during his or her regular job duties, could be called upon to respond to, or could be the first on the scene of, a technical rescue incident. This level can involve search, rescue, and recovery operations. Members of a team at this level are generally not considered rescuers.
- **Operations:** This level represents the capability of hazard recognition, equipment use, and techniques necessary to safely and effectively support and participate in a technical rescue incident. This level can involve search, rescue, and recovery operations, but usually, operations are carried out under the supervision of technician-level personnel
- **Technician:** This level represents the capability of hazard recognition, equipment uses, and techniques necessary to safely and effectively coordinate, perform, and supervise a technical rescue incident. This level can involve search, rescue, and recovery operations.

Proposed ASAR Responder Certification Levels

Formal certification levels for ASAR responders do not currently exist. All certification levels are proposed based on existing and/or potentially available courses. AHJ acceptance of specific training and experience criteria for each level should be established. Some recommendations are currently in development.

ASAR Awareness	ASAR Operations*	ASAR Technician
FEMA IS: 100, 200, 700 and 800 (available online)	ASAR Awareness Certification	ASAR Operations Certification
FEMA IS: 10 and 11 (available online)	Slackwater/Floodwater Watercraft (16 hours)	FEMA ICS 300
Animal Control, Capture, and Behavior (2-4 hours)	Low/High Angle Rope Rescue (24 hours)	Swiftwater Rescue (24 hours)
Awareness Level Hazmat Course (4-8 hours)	Large Animal Rescue – Low Angle (8 hours)	Animal Decontamination Course and 24h HAZWOPER as required by AHJ)
Animal Handling Experience (minimum of one year in shelter/clinic)	Introduction to Assessment (4 hours, course in development)	Large Animal Rescue – Low Angle and Sling Lifts (16-24 hours)
Introduction to SAR (available online)	Comprised Structure Hazards	Wilderness First Aid (WFA, NOLS WMLA, 16 hours or equivalent)
Animal Emergency Sheltering (NARSC-endorsed)	Animal Decontamination Course and 8h HAZWOPER as required by AHJ	
Human First Aid/CPR/AED/Epi-Pen	Wildland Fire Online Training (Introduction to Wildland Fire Behavior or equivalent as required by AHJ)	
Animal Triage and Stabilization		
Safe Boat Handling (USCG-approved, available online)		

*Reference FEMA 509-1. The ASAR Operations will be an animal care and handling specialist plus the skills above.

The certification criteria could be developed by:

1. Local animal response team recognized by emergency management
2. State animal response team recognized by emergency management
3. State or local government emergency management agency
4. National Animal Rescue & Sheltering Coalition (NARSC)

Command and Coordination

Incident Command and Incident Coordination

Overview

Every day across the nation, some events result in emergencies or disaster events. The response to these incidents requires a systematic and organized management effort by various authorities and jurisdictions.

In the 1970s, incident management was developed to bring the appropriate agencies with authority, capable and trained personnel, supplies, and equipment to an impacted scene. Incident management sets into practice procedures and structures that provide for human and animal safety and protection while allowing flexibility and scalability for an effective response to the event.

Incident Command

As stated previously, Incident Command has the authority to manage incidents in a given jurisdiction for the protection of human life, property (including domestic animals or captive wildlife) and the environment following disasters. Authority is either established statutorily, through regulation or may be delegated authority. The types of authority will be discussed in more detail in another subsection.

Incident Command is responsible for developing a planning and response strategy using specific objectives and tasks to advance an efficient and effective response. The command structure is critical to maintaining an orderly response and an accountable system during the chaos that ensues following negative impacts of natural or manmade events.

There are typically five core functional areas of Incident Command used to organize response activities and responsibilities and include command, planning, operations, logistics, and administration/finance. These areas will be explained in more detail later in the document.

There are a wide range of natural events requiring specialized skills and resources such as:

- Earthquakes
- Hurricanes
- Droughts
- Floods
- Tornadoes/microburst
- Ice/snow

- Wildfires
- Disease outbreaks/biological threats

Manmade events include:

- Arson
- Civil disorder
- Chemical threats
- Biological threats
- Cyberattacks
- Infrastructure failure
- Other emerging sources

The list for both types can be expanded, these are the most prominent examples.

Incident Coordination

Incident Coordination is an integral part of the ICS. Whether an incident is small or complex, information flow and sharing are critical to the success of managing all aspects of the impacted area(s).

Information flow in the first minutes to hours is crucial and should continue through the cycle of the incident. This information should be accurate to help managers assess the initial impacts, organize operational tactics, develop the strategy for approaching the scene safely, protect the public and property, and ensure coordinated effective messages are being delivered to decision-makers and residents.

Data and messaging are important for maintaining accountability of resources addressing legalities that arise and establishing/analyzing costs.

When building your ICS structure, ASAR resources can be managed in several ways:

- Integrate into existing branch structure (e.g., ASAR could embed under a search and rescue branch as a single source strike team or packaged with USAR to create a broader SAR task force package)
- Aggregate animal response activities under an animal branch where ASAR has a group designation
- Hybrid structure that makes sense for the issues you are facing in the incident

There is no single right answer and there are pros and cons to each structure. Work within your emergency management system to create a structure that makes sense in your jurisdiction and your incident, given the animal issues you are immediately facing and anticipating could happen.

Equipment

There is a variety of equipment needed for ASAR operations, some for personal use and some for teams covering different rescue disciplines. Things to consider when packing personal and team gear:

- What are the safety considerations for you, your team, and the animals?
- What is your assignment?
- What equipment do you need to accomplish the assignment?
- How long will you be in the field?
- How far will you be from additional resources?
- What is the current and predicted weather?
- What is the terrain?
- Will there be technical challenges?
- What could go wrong?

Reviewing these questions while keeping in mind the weight and size of the gear will allow rescuers to be more effective in different environments.



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Appendix A: Acronyms, Key Terms, and Definitions

Acronyms

An asterisk indicates the term has a more complete definition in the following section.

AAR	After Action Report
ACO	Animal Control Officer
ADA	Americans with Disabilities Act (defines service animals)
AHJ	Authority Having Jurisdiction
APHIS	Animal and Plant Health Inspection Service (USDA)
ASAR	Animal Search and Rescue
CART	County/Community Animal Response Team*
CBRN or CBRNE	Chemical, biological, radiological, nuclear (explosive)
CERT	Community Emergency Response Team (Citizen Corps program)
CONOPS	Concept of Operations
DHS	Department of Homeland Security
DOD	Department of Defense
DOI	Department of Interior
EIEIO	The chorus from “Old MacDonald Had a Farm”
EMA	Emergency Management Agency
EMAC	Emergency Management Assistance Compact*
EOC	Emergency Operation Center* (also termed Coordination Center)
EOP	Emergency Operations Plan (may be preceded by jurisdictional identifier)
ESF	Emergency Support Function*
ESF6	Emergency Support Function 6 (Mass Care, Emergency Assistance, Housing, and Human Services)
ESF8	Emergency Support Function 8 (Public Health and Medical Services)
ESF9	Emergency Support Function 9 (Search and Rescue, SAR)
ESF11	Emergency Support Function 11 (Agriculture and Natural Resources)
FEMA	Federal Emergency Management Agency
HAZMAT	Hazardous Materials
HHS or DHHS	Health and Human Services (U.S. Department of)
HVAC	Heating, Ventilating, and Air Conditioning
IA	Individual Assistance (FEMA)
IAP	Incident Action Plan*
IC	Incident Commander
ICC	Incident Command and Coordination

ICP	Incident Command Post
ICS	Incident Command System*
IMT	Incident Management Team*
IMAT	Incident Management Assistance Team (FEMA)
IOF	Interim Operating Facility (precursor to Joint Field Office)
IT	Information Technology
JFO	Joint Field Office (FEMA)
JIC	Joint Information Center
JIS	Joint Information System (multiple locations)
MA	Mission Assignment*
MAA	Mutual Aid Agreement
MAC Group	Multi-agency coordination group (policy level)
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MRC	Medical Reserve Corps (a program within Citizen Corps)
NARSC	National Animal Rescue and Sheltering Coalition
NASAAEP	National Alliance of State Animal and Agricultural Emergency Programs
NDMS	National Disaster Medical System
NGO	Non-Governmental Organization
NIMS	National Incident Management System
NRCC	National Response Coordination Center
NRF	National Response Framework
NSS	National Shelter System
NVRT	National Veterinary Response Team
OSHA	Occupational Safety and Health Administration
PA	Public Assistance (FEMA)
PAPPG	Public Assistance Program and Policy Guide (FEMA)
PETS Act	Pets Evacuation and Transportation Standards Act (amendment to the Robert T. Stafford Act of 1974)
PIO	Public Information Officer
POC	Point of contact
PPE	Personal Protective Equipment
RRCC	Regional Response Coordination Center (FEMA)
RRF	Resource Request Form (FEMA)
RSF	Recovery Support Function
SAHO	State Animal Health Official
SAR	Search and Rescue
SART	State Animal/Agricultural Response Team*

SME	Subject matter expert
SOG	Standard Operating Guidelines
SOP	Standard Operation Procedures
STT	State, Tribal and Territorial
STTI	State, Tribal, Territorial and Insular
STTL	State, Tribal, Territorial and Local
THIRA	Threat and Hazard Identification and Risk Assessment
USAR or US&R	Urban Search and Rescue
USDA	United States Department of Agriculture
VOAD AND NVOAD	(National) Voluntary Organizations Active in Disasters
VERT, VRC or VMRC	Veterinary Emergency Response Team, Veterinary (Medical) Reserve Corps
Web EOC	Software platform for EOC management (used by FEMA and many other jurisdictions)
ZAHP	Zoo and Aquarium All Hazards Partnership

Key Terms and Definitions

Legal definitions of different types of animals vary across jurisdictions. To provide consistency across the Animal Emergency Management Best Practice Working Group documents, animal classifications and definitions are provided as common-use definitions.

For a specific legal definition, refer to jurisdictional definitions. These definitions are generally accepted in the US and are sourced from global, state, and/or federal guidelines. Other key terms are used in animal emergency practices. This list addresses some common terms used during emergency response.

- **Animal Definitions**

- **Animals:** Animals include household pets, service and assistance animals, working dogs, livestock, wildlife, exotic animals, zoo animals, research animals, and animals housed in shelters, rescue organizations, breeding facilities, and sanctuaries (source: [National Preparedness Goal](#)).
- **Assistance animals:** an assistance animal is not a pet. It is an animal that works, provides assistance, or performs tasks for the benefit of a person with a disability or provides emotional support that alleviates one or more identified symptoms or effects of a person’s disability (source: [Section 504 of the Fair Housing Act](#)).
 - Note – service animal definitions under the Americans with Disabilities Act (ADA) and assistance animal definitions under the Fair Housing

Act only differ by the exclusion of emotional support from the service animal definition.

- **Livestock:** The term livestock may have a specific definition within individual states and Federal programs. In the broadest use, including general ESF #11 use, livestock includes domestic livestock typically kept on farms and such as cattle, sheep, goats, swine, poultry, and other animals raised for food or fiber, as well as horses, donkeys, and mules. “Alternative livestock” may include wild cervids (elk, deer, etc.) as well as bison, ostrich, emu, or other wild species kept for food production. When discussing “livestock,” it is essential for all parties to work from the same definition.
- **Non-commercial livestock or “backyard” livestock:** This is another flexible term that may have a specific definition in local, State, Tribal, Territorial and/or Insular (STTI) emergency plans. In its broadest use, non-commercial livestock would include animals kept at residences for pleasure, companionship, sport (not commercial racing) or household food production which does not generate food or products intended to enter commerce.
- **Pets/Household pets:** Summarizing from the FEMA Public Assistance Policies, household pets are domesticated animals that:
 - Are traditionally kept in the home for pleasure rather than commercial purposes
 - Can travel in common carriers
 - Can be housed in temporary facilities
 - Examples are dogs, cats, birds, rabbits, rodents, hedgehogs, and turtles
 - FEMA Public Assistance excludes these species as household pets: farm animals (including horses), racing animals, reptiles (other than turtles), amphibians, fish, insects, and arachnids
 - *Note: This definition applies to expense eligibility under the FEMA Public Assistance Grant Program and in no way limits STTI, Local, and non-governmental entities from defining and managing all animal types per their own policies.*
- **Service animals:** Under the ADA, a service animal is defined as a dog that has been individually trained to do work or perform tasks for an individual with a disability. The task(s) performed by the dog must be directly related to the person's disability. In addition to the provisions about service dogs, the Department’s ADA regulations have a separate provision about miniature horses that have been individually trained to do work or perform tasks for people with disabilities (U.S. Department of Justice Civil Rights Division, 2020).

- **Working animals:** The term working animal can vary considerably within the situational context, but within an emergency management context, ESF #11 considers this group to include animals (typically dogs and horses) working in law enforcement (detection, patrol, apprehension, etc.) and animals working in search and rescue (primarily dogs used in search and recovery missions). Working dogs may include dogs used in hunting, guarding and for agriculture tasks.
- **Animal Emergency Management Annex:** A component of a jurisdictional emergency operations plan that provides information on how animals will be managed in disasters, including organizational responsibilities.
- **Biosecurity:** Measures that prevent the spread of disease to, from, or within a premises containing animals.
- **Community or County Animal Response Team (CART):** An organization developed to implement the animal elements of the jurisdictional emergency operations plan. The exact title and format vary considerably (a team of organizations, direct volunteers, etc.) The critical element is that the CART must be under the control of, or have an agreement with, the local government.
- **Coordination Center:** *FEMA EMI ICS Glossary* – A facility that is used for the coordination or agency or jurisdictional resources in support for one or more incidents.
- **Emergency Management Assistance Compact (EMAC):** EMAC is a national interstate mutual aid agreement that enables states to share resources during times of disaster. The thirteen (13) articles of the Compact sets the foundation for sharing resources from state to state that have been adopted by all 50 states, the District of Columbia, the U.S. Virgin Islands, Puerto Rico, and has been ratified by Congress (PL-104-321).
- **Emergency Operations Center (EOC):** See Coordination Center definition above.
- **Emergency Support Function (ESF) (Federal):** Some states, but not all, use ESF terminology. Some states use more than 15 ESFs and do not necessarily align with Federal ESFs.
- **Disaster Declaration:** A Disaster Declaration is a formal statement by a jurisdiction that a disaster or emergency exceeds the response and/or recovery capabilities.
- **Disaster/emergency:** An occurrence of a natural catastrophe, technological accident, or human-caused event that has resulted in severe property damage, deaths, and/or multiple injuries. Except for use in certain declarations, the terms are commonly used interchangeably.
- **Emergency manager:** The jurisdictionally appointed position that conducts analysis, planning, decision-making, and assignment of available resources to prevent/mitigate, prepare for, respond to, and recover from the effects of all hazards.

- **Emergency Operations Plan (EOP):** A document maintained by various jurisdictional levels describing the plan for responding to a wide variety of potential hazards.
- **Incident Action Plan (IAP):** *From the FEMA ICS Glossary* – An oral or written plan containing incident objectives which reflect the overall strategy for managing the incident. It may include the identification of operational resources and assignments. It may also include attachments that provide direction and important information for management of the incident during one or more operational periods.
- **Incident Command System (ICS):** *From the FEMA ICS Glossary* – A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.
- **ICS forms:** Nationally standardized forms used to manage or document incident response under the Incident Command System. Forms can be found on FEMA's website.
- **Incident Management Team (IMT):** The Incident Commander and appropriate Command and General Staff personnel assigned to an incident. Key IMT positions include (source: FEMA ICS Glossary):
 - **Incident Commander (IC)** – assigned by jurisdictional authorities to oversee all aspects of the incident response
 - **Command Staff:** Safety Officer (SOFR), Liaison Officer (LOFR), Public Information Officer (PIO)
 - **General Staff:** Operations Section Chief (OSC), Planning Section Chief (PSC), Logistics Section Chief (LSC) and Finance and Administration Section Chief (FASC)
- **Isolation:** Segregation of animals to prevent disease exposure or spread.
- **Mission Assignment (MA):** A work order issued by FEMA to another Federal agency directing the completion of a specific task, and citing funding, other managerial controls, and guidance. There are two general types of MAs:
 - **Federal Operations Support (FOS)**—Requested by a Federal agency to support Federal operations.
 - **Direct Federal Assistance (DFA)**—Resources requested by and provided to affected State and local jurisdictions when they lack the resources to provide specific types of disaster assistance.

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- **Mutual aid:** emergency assistance provided from one jurisdiction or organization to a peer (local-local, state-state, NGO-NGO, etc.).
 - **Quarantine:** Isolation of animals that may have an infectious disease for a specified period to allow for testing or extended observation.
 - **Resource typing and credentialing:** Resource typing is defining and categorizing, by capability, the resources requested, deployed, and used in incidents. Resource typing definitions establish a common language and defines a resource's (for equipment, teams, and units) minimum capabilities.
 - **State Animal/Agricultural Response Team (SART):** SART organizations vary considerably in their structure, mission, and nomenclature (many don't use the SART name). In general, SART-type organizations provide a framework for State stakeholders to support the State animal emergency management plan. SART-type organizations generally are under the control of the state or have an agreement with the state.
 - **State veterinarian/animal health officials (SAHO):** The veterinary officer/official for a particular State or territory of the U.S. in charge of animal health activities (exact title varies).
 - **Zoonoses:** Disease that can be transmitted between animals and humans.



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Appendix B: Animal Control/AHJ Considerations

This appendix is to assist local Animal Control or AHJ as they prepare for an ASAR team to assist them during a disaster.

Sheltering

If the AHJ has a functional animal shelter, then a decision must be made about how to house animals displaced from the event. Below are some of the considerations:

- Can animals that are currently available for adoption be transported out of the area for adoption to free up space for animals displaced by a disaster?
 - Will you suspend or modify the hours of operation at the shelter?
 - How will people access the shelter to claim lost household pets?
- If the current shelter is damaged or not available for displaced animals from the disaster:
 - Is there a temporary emergency shelter set up for people and animals displaced by the storm?
 - Do you have a CART, SART, or other resources?
 - Will this shelter need staffing or security 24/7?
 - Is the location adequate to house household pets for the duration of the event?
 - Will the stray hold be extended for animals found during the disaster? What about stray animals not related to the disaster?
- Is federal support needed?

Staffing

AHJ will need to consider multiple staffing needs during a disaster:

- How many staff are needed for priority calls to service?
- How many staff can you embed with an ASAR team?
 - Are any of your staff trained to respond to the specific disaster?
 - Does your agency have specialized equipment, vehicles or PPE relating to the specific disaster?
- How many staff are needed for sheltering?
 - How many staff members are needed to maintain current sheltering needs?
 - How many staff members are needed to provide care to emergency sheltering?
- Do you have mutual aid agreements with neighboring agencies for additional field and sheltering support if needed?
- What will emergency staffing hours be?
 - How will you provide time off for staff?
 - Will your staff be allowed overtime?

Calls to Service

AHJ will need to decide what calls to service will be provided post-disaster. Priority calls not related to the disaster might still need to be addressed, however. This could include:

- Animal bite to human
- Aggressive animal calls
- Injured animals in distress
- Cruelty cases
- Contained stray animals
- Injured wildlife – Can this be outsourced to wildlife agents or local wildlife rehabilitation staff?

Non-priority calls might not need to be addressed during a disaster. This can include:

- Stray animals that are not contained
- Nuisance complaints, like barking or unleashed dogs
- Wildlife complaints where an animal isn't injured
- Feral cats

ASAR teams can be utilized for calls to service for disaster-related animal rescue. Teams will be given missions by the AHJ, and the parameters for those missions will be approved by the AHJ. ASAR teams are typically utilized for missions needing specialized training, equipment, and PPE. This can include:

- Flooding
- Compromised structure
- Hazmat
- Fire
- Tornado
- Hurricane

A staff member might need to be assigned to the ASAR team for the day or be called to advise on certain circumstances. Those circumstances can include:

- Breeching a house
- A cruelty situation
- A hoarding situation
- Determination of feed-in-place or removal

Transportation

Some of the following transportation issues might need to be considered during a disaster:

- Transport for animals that were available for adoption before the disaster.
- Transportation for staff in charge of daily calls to service not related to the disaster.
- Transportation for staff assisting ASAR teams in the field.
- Transportation for teams at forward receiving areas for rescued animals (sometimes called “lily pads”); animals are then transported to designated shelters or owners.
- Transportation of food and animal supplies.

Supplies and Donations

In every disaster, there is an influx of supplies donated to victims of the disaster. The AHJ will need to have an indoor space to house these donations and may need to designate a staff member to organize and distribute supplies. Work with local emergency management to utilize the logistics section to help with donations management and build this relationship before the disaster.

Feed-in-Place

In many cases, animals may not need to be removed from their home after a disaster and can be fed in place. Considerations for feeding in place include:

- Is the structure safe to leave animals for the duration of the event or until the owners can take over care?
- Is the structure accessible to staff or ASAR teams for feeding in place?
 - Will teams need to access by boat?
 - Is there debris that makes it unsafe for daily visits?
 - Are the projected flood levels rising or falling?
 - Will access to the property be consistent and improved or is it under threat of being cut off by worsening conditions (i.e., flooding, wildfires, and more)?
 - Are there security concerns for staff making daily visits?
- Are the animals healthy enough to feed in place?
 - Any signs of injury or trauma?
 - Any pre-existing health conditions that need treatment?
- Are the animals aggressive and pose a risk to responders and shelter staff if removed from the home?
- Are the animals unusual (birds, reptiles, fish, small animals) and contained in enclosures?
 - Will it be easier to remove these habitats?

- Do any of these animals require specialized care?
- Are there exotic animals (see *Appendix G: Non-Domesticated Animals*)?
- Is there an appropriate water source?
- What is the projected timeline for the owners to return to the property?
- Are the owners requesting the animals be left on the property?
- It is often advisable to leave livestock with a feed-in-place program when safe to do so.

Paperwork

The AHJ must decide how all calls to service during a disaster will be recorded. They will need to provide the ASAR teams with the appropriate paperwork to maintain.

- Will standard intake forms be used or a form that is specific to disaster intake?
- Who will cover the cost of care for disaster intake?
- How long will you house animals from a disaster intake vs. a standard intake?
- What markings will be put on houses after a search and how will that be tracked?

When owners are calling for a rescue, request the following information:

- Owner contact information
- Address where the animal(s) are being kept
- How long the animals have been alone
- If the animals have access to food and water
- Identifying markers if the address number isn't visible
- Number, type, and description of each animal on the property
- Location of each animal on the property
- If a small animal, does it have a carrier, and where is it located?
- Any known medical or behavioral issues
- Location of any medication needed for the animals
- Can the owners take the animals to a shelter?
- How long it will be until the owner returns to the property?
- Whether a key or keyless entry is available

It is important to understand the type of system that will be used to track lost and found animals after a disaster.

Public Information

The timely and accurate dissemination of information during and after a disaster can be one of the most important aspects of a disaster.

- Who will be the public information officer (PIO)?
- Where should the public go to look for a lost pet?

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- Where should the public go with a found pet?
 - Who should the public contact for calls to service related to the disaster?
 - Who should the public contact for calls to service NOT related to the disaster?
 - Where can impacted people access supplies?
 - Where can people volunteer (how to keep unauthorized people out of the disaster area)?
 - Where can the public access veterinary care related to disaster?

Demobilization

ASAR teams are typically deployed for immediate needs following a disaster. As soon as immediate needs are met and the AHJ can resume calls to service for their area, ASAR teams will demobilize.

Needs that should be considered after demobilization include:

- Will responders continue to feed-in-place or will owners be able to take over care? Or should animals be removed?
- Are you able to demobilize the emergency shelter if one was established?
- Is there enough staff to maintain priority calls to service?
- Is there adequate staff to continue the organization and distribution of supplies?
- Transport for unclaimed animals after the disaster hold?
- Some animals will be owner-surrendered after the residents can return home. AHJ will need to be prepared for this.



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Appendix C: Personal Equipment

The list is not intended to be all-inclusive and is only meant to serve as a guide to aid responders with ASAR activities.

- Having the equipment doesn't necessarily mean the responder has learned the competencies needed to complete a given rescue or mission, so proper training should be taken in the appropriate disciplines to ensure safety and protection.
- Equipment should be well-maintained and verified before deployment.

Note

Field equipment should be kept near responders at all times.

Below is a recommended list of personal items to be carried into the field for personal safety and comfort in most situations. A responder can learn to build his/her field pack based on what is needed in each environment and what may be needed for contingencies when things don't go as planned.

When building a personal kit, keep these 10 essentials in mind:

1. Navigation (map and compass)
2. Sun Protection (sun block, sunglasses, hat)
3. Insulation (extra clothes adequate for climate)
4. Illumination (Headlamp/ flashlight and extra batteries)
5. First Aid Kit
6. Fire (waterproof matches/ lighter/candle/fire starter)
7. Repair Kit/ Tools (knife/duct tape)
8. Nutrition (extra food)
9. Hydration (extra water)
10. Emergency Shelter (space blanket/ tarp/tent)

See <https://www.mountaineers.org/blog/what-are-the-ten-essentials> for more details on these essentials.

The lists on the following pages are for one operational period for localized deployment. Long distance/multi-day events may require additional supplies and equipment.

Urban Personal Search and Rescue (SAR) Equipment

(adapted from the National Association for Search and Rescue equipment list)

One pack (small backpack or large waist pack approximately 600-1200 cubic inches), plus the following items carried in the pack or on the person:

First Aid Kit (inform team-members, especially the team lead, of any relevant medical conditions):

- 1 - Plastic bag, zip lock, quart size, for first aid kit
- 2 - Surgical/ Exam/nitrile gloves
- 1 - Personal medications, 24-hour supply
- 4 - Acetaminophen or aspirin tablets
- 4 - Antacid tablets
- 2 - Antihistamine, 25mg Benadryl
- 2 - Antiseptic cleansing pads
- 1 - Antiseptic ointment
- 6 - Band-aids, various sizes
- 1 - 2x2 gauze sterile pad
- 1 - 4x4 gauze sterile pad
- 1 - Tampon
- 1 - Feminine pad
- 1 - Roller gauze bandage
- 1 - Moleskin
- 2 - Triangle bandages/cravats
- 1 - Splinter forceps, tweezers
- 1 - Roll elastic bandage (e.g., ACE)
- 1 - Small roll tough cloth tape
- 1 - Eye irrigation solution (personal wash bottle)
- 1 - Eye lubricant

Other Gear:

- 1 - Small pad and pencil
- 1 - Tracking stick, 42" long
- 1 - Tissues or baby wipes
- 1 - Watch
- 1 - Water container, at least liter size
- 2 - Slip leads
- 4 - Plastic bags, various sizes, zip closure
- 1 - Bandana, handkerchief

Survival Kit:

- 1 - Map
- 1 - Compass, orienteering
- 1 - Flagging tape, roll
- 1 - Headlamp, flashlight, or lantern
- 1 - Candle, long burning
- 2 - Cotton swabs, non-sterile
- 1 - Duct tape, 5-10 ft.
- 1 - Leaf bag, large
- 8 - Waterproof matches or lighter
- 1 - Backup phone charger and cord
- 1 - Razor blade, single-edge safety type
- 2 - Safety pins, large
- 1 - Space-type blanket or sleeping bag
- 1 - Whistle
- 1 - Knife, multi-purpose
- 1 - Mirror, small

PPE:

- 1 - N-95 mask
- 1 - Clothing, adequate for the climate, such as cargo pants and, a rain jacket (avoid cotton long-sleeve shirts & pants/jeans, they take too long to dry)
- 1 - Footwear, sturdy, adequate for climate, puncture-resistant soles (wool or synthetic socks)
- 1 - Cap or other headwear
- 1 - Helmet (minimum construction hard hat, climbing type preferred)
- 1 - Work Gloves
- 1 - Towelette
- 1 - Ear plugs
- 1 - Goggles, or eye protection, clear
- 1 - SAR personal identification
- 1 - Sunglasses, 97% UV protection
- 1 - Sunscreen (SPF 15 or greater)
- 1 - Waterless hand cleaner/sanitizer

Non-Urban SAR; Wilderness SAR Personal Equipment (in addition to USAR Pack)

(adapted from the National Association for Search and Rescue equipment list)

1 - Pack, 1800-cubic inch (minimum), containing:

- 2 - Carabineers, locking gate
- 2 - Prusik cords (6mm – 8mm; 6 ft. length)
- 1 - Webbing, 1" tubular - length suitable for harness
- 1 - Clothes bag, waterproof
- 1 - Clothing, extra set, suitable for climate (avoid cotton)
- 1 - Socks, extra pair (wool or synthetic)
- 1 - Insect repellent
- 1 - Lip balm, with sunscreen
- 2 - Water containers, at least liter size
- 1 - Water purification tabs
- 2 - Food, nonperishable
- 1 - Trail snacks
- 1 - Metal cup or pot
- 1 - Shelter Material 8 x10 plastic or coated nylon
- 1 - Foam pad
- 1 - Flashlight extra, extra batteries and bulb
- 1 - Scissors, multi-purpose
- 8 - Wire ties, plastic, self-locking
- 1 - Wire, 5-10 ft., woven steel
- 1 - Nylon twine or small rope, 50 feet
- 1 - Measuring device, 18-inch minimum
- 1 - Gloves, durable, even in summer

Additional Personal Gear to consider:

- Toilet Paper in plastic zip top bag, feminine funnel, toilet bags
- Cell phone charger, car charger, portable battery phone, multiple cords/adapters for different phones/accessories
- Baby wipes, waterless hand cleaner/sanitizer
- Spare prescription glasses, contact solution
- Toiletries
- Toothpick, floss, floss sticks, mini brush
- Sleeping bag
- Mess kit
- Water filter or other water treatment system
- Universal precaution kit:
 - One-gallon plastic zip-top bag to contain the kit
 - Tyvek suit with hood
 - Goggles
 - Face mask
 - N-95 mask
 - Exam gloves
 - Dishwashing gloves
 - Booties
 - Hand sanitizer wipes



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Appendix D: Team Gear

Depending on the team's task, these would be on a truck or available from the base/staging area. Appropriate equipment should be available based on training and certification level. Equipment needs will vary greatly, depending on the mission assignment.

Personal Protective Equipment (PPE)

Note

Ensure that there is enough equipment for each person on the team.

Urban uniform:

- Identification
- Long sleeve shirt
- BDU pants (battle dress uniform/military-type cargo pants)
- Sturdy foot ware with ankle protection (waterproof/resistant, highly recommended)
- Work gloves
- Surgical/exam gloves/nitrile/latex gloves
- Eye protection
- Hearing protection
- Hat (environmental protection, either sun, rain, or cold)
- Helmet (may be specific to the discipline involved)
- Whistle

Additional PPE:

- N95 dust masks or better respirators
- First aid kit (larger and better stocked than personal first aid kit)
- Sunscreen (SPF 15 or greater)
- Insect repellent
- Collapsible baton/bite stick
- Tyvek suits and booties
- Rubber boots
- Knee pads
- Kevlar/bite gloves
- Bear spray

Vehicle Supplies and Tools

- Registration
- Insurance
- Emergency contact list and numbers
- Emergency care locations and contact information
- First aid kit
- Fuses
- Spare light bulbs
- Spare tire
- Jerry can with extra fuel
- Quart of oil
- Windshield washer fluid
- Funnel
- Zip ties
- Baling wire
- Duct tape
- Electrical tape
- Rope (paracord)
- Emergency cones/ triangles
- Flares
- Ice scraper
- Ziploc bags of various sizes
- Trash bags
- Food and water
- Maps
- Disposable camera
- Tow strap
- Hand sanitizer
- Paper towels
- Baby wipes
- Fire extinguisher
- Rope (paracord)
- Emergency cones/triangles
- Flares
- Ice scraper
- Plastic zip-top bags (varying sizes)
- Trash bags
- Food and water
- Maps
- Disposable camera
- Tow strap
- Tool bag/box
- Screwdrivers, Philips/flat (varying sizes)
- Adjustable pliers
- Adjustable wrench
- Wire cutters
- Socket set (SAE and Metric)
- Bolt cutter
- Pry bar
- Hammer
- Flashlight (plus extra batteries)
- Jumper cables
- 12-volt jumper box
- Appropriate tire pressure gauge
- Tire plug kit
- 12-volt air compressor
- Shovel
- Gloves

Communication Needs

- Whistles
- Cell phones and chargers; Contact list with phone numbers
- Air horn
- Bull horn
- FRS radios
- Handheld radios (VHF, UHF, 700, 800, whichever frequencies are being used in the area); and list of frequencies being used (from the communications plan)
- Satellite phone, data
- Ham radio and operators

Location/Navigation Needs

- Compass (orienteeing)
- Local area maps in large plastic bag
- Local GIS maps from emergency management
- List of road closures and known hazards
- List of local landmarks
- GPS (field unit to mark coordinates) with extra batteries
- GPS (vehicle unit for street navigation)
- Head lamp (spare batteries)
- Pencil, pen, marker

Assessment Needs

- Maps
- Camera
- Forms
- Marking guide (animal marking triangle)
- Entry marking supplies
- Spray paints
- Markers
- Paper
- Plastic baggies
- Duct tape
- Note pads
- Writing instrument
- Flagging tape

Documentation Needs

- Note taking items
 - Clipboard, note pad
 - Forms
 - Writing instruments, marker
- Tyvek identification collars

Forms

This list represents forms that should be carried during deployment. Additional examples can be found in Appendix E.

- Request for Rescue (Rescue Request Share)
- Notice of Removal (generic Notice Animals Removed)
- Notice/Attention of Premises Searched (generic Attention Premises Searched)
- Shelter-in-Place
- Animal Assessment/Field Triage Form and Tag
- Animal Euthanasia Authorization and Witness
- Change of Status (Animal Status Change Share)
- Transportation/Evacuation Manifest (Evacuation Manifest)
- General Notice of Animal Emergency Shelter Locations (generic Notice of Animal Shelter Location)

ICS Forms can be found at <https://training.fema.gov/icsresource/icsforms.aspx>

- Form 201 Briefing
- Form 202 Objectives
- Form 203 Organization Assignment List
- Form 204 Assignment List
- Form 205 Radio Communications List
- Form 205A Communications List
- Form 206 Medical Plan
- Form 206a locations of working animal hospitals
- Form 207 Org Chart
- Form 208 Safety Message
- Form 214 Activity Log
- Form 215 Operational Planning Worksheet
- Form 215A Incident Action Plan Safety Analysis

Water and Food Needs for Responders

- One gallon of water per person per day
- High-energy shelf-stable foods (e.g., trail mix, energy bars)
- Powdered drink mixes
- MREs or IMPs (foods that do not require cooking)

Medical Needs for Responders

- Team medical protocols
- Emergency care locations and contact information
- Emergency contact information
- First aid kit and eye wash
- C-collar
- Splinting material (SAM splint)
- Antiseptic cleansing solution
- Bandages, roller gauze
- Oxygen and masks

Animal/Patient Treatment Needs

- Emergency care locations and contact information
- Universal microchip scanner
- Camera for photographic documentation of animals and any relevant medical condition
- Medical protocols for triage, stabilization treatment, and evacuation
- Medical forms and tags for triage and first aid/stabilization treatments
- Water
- Slip lead
- Commercial muzzles, varying sizes (or rolled gauze for improvised muzzle)
- **Animal First aid Kit:**
 - Basic wound care and bandaging:
 - 4x4 gauze pads, non-adherent pads, cast padding, rolled cotton or combined, rolled gauze
 - Vet wrap (2" and 4"), elastic adherent wrap (3"), splints, white tough cloth tape (1"), duct tape
 - Antiseptic skin cleansing solution
 - Topical antiseptic cream or ointment
 - Eyewash and lubricant
 - Sterile crystalloid fluids for systemic administration and fluid administration set
 - Sterile injection administration supplies of various sizes (syringes, needles, and short-term intravenous catheters and butterfly/winged needles)
 - Pain management drugs

- Tranquilizer and sedatives drugs – Carried and administered by trained, certified, and licensed personnel only and only following local, state, and federal laws.
 - Humane euthanasia equipment and drugs (per AVMA Guidelines for Humane Euthanasia) – Carried and administered by trained, certified, and licensed personnel only and only following local, state, and federal laws.
- Animal stretcher or ½ SKED

Refer to the *NASAAEP 2023 Current Best Practices in Animal Emergency Management Disaster Veterinary Medical Response* document for additional information.

Shelter-in-Place Needs

Shelter-in-Place for Household Pets:

- Water to leave at locations (bulk)
- Dry dog and cat food
- Flour (for lying down next to food and water bowls to verify animals' presence at the location)
- Forms to track the frequency of welfare checks and care
- Tyvek identification collars

Shelter-in-Place for Livestock:

- Water to leave at locations (bulk)
- Hay and feed for livestock
- Zip ties and baling wire to secure enclosures for animals' safety
- Forms to track the frequency of welfare checks and care

Capture Needs

Capture Companion Animal Needs:

- Slip leads
- Catchpole
- Snappy snare
- Cat tongs
- Cat bag, net, pillowcase
- Pole net
- Reptile hook
- Towels
- Bait food
- Muzzles/leashes, varying sizes
- Humane traps
- Chemical light sticks
- Strobe lights/trap marking
- Injection or pole syringes*
- Plastic animal crates
- Nylon ropes
- Flat web ropes
- Carabineers
- Pulleys with ropes
- Flashlight
- Bite stick
- Tyvek identification collars

**Chemical Capture equipment and drugs -carried and administered by trained, certified, and licensed personnel only and only following local, state, and federal laws.*

Capture Livestock Needs:

- Large animal first aid kit
- Water
- Buckets
- Hay and grain/treats
- Leads, halters, varying sizes
- Rope 5/8" x 30' (to improvise with emergency halters, leads, etc.)
- Hog boards
- Portable corrals
- Blinds/masks, pillowcase, or soccer socks (restraint of ratites)
- Herding fence (construction fence, rope with flagging tied for visual barriers)
- Injection*
- Flashlight

**Chemical capture equipment and drugs – Carried and administered by trained, certified, and licensed personnel only and only following local, state, and federal laws.*

Technical Rescue Needs

Wildland Fire (NFPA 1977):

- Team protocols for working in a wildland fire environment
- Personal protective equipment (PPE):
 - Non-melting base layer (cotton or treated blend of synthetic cotton blend labeled as non-melting)
 - Nomex IIIIR (approved fire-resistant material) outer layer
 - Long sleeve shirt
 - Pants
 - Face and neck shroud
 - Helmet (NFPA 1977 approved)
 - Eye protection “splash guard” goggles
 - Hearing protection
 - 8” or higher leather boots with leather laces and Vibram soles
 - Leather gloves chrome-tanning (resists heat shrinkage and stretching when wet) or appropriate approved alternative
 - Surgical/Exam gloves/ Nitrile/ Latex gloves
- First Aid kit (larger and better stocked than personal first aid kit)
- Sunscreen (SPF 15 or greater)
- Insect repellent
- Collapsible baton/ Bite stick
- Whistle
- Bandana
- Fire shelter

Low Angle Rescue (low angle rescues are where the slope is not greater than 60 degrees):

- Team protocols for Low Angle Rescue Systems and Techniques
- Personal protective equipment (PPE)
 - Urban uniform
 - Helmet with chin strap (climbing type)
 - Harness (either commercially manufactured or one tied out of webbing based on your organization's protocols)
- ½" ropes (Varying lengths of 150', 200', and 300')
- Locking carabineers, belay device
- Anchor material, edge protection, canvas pads, plastic rope guides
- 1" webbing
- Anchor strap, Prusiks 8mm
- Pickets and picket plate
- Sledgehammer
- Anchor plate/Rigging ring
- Pulleys, rollers
- Wire Stokes-type litter, animal stretcher, ½ SKED, tarp 10'x 12' (folded in half twice for a makeshift stretcher)

High Angle Rescue (high angle rescues are where the slope is greater than 60 degrees) – equipment needed includes low angle rescue equipment listed above plus:

- Team protocols for High Angle Rescue Systems and Techniques
- High angle litter bridle

Large Animal Rescue (LAR) – equipment needed includes capture livestock and low angle rescue equipment listed above plus:

- Team protocols for Large Animal Rescue Systems and Techniques
- 3"- 4" Straps for assists
- Hobbles
- Horse blanket
- Horse head protection (humane life vest or padding)
- Twitches
- Leg handling cane
- Boat hook or pike pole with changeable heads (cutters, carabineer hold-open, S-hook)
- Tarps and dark drop cloths
- Duct tape
- Rescue glide with handles (8' x 4') and/ or slip sheets (7' x 4')
- Plywood for makeshift ramp or glide
- Tarp 16'x 20' (to be folded in half twice for a makeshift slide)
- Tripod lift
- Large Animal Lift (LAL), which includes:
 - Overhead bar
 - Front straps (3 straps with clip on each end) with sternal plate/pad
 - Rear straps (2 straps with clip on each end) with J-hook
- Anderson sling, which includes:
 - 3-piece support (breast, abdomen, and rear) and halter/ face mask in 3 sizes (small – approx. 400 to 800 pounds; medium – approx. 800 to 1,100 pounds; large – approx. 1,100 pounds and up)
 - Dorsal training strap
 - Headpiece (i.e., face mask/ halter)
 - Hardware (frame with head bar)
- Additional items:
 - Helicopter cable and webbing
 - Carabineers
 - Becker sling
 - Rescue sled – straps-handles
 - Rigging

Flat Water Rescue (Slack Water Rescue) (flat water or slack water is non-moving or extremely slow-moving standing water, water without a current)

- Team Protocols for Flat-Water Rescue System and Techniques
- Helmet (approved for water rescue)
- PFD (type III/V)
- Knife
- Whistle
- Emergency beacon
- Water gloves neoprene
- Throw bags
- Waders, knee/thigh/waist/bib (situation-specific)
- Dry suit
- Wet suit (only in non-contaminated water, used as a thermal barrier)
- Booties with puncture-resistant soles
- Radio dry bags
- Dry bags of varying sizes for gear
- Rescue board (“boogie-board”)
- Boat with stable platform and appropriate capacity - flat bottom jon boat, commercial inflatable boat (e.g., Zodiac)
- 10-25 HP 4-stroke motor (appropriate for the type of boat) and fuel cell
- Trolling motor and battery
- Emergency kit for boat
- Plastic animal crates
- Towels

Swift Water Rescue (when water has a current, such as a river or creek) – equipment needed includes low angle rescue equipment and flat-water lists above plus:

- Team Protocols for Swift Water Rescue System and Techniques

Working in HAZMAT Conditions

Appropriate equipment based on training and certification level. Equipment needs will vary greatly depending on the mission assignment. See <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.120AppB> for more details.

- Team protocols for working in HAZMAT conditions
- Personal Protective Equipment (PPE) Levels:
 - Level D - work/urban uniform affording minimal protection: used for nuisance contamination only, as appropriate
 - Coveralls
 - Chemical resistant apron
 - Gloves
 - Boots, outer, chemical resistant (disposable)
 - Safety glasses or chemical splash goggles
 - Hard hat
 - Escape mask (emergency escape breathing device)
 - Face shield
 - Level C - concentration(s) and type(s) of airborne substance(s) is known and the criteria for using air purifying respirators are met, as appropriate
 - Full-face or half-mask, air purifying respirators (NIOSH approved)
 - Hooded chemical-resistant clothing
 - Coveralls
 - Gloves, outer, chemical-resistant
 - Gloves, inner, chemical-resistant
 - Boots, outer, chemical-resistant
 - Boot-covers, outer, chemical-resistant
 - Hard hat
 - Escape mask (emergency escape breathing device)
 - Face shield
 - Level B - the highest level of respiratory protection is necessary, but a lesser level of skin protection is needed, as appropriate
 - Positive pressure, full face-piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA, approved by the National Institute for Occupational Safety and Health (NIOSH)
 - Hooded chemical-resistant clothing
 - Coveralls
 - Gloves, outer, chemical-resistant
 - Gloves, inner, chemical-resistant
 - Boots, outer, chemical-resistant
 - Boot-covers, outer, chemical-resistant

- Hard hat
- Escape mask (emergency escape breathing device)
- Face shield
- Level A - to be selected when the greatest level of skin, respiratory, and eye protection is required, as appropriate
 - Positive pressure, full face-piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA, approved by the National Institute for Occupational Safety and Health (NIOSH)
 - Totally encapsulating chemical-protective suit
 - Coveralls
 - Long underwear
 - Gloves, outer, chemical-resistant
 - Gloves, inner, chemical-resistant
 - Boots, outer, chemical-resistant
 - Boot-covers, outer, chemical-resistant
 - Hard hat (under suit)
 - Escape mask (emergency escape breathing device)
 - Face shield
 - Disposable protective suit, gloves, and boots (depending on suit construction, may be worn over a totally encapsulating suit)
- Decontamination
 - Appropriate equipment based on training and certification level. Equipment needs will vary greatly depending on the mission assignment
 - See the HAZMAT list for levels of PPE protection
 - Team protocols for decontamination
 - Basic decontamination/gross decontamination - rinsing contaminants off followed by a bathing process
 - Water access or bulk tank
 - Industrial portable water heating system especially in cold climates or environments
 - Dawn dish soap
 - Washtub, with drain, homemade baby swimming pole, large storage crate, 45 liters or more
 - PPE
 - Eye protection, glasses, goggles, face shield
 - N95 respirator
 - Exam gloves, nitrile
 - Dish gloves with long cuffs
 - Waterproof booties/rubber boots

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- Slip leads, colored red/contaminated, yellow/cleaning, and green/clean
 - Muzzles
 - Towels
 - Chemical decontamination (see basic decontamination list for additional equipment)
 - Dry agent vacuum system
 - Neutralizing agent
 - PPE (depending on the chemical, more intensive PPE may be required)
 - Wastewater collection
 - Radiological decontamination (see basic decontamination list for additional equipment)
 - Radiation monitor

Refer to the *NASAAEP 2023 Current Best Practices in Animal Emergency Management Decontamination* document for additional information.

Transportation

Household Pets

- Team protocols for household pet transportation
- First aid kits, human and animal
- Animal gurneys/stretchers
- ½ SKED
- Plastic animal crates
- Cleaning/decontamination supplies
- Towels/puppy pads
- Appropriate vehicle for transport that allows for fresh air and the animals to be secured
- Animal transport vehicles (cage truck)
- Trailer

Livestock

- Team protocols for livestock transportation
- First aid kit, human and animal
- 3"- 4" straps for assists
- Rescue glide with handles
- Portable stretcher (rated 1,500 pounds) or tarp
- J-hook (small and large)
- Plywood for makeshift ramp or glide
- Panels for building makeshift pens and assisting loading
- Livestock trailers

For additional information, refer to the *NASAAEP 2023 Current Best Practices in Animal Emergency Management* documents:

- *Household Pet Evacuation and Transportation*
- *Equine Evacuation and Transportation*

Water and Food/Feed for Animals

Water per day:

- Cats: 1 quart
- Dogs: 2 quarts
- Horses per 1,000 pounds: 7 gallons
- Cattle:
 - Dairy and dry cows: 7 gallons
 - Heifers: 4 gallons
 - Cow and calf pairs: 8 gallons
 - Calves 400 pounds or more: 4 gallons
- Swine:
 - Sow and litter: 4 gallons
 - Pregnant sow: 3 gallons
 - Gilt or boar: 1 gallon
- Sheep:
 - Ewe and lamb pairs: 1 gallon
 - Dry ewe: 3 quarts
 - Weanling lambs: 2 quarts
- Poultry:
 - 100 broilers: 5 gallons
 - 100 layers: 5 gallons
 - 100 turkeys: 12 gallons

Food/Feed per day (amounts are suggested based on average needs; actual needs will vary depending on animal size, condition, and nutrient density)

- Cats: ½ cup
- Dogs: 2 cups
- Horses per 1,000 pounds: 20 pounds of hay
- Cattle:
 - Dairy and dry cows: 20 pounds of hay
 - Heifers: 9 pounds of hay
 - Cow and calf pairs: 15 pounds of hay
 - Calves 400 pounds or more: 10 pounds of hay
- Swine:
 - Sow and litter: 8 pounds of grain
 - Pregnant sow: 2 pounds of grain
 - Gilt or boar: 3 pounds of grain

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- Sheep:
 - Ewe and lamb pairs: 5 pounds of hay
 - Dry ewe: 3 pounds of hay
 - Weanling lambs: 3 pounds of hay
 - Poultry:
 - 100 broilers: 10 pounds of grain
 - 100 layers: 17 pounds of grain
 - 100 turkeys: 40 pounds of grain



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Appendix E: ASAR Forms

This section contains the following forms and notices typically used in search and rescue operations:

- Animal Removal Notice
- Evacuation Manifest
- Animal Search Notice
- Premises Animal Removal
- Animal Housing Notice
- Notice of Animal Shelter Location
- Animal Status Change
- Rescue Request Form
- ICS 214 Activity Form



Animal Removal Notice

Pets or Livestock (number and type):

Total: Dogs____ Cats____ Horses____ Other_____

Removed_____ Left in Place_____

Removing Organization/Reclaiming Information:

Notes:

Examples: “Dogs located in yard or cats inside house or 1 dog in yard and 1 dog in house.”
“Pinto mare and filly confined in barn or flock of sheep in west pasture or chestnut gelding loose in barnyard.”

Food / Water / Wellness Check:

___/___/___ Organization: _____

Action:

___/___/___ Organization: _____

Action:

(Add additional entries on back of form)

Attention!

These premises were searched for stranded animal inhabitants on:

Date: _____

and no animals were found as of this date.

Animal Search and Rescue organization information

REMARKS:

Notice!

On _____^{Date} in cooperation with local authorities, _____^{Total Number} animals were removed from these premises for their health and safety. For more information, please contact your local animal care facility at:

NAME: _____

ADDRESS: _____

PHONE NUMBER: _____

Animals Removed:

TYPE	SEX	COLOR/Description
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____

See Reverse Side if More

Notice!

**Lost pets are being housed at an
Emergency Animal Shelter
If you have lost a pet, please visit or
contact:**

Name: _____

Address: _____

Phone Number: _____

**It is important that you come to the
above address and look for your pet
as soon as possible.**

Animal Status Change

Animal Status Change

Incident _____ Case # _____ Animal ID # _____

On-going Evaluation: Date _____ Evaluator _____

Animal Status: <input type="checkbox"/> Green — Friendly <input type="checkbox"/> Blue — Shy/Caution <input type="checkbox"/> Yellow — Fearful/Aggressive <input type="checkbox"/> Red — Biter/Bite Hold		
Animal Health Status: <input type="checkbox"/> Immediate Medical <input type="checkbox"/> Medical <input type="checkbox"/> Stable <input type="checkbox"/> Pregnant <input type="checkbox"/> Deceased		
Medical Exam: Date: _____ Doctor: _____ <input type="checkbox"/> Examined <input type="checkbox"/> Treatment Sheet	Treatment: <input type="checkbox"/> Treat on site <input type="checkbox"/> Transport Location: _____ <input type="checkbox"/> Complete	Pregnancy: <input type="checkbox"/> Gave birth <input type="checkbox"/> Terminated <input type="checkbox"/> Transported to: _____

On-going Evaluation: Date _____ Evaluator _____

Animal Status: <input type="checkbox"/> Green — Friendly <input type="checkbox"/> Blue — Shy/Caution <input type="checkbox"/> Yellow — Fearful/Aggressive <input type="checkbox"/> Red — Bite Hold		
Animal Health Status: <input type="checkbox"/> Immediate Medical <input type="checkbox"/> Medical <input type="checkbox"/> Stable <input type="checkbox"/> Pregnant <input type="checkbox"/> Deceased		
Medical Exam: Date: _____ Doctor: _____ <input type="checkbox"/> Examined <input type="checkbox"/> Treatment Sheet	Treatment: <input type="checkbox"/> Treat on site <input type="checkbox"/> Transport Location: _____ <input type="checkbox"/> Complete	Pregnancy: <input type="checkbox"/> Gave birth <input type="checkbox"/> Terminated <input type="checkbox"/> Transported to: _____

On-going Evaluation: Date _____ Evaluator _____

Animal Status: <input type="checkbox"/> Green — Friendly <input type="checkbox"/> Blue — Shy/Caution <input type="checkbox"/> Yellow — Fearful/Aggressive <input type="checkbox"/> Red — Bite Hold		
Animal Health Status: <input type="checkbox"/> Immediate Medical <input type="checkbox"/> Medical <input type="checkbox"/> Stable <input type="checkbox"/> Pregnant <input type="checkbox"/> Deceased		
Medical Exam: Date: _____ Doctor: _____ <input type="checkbox"/> Examined <input type="checkbox"/> Treatment Sheet	Treatment: <input type="checkbox"/> Treat on site <input type="checkbox"/> Transport Location: _____ <input type="checkbox"/> Complete	Pregnancy: <input type="checkbox"/> Gave birth <input type="checkbox"/> Terminated <input type="checkbox"/> Transported to: _____

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Rescue Request Form

Request for Animal Rescue

Incident _____ Date _____ Time: _____ Animal ID # _____

Dispatcher or receiving agent _____

Reason for Rescue: _____

Person Requesting Rescue: <input type="checkbox"/> ASAR <input type="checkbox"/> EM/Command <input type="checkbox"/> Owner Request <input type="checkbox"/> ACO <input type="checkbox"/> Owner Agent Request <input type="checkbox"/> _____	Assigned to Organization or Team: _____
--	---

Species	Breed	Color/markings	Behavior Status:	Animal Health Status:
			<input type="checkbox"/> Green — Friendly <input type="checkbox"/> Blue — Shy/Caution <input type="checkbox"/> Yellow — Fearful/Aggressive <input type="checkbox"/> Red — Bite Hold	<input type="checkbox"/> Immediate Medical <input type="checkbox"/> Medical <input type="checkbox"/> Stable <input type="checkbox"/> Pregnant

Address or physical location of animal _____ Additional information of location or condition of animal _____

Name of person requesting rescue _____ Relationship _____ () _____
Phone _____

Owner(s) Name and Address (include city, state, zip) _____ () _____
Phone _____

Owner(s) Email _____

Animal's Veterinarian's Name _____ () _____
Phone _____

Please initial where consent given.

_____ Does the person requesting rescue have the owner(s) permission to authorize care? Yes No

_____ If so, explain _____

_____ Is in-field medical care authorized? Yes No To what extent? _____

_____ If home check, is key available to rescuers? Yes No Key location _____

_____ Is keyless entry authorized? Yes No By what means? _____

Signature _____ Date _____ Printed Name _____

Status: <input type="checkbox"/> Rescued <input type="checkbox"/> Unable to capture <input type="checkbox"/> No sign of the animal <input type="checkbox"/> Deceased <input type="checkbox"/> Access denied
Transported: <input type="checkbox"/> Owner Signature _____ <input type="checkbox"/> Other: _____ <input type="checkbox"/> Emergency Shelter _____ Location: _____ <input type="checkbox"/> Veterinarian _____ Location: _____

Notes/Comments: _____

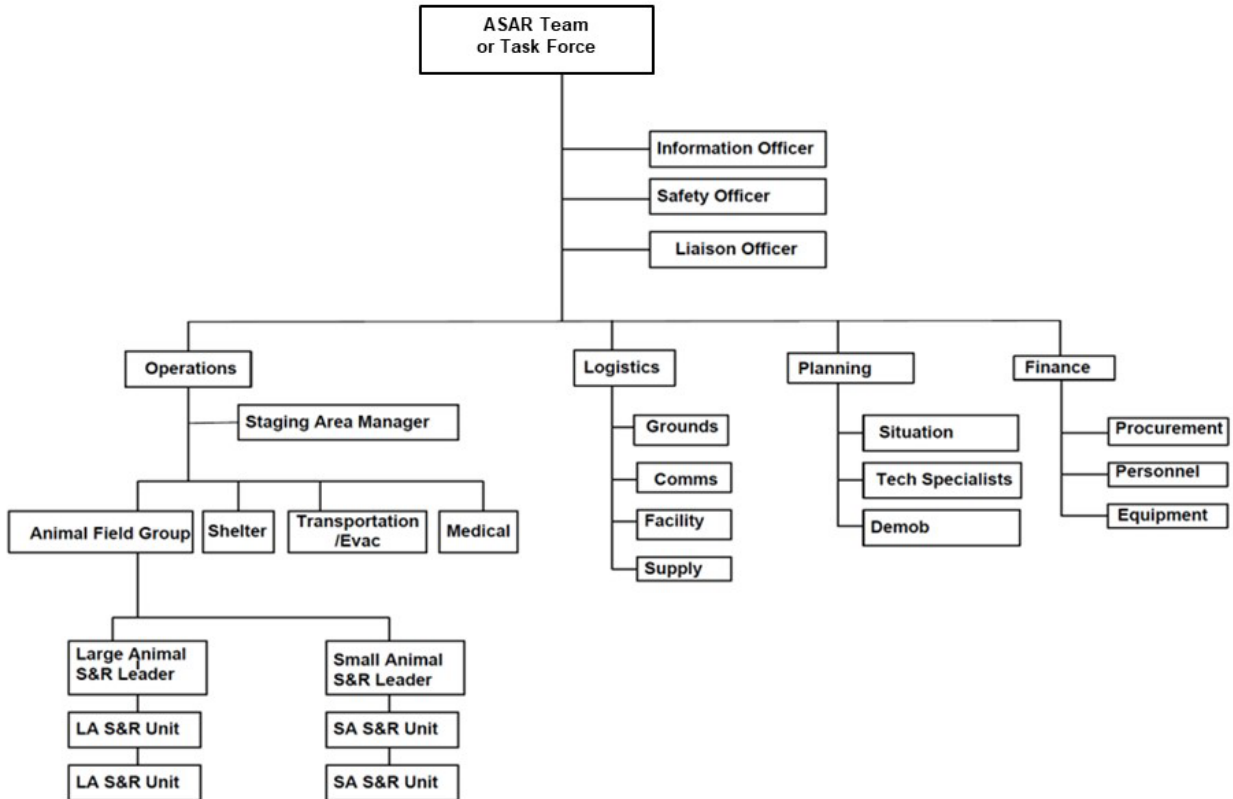


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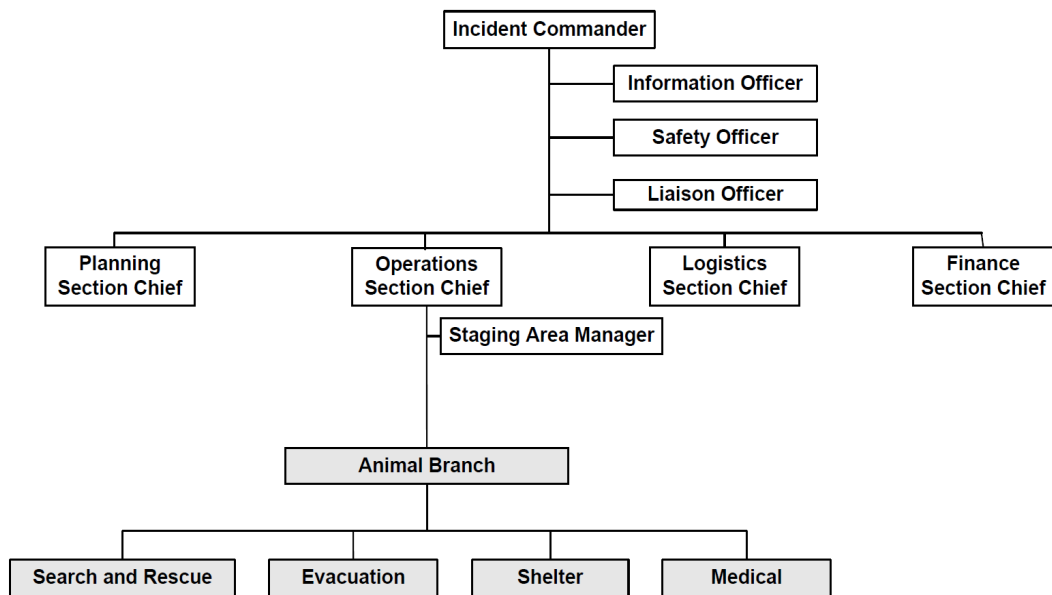
Appendix F: Examples of Animal Search and Rescue ICS Organization Charts

Refer to the *NASAAEP 2023 Current Best Practices in Animal Emergency Management Incident Command and Coordination* document for additional information.

Using ICS to Manage ASAR Team or Task Force



ASAR within an Animal Response Branch



Appendix G: Non-Domesticated Animals

ASAR guidance for non-domesticated animals differs from domesticated animals. The information in this appendix provides general planning considerations when encountering non-domesticated animals.

Assumptions

- ASAR teams are conducting operations with a focal point on residences
 - Non-domesticated animals in residences are likely to be part of a personal collection, held either legally or illegally.
- Animal exhibitions (zoos, circuses, etc.) are generally not a focus for ASAR teams; however, awareness of their proximity and possible risks is necessary.

Planning for Non-Domesticated Animals

- Planning should include considerations pertinent to non-domesticated animals
 - Non-domesticated animal considerations are written into some emergency operations plans, but it is not a uniform inclusion.
 - Even if non-domesticated animal considerations are included, due diligence should be conducted to ensure that the outlined plans are realistic.
- Build relationships in advance with subject matter experts (SMEs) on various species and species groupings.
 - SMEs can provide awareness of the prevalence of non-domesticated animals.
 - SMEs may be able to assist with advising, demonstrating, or training on handling techniques for non-domesticated species, as appropriate based on species and risk.

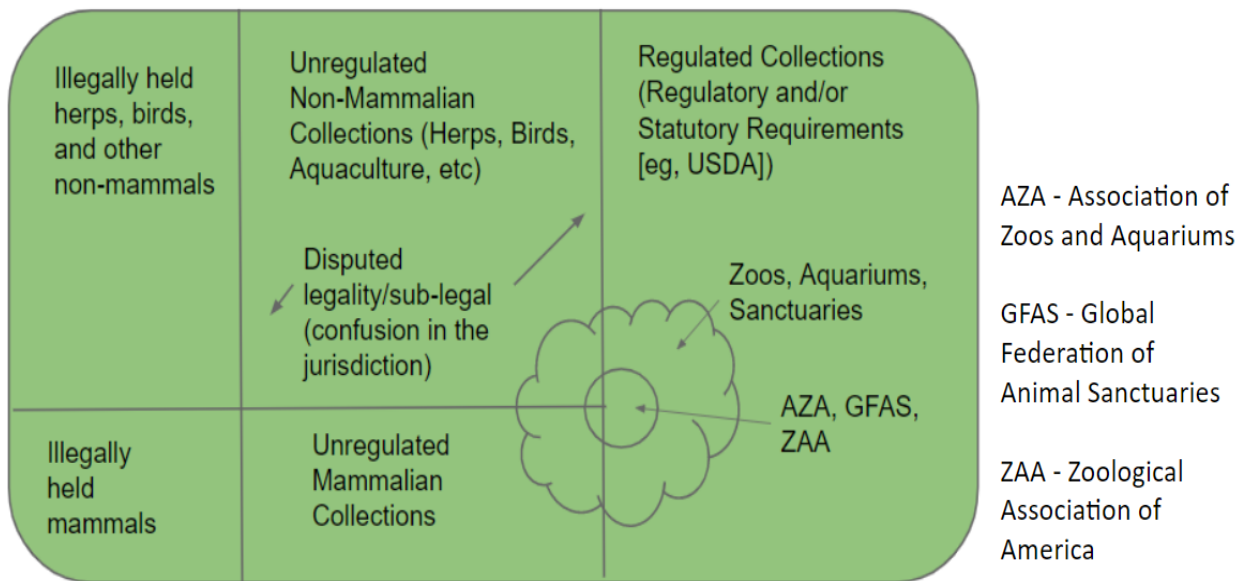
Case Example

A large metropolitan area supports the development of a multi-jurisdictional technical large animal rescue (TLAR) team. The team members meet with the professional staff at a major zoo and an aquarium within the metro area and discuss how they might leverage their resources. Jurisdictional plans are modified to include both facilities. The TLAR team is incorporated into the facilities' plans. The zoo, aquarium, and the TLAR team schedule a series of trainings and exercises to test their plans.

Prevalence of Non-Domesticated Animals

- It is very hard to substantiate data regarding non-domesticated animal ownership on a broad scale.
 - Mammals used in exhibitions are required to be regulated by the USDA, with some exceptions.
 - Some birds will be coming under USDA regulation in 2023.
- Certain regions have higher populations of non-domesticated animal ownership, based on factors such as regulations and climate.
- Large, dangerous animals are more commonly found in rural or suburban than urban or exurban areas, especially true of collections maintained in exterior housing.
- Smaller animals (e.g., reptiles) can be more easily maintained in populated regions.

Captive Wildlife in the US



Not to scale based on relative populations

Individual Species/Species Groupings

- Non-domesticated hoofstock (e.g., llamas, yak, buffalo)
- Small mammals (e.g., chinchillas, sugar gliders, ferrets)
 - Higher prevalence and lower risk for handling
- Reptiles & Amphibians
 - Some species may be appropriate for handling by trained responders
 - Snakes
 - Bite considerations
 - How to release venomous versus non-venomous
 - Availability of anti-venom
 - Constrictor-species
 - Appropriate actions to take when encountered
- Fish
 - Power loss will result in eventual death of animals that require water circulation.
- Insects/Arachnids (e.g., spiders and scorpions)
 - Venomous
 - Anaphylactic reactions
- Birds
 - Some species may be appropriate for handling by trained responders.
 - Ill birds may carry illnesses that are zoonotic, which pose an increased risk for responders. Face masks should be worn when handling birds of unknown origin that are exhibiting signs of illness.
 - Parrots
 - Can be aggressive and inflict painful bites.
- Primates
 - Apes
 - Negligible likelihood of interaction due to negligible number maintained outside commercial facilities.
 - Monkey
 - USDA requirements for animal housing depends upon the size of the monkeys.
- Small wild cats (e.g., bobcats, servals)
 - Much more powerful than comparably sized domestics.
 - If possible, confine to a single room or crate.
- Wolves/wolf dogs
 - Most wolves encountered will be hybrid, but it is advisable to make no assumptions about behavior based on appearance.
 - If possible, shelter-in-place. Temperament can be unpredictable, especially in duress.

-
- Bears
 - Low likelihood scenario for ASAR to find in a dwelling; however, wild bear interaction potential should be considered.
 - Black bears are more likely to be encountered than grizzly/brown bears.
 - Brown bears are far more aggressive than black bears.
 - Big cats
 - Low likelihood scenario in a private dwelling.
 - Could be kept in the basement, interior room, or outdoor enclosure
 - Do not attempt to feed or otherwise engage with the cat. Authorities should be contacted immediately, and responders should adhere to the guidance provided by authorities, as the situation constitutes a potential public safety threat.
 - Will likely grow agitated with increased activity in the vicinity, which could lead to self-injury or compromised containment.
 - Try to maintain a line of sight on the cat without putting yourself at risk. This can be achieved by staying in a vehicle while maintaining a visual of the location.

Unique Risks

- Physical capabilities
 - Often stronger than domestic counterparts of comparable size.
 - Often able to inflict some harm or injury, which can be unpredictable to individuals unfamiliar with the individual species.
- Transmissible disease/zoonoses
 - Ability to carry zoonotic diseases that are atypical of domestic animals. PPE considerations should be appropriately calibrated.
 - Primates present unique risks, including the potentially fatal simian herpes B virus in macaque monkeys
 - Injury caused by a non-domesticated animal that breaks the skin should receive medical attention due to the possibility of infection.
 - Vaccinations administered to non-domesticated animals are often considered “off-label” use; post-exposure treatment after bites or scratches is essential.
- Non-domesticated animals maintained illegally may be indicative of other illegal activities.
 - Drug activity results in hazardous environments for responders.
- Media interest
 - As soon as the presence of non-domesticated animals at a location is known, there will be heightened media and public interest.
 - Depending on the scope of the incident, accessibility of the location, and interest of the media, authorities, and responders will need to consider a perimeter that prevents further agitation of the animals.
 - Airspace should be considered, as helicopter noise or low-flying drones may further agitate animals.

Special Considerations

- If the presence of a non-domesticated animal is suspected, assess the interior of the house if possible, through windows, etc. If a large animal is confined in an interior room, it may be audible or visible from outside the house.
- Whenever possible, shelter the animal in place and reach out to the appropriate SME.
- If the animal is in an enclosure or cage, it may be able to be removed, but only after considering:
 - Integrity of the enclosure, including a locking mechanism
 - Risk level of animal
 - Possibility of animal causing harm through the containment or escaping containment
- Do not assume that handling techniques for domestic animals will translate.
- Avoid sharing space with the animal, especially if it is large and/or dangerous.
 - Always have an exit and plan

Unique Care Needs

- Non-domesticated animals may have very precise care needs. Sheltering in place or removal and temporary relocation operations should consider these factors and consult with subject matter experts on requirements for the species.
 - Temperature
 - Humidity
 - Diet
 - Substrate
- Sheltering operations for domesticated animals may not have the capability to manage incoming non-domesticated animals.
 - Alternative sheltering options for non-domesticated animals should be considered in planning.

Subject Matter Experts/Resources

- SLTT wildlife agencies or other potential oversight bodies
- Local zoo, aquarium, sanctuary, or other business specializing in non-domesticated animals
 - Even if it is not a species in their care, they may either know or have access to another professional in the network
- Wildlife rehabilitators who specialize in similar taxa may have the capacity or insight/network
 - [The Role of the Wildlife Rehabilitator in Disaster Preparedness and Response](#)
- Rescue groups specializing in non-domesticated animals
- US Fish and Wildlife Services
- USDA APHIS Animal Care
- ZDR3: <https://www.zdr3.org/contact>
- [CDC guidelines on the safe handling of Exotic Animals](#)