



PRACTICAL LIVESTOCK EVACUATION



Introduction

The need to evacuate livestock from an area varies with incident type, demographics, numbers, topography, species, operation, authority and timing. Most of these are information dependent.

Deciding to move livestock unexpectedly to a new location is very difficult since time, money, weight, and function may be lost for the season. This decision is very dependent on accurate information during a crisis. Manpower and functional challenges of moving a herd or flock need to be considered.

During disasters agriculture producers have often historically “self-deployed” to help each other without the benefit of any authority approval. This has occurred in the past due to two factors: 1. during a disaster authorities deal with human risk first leaving agricultural assets for last; and 2. often producers are closer to the initial impact and have better initial incident data than authorities do.

Coordination and Effective Risk Reduction

In many cases as an incident progresses, such as a flood, wildfire, or blizzard, the initial information grasped by producers MAY become out-of-date due to a changing situation. This and the fact that authorities need to know what producers are doing requires some collaboration.

In all cases of livestock evacuation all parties need to know:

- Where & when did the incident start.
- How big or severe is the incident.,
- How are the impacts changing or moving!
- Which egress routes are open and how long?
- What resources are available to act on needs?
- Who is already involved and what are they doing?

Initially a decision must be made on updated information on whether the livestock will be moved a considerable distance, moved a short distance or an effort will be made to “defend in place” by mitigating some impacts.

Historically agriculture producers since the 1870’s have assisted each other in responding to disaster and emergency needs calling it “Neighboring”. Unfortunately when the impacts exceed the capacity of neighbors to deal with them the long-term impacts can be “landscape changers” which also directly impact the vitality of rural communities.

Collaboration

Developing a working relationship with Emergency Managers (EM) and First Responders to address disaster vulnerabilities in an area can lead to direct and durable connections between authorities and producers. Authorities can “deploy” producers as teams working within the Incident Command System and provide “over watch” situational analysis and updates to help keep evacuation more safe.

Initial Evacuation Response

As part of the Incident Assessment producers working with the EM should identify which herds of animals are at risk, their number and ownership, proximity to the incident elements, and a practical time frame for extended impacts.

An Incident Action Plan should be established for the first Operational Period (usually 8 hours) listing the groups objectives, resources needed, estimated time needs, assignments, communication processes, and both ingress and egress routes. This should include a starting point, routes, alternate routes, checkpoints, and destinations for the livestock as well as mechanism of movement.

A staging area or areas should be set up where all resources check in and are deployed with detailed information, estimated return, and equipment type. This area will require fuel and other supplies for responders.

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Communication

If possible, Team Leaders should be designated and issued radios since the telecommunication system is often overloaded or compromised by disaster impacts. These Team Leaders should be responsible for coordinating the efforts of small teams and calling progress reports into the Branch Director or Incident Command Center on a pre-designated time frame or when they have additional needs. These Teams and Leaders will be given identifiers so that checkpoints can track their entry and return from the area near impacts.

Safety and Updates on Situation

A person qualified as an Incident Commander should be assigned to monitor conditions, team progress and proximity, and all factors during a disaster to call for changes to protect the safety of responders and the livestock resource. This may include changes in routes, adjustment to team assignments, general “back outs”, suspending activities or sending teams in more aggressively.

Movement Mechanics

Animals species all act different than normal during most disasters which can add confusion to handling the animals. Various species herd and load at different paces, especially during disasters. Cattle which could normally be moved 15 miles may only move 2 miles in smoke or one mile in water.

When herding animals an estimate of how fast they move, how far they are from risk elements, how much time they have, and how their speed compares to the speed of potential impacts. This is a critical issue when dealing with wildfires, blizzards, and floods in the west. Try to project the animals behavior in specific types of incidents.

When gathering and hauling livestock a determination of total head, distance to haul, transportation needed, and total time required with existing resources.

If livestock cannot reliably be moved to an area where

they would not be impacted for 24-72 hours, then measures should be taken to move them to the best defensible space available in a short-term. Measures should be taken to mitigate impact severity at the short-term location such as creating a fire barrier by back-burning in the face of wildfires, or moving livestock to the highest possible ground during flooding or to a shelter need a feed source in a blizzard.

Logistics

For each team in the field evacuating cattle there must be someone organizing supplies, manpower, vehicles, supplies, destination locations, equipment and carefully documenting who is doing what with whose property where, and when. On the average for every field responder there are 2-10 people needed behind the scenes to keep efforts functioning. Each evacuation effort will usually require movement documentation by livestock authorities and someone to provide oversight and care when the animals arrive to a destination.

Disaster Declarations/ Liability/ Documentation

The declaration of a county, state or national disaster provides operational cost options and loss programs at times. When moving other people’s livestock on your own without functioning thru authorities may leave you liable personally for losses or injuries while in transit. It is best to work within the system or document owners request for movement. If you sustain damage to your vehicle or an injury without working thru an authority you costs and recovery are often on your own.

Developing a relationship with County Emergency Managers, providing input on agriculture plans, training as a team and responding as a component of that authority alleviates many issues and liabilities. It also helps your neighbors document and qualify for post-disaster assistance and payments.

Land-grant university Extension staff can help you plan, train and prepare for disasters and emergencies.

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Operational Periods

Although all responders would like to knock out all needs in one period of time, it is seldom possible during disasters. Usually conditions, distances, and limited resources will require more than one operational period, especially if conditions are changing or moving. An Incident Action Plan with objectives, assignments, and resources needs to be prepared for the next period which means you need to save some resources for the next shift allowing Team 1 to rest and recover in case they need to be functional in Period 3. Resources and planning for each future Operational Period should be worked on while the first set of objectives are being addressed. It will take time to get additional resources on-scene. Holding and destination requirements will adjust as the incident unfolds and will also change resource requirements.

Make sure to check everyone back into base at the end of each Operational Period. If conditions begin to accelerate it may be necessary to shorten operational periods so that objectives can be adjusted more rapidly.

Animal Behavior

Animals do not like to cross or stay in flood waters. Earthquakes confuse the senses of many species. Many species walk different directions and stop differently in the face of blizzards. Flood waters drive animals to high ground. Wildfire can cause erratic behavior, confusion and aggression in animals. Tornadoes can disorient livestock and humans.

When determining movement and gathering patterns design destinations that take livestock reaction to specific incidents into consideration. Trying to move livestock into the wind to reach shelter is much more difficult than traveling down wind in many cases. Sometimes responders can use other animals such as saddle horses to lure livestock in the right direction. ALWAYS maintain awareness of approaching impacts and protect your responders. Injured or dead responders save no livestock!

Safety Overwatch At All Times

All response teams need to have one or more Safety Officers watching over field operations, monitoring changing conditions, and constantly communicating with resources in the field. These officials should have a deep knowledge of the operation requirements, in-depth qualifications in Incident Command, AND the authority to call all operations to a halt if they observe a safety issue developing.

Destinations

One of the more crucial elements of evacuating livestock and other animals is having one or more destinations where the animals can be taken. If central locations are to be used, you must have:

- Permission to use that location which is out of the risk envelope,
- Staff to manage the site,
- Equipment and an access route.
- (see the Establishing and Operating Animal Shelter Fact-sheet).

Hauling Considerations

When planning a livestock evacuation the process of hauling animals has many factors to consider including:

- What type of vehicles do you have available and how many animals can be moved per trip,
- Do access conditions allow these vehicles or is an intermediary level of movement required,
- Do you have relief drivers, vehicles, fuel and supplies if more than one Operational Period is required?
- How do get authority for overloading and running more than normal hours?
- Where do you safely stage?

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Training Teams

Livestock Evacuation Teams should have some basic training for the effort including:

- Incident Command 100/ 200 / 700/ 800
- Radio Communication Protocols,
- Animal Handling Techniques,
- Emergency Corral and Loading Chute Deployment,
- Animal Injury and Mortality Triage,
- Basic Wildfire, Flood, Blizzard, and Tornado Orientation,
- Familiarity with various trailers and trucks,
- Familiarity with local livestock laws,
- Use of GPS equipment and coordinates,
- Understanding of livestock identification,
- And either familiarity or a guide for the area.

By conducting several levels of practical training teams can learn how to respond faster, safer and more effectively during real incidents. Training can start with simple exercises and move to more complex training with live animals and full-scale equipment. This will allow local Emergency Managers an opportunity to fine tune deployment strategies also.



Con-

tingencies

Disasters are usually fluid events with changing boundaries, changing access corridors, changing risk zones and changing safe zones. Communication between field response teams and both Safety Officers and the Incident Command Center are crucial at least every 30 minutes and if conditions change suddenly.

These “status checks” are not only crucial to effective response, they are crucial to team safety. They also allow to verify that the communication links are still functioning every 30 minutes.

Extension and the Extension Disaster Education Network has training materials and expertise available to prepare teams for active service. Contact your local Extension office for more information.

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