Large Animals & Stress and Euthanasia

Concepts and Safety Issues
Large Animals and Stress

- Flight instinct – Run first, then look.
- Animals want to get up and leave.
- Humans are recognized as predators.
- Humans *ACT* like predators.
- Prey animals hide pain from predators.
- Horses do not neigh when trapped.
- Ears and eyes can tell the animal’s focus.
Large Animals and Stress

KEY RESPONDER BEHAVIORS

- Control the “energy” at the scene.
- Avoid unnecessary chatter and noise.
- Move and act with quiet purpose.
- Constantly observe the animal’s response to activities.
- Coordinate the actions of all responders.
Large Animals and Stress

KEY RESPONDER BEHAVIORS

- Use caution when using noisy power rescue tools.
- Monitor sparks from cutting tools.
- Apply pool noodle or plumbing insulation to cover sharp areas.
- Remember hay is Nature’s sedative.
- Consider using herd instincts if multiple animals are present.
Low energy helps maintain a calm horse during an extrication.
Large Animals and Stress
Alert Animal
Large Animal Safety

Be aware of the animal’s behavioral display!
Large Animals and Stress

- Very sensitive skin, they can feel a fly land.
- Use firm rubs, not patting.
- Horses have a 500 lb biting force.
- Approach at shoulder if possible.
- Avoid blind areas.

Diagram from Grandin.com, 2011
Large Animals and Stress

- Horses can have a lightning fast reaction to fear stimuli.
- Stay out of the “Kill Zones,” when the horse is standing and when recumbent.
- Use a low, calming voice. Avoid shouting or a high pitched voice.
- Use handheld radios to communicate among team members rather than shouting.
Basic Anatomy

Poll
Shoulder
Withers
Girth
Point of Hip
Stifle
Chest
Knee
Fetlock/Ankle
Pastern
Hoof/Foot
Elbow
Hock
Basic Anatomy

TORSO

FRAGILE
Basic Anatomy

Courtesy animalcorner.co.uk
Basic Anatomy

These areas are not handles for hauling!
Basic Anatomy

An extrication gone tragically wrong
Basic Anatomy

Key element for rescue hardware:

**SURFACE AREA**

If you have to use a leg, make the covering as broad as is practicable before attaching a pulling device.
Correct lift

When lifting by the legs is required, done with appropriately wide padding.
Security and Containment

- Security is a must for the safety of first responders, public and livestock
- Keep livestock contained to the scene.
- Keep out those who don’t need to be involved with the scene.
  - (General public, media)
- A public Information Officer (PIO) should be designated for significant incidents before one is needed… be prepared!
Security and Containment

- The scene should be blocked from public view.

- Prior to any animal extrication, a containment structure must be in place!
  - There are several documented cases of death or severe injury to the general public or first responders because this rule was not followed.
Containment plans should include list of local entities that can provide livestock handling equipment that can be used to erect containment facilities.

- Should be included in Emergency Contact Sheet.

- Use available data (Animal Transport Incident Assessment Form, Bill of Lading, etc.) to determine size of needed containment structures.

- Evaluate potential onsite factors and assets for use in containment.
Security and Containment

- Loose animals on the scene:
  - Provide a challenge.
    - Consider closing the roadway.
  - If any meet euthanasia criteria, euthanize immediately.
  - Injured livestock should be contained as soon as feasible.
  - Utilize:
    - Natural containment that is available.
    - Relationships with local community to develop site specific capture plans.
  - Aggressive animals posing hazards should be euthanized.
    - Use large caliber rifle, aiming for chest, considering distance, other safety issues.
      Shotguns with slugs are effective.  (Note: Chest shots are for aggressive animals.)
Containment Options
Containment: Portable Panels
Deploying construction netting to direct a horse into a funnel chute.
Containment

Use available tools

Rescue Clip
Containment

Rescue clip attached to halter
Containment

Improvising: Haltering using a rope and catch pole
Containment

Improvising: Utilizing a quick halter and loading chute
Containment methods need to be developed and fully practiced well in advance of an actual event!
Decontamination

Be prepared to secure and decontaminate animal victims.

(Horse that fell into a sewer treatment plant sludge pond.)
Euthanasia

Field Euthanasia

- Gunshot to the head
- Captive bolt
Euthanasia

Field Euthanasia

- Gunshot to the head
- Captive bolt
Euthanasia in trailers
- Off load mobile animals
- For livestock remaining on the trailer
  - Sort based upon severity of injury—Determine potential candidates
  - Euthanize those still in truck: immobile, non-extractable
  - Follow Approved Methods of Euthanasia
  - Euthanize as soon as practical
    - Designated candidates on truck first (worse condition)
    - Off loaded group
Situational awareness

- Secure the scene, block, obscure visual observation.
- Have an escape route and a plan.
- Consider dangers related to dealing with injured, scared animals in confined, closed area.
  - Animals thrashing, charging, etc.
- Plan for dangers related to euthanasia.
  - Livestock reactions to rescue and euthanasia actions.
  - Firearm discharge, captive bolt challenges.
  - Restraint is key, but can also be dangerous.
Euthanasia

• Situational awareness, cont.
  • Be cognizant of other human and animal hazards.
    • Saws, sparks, slivers, sharp edges, protruding objects

• Use approved methods of humane euthanasia.
  • Captive bolt vs Firearm.
    • Safety needs to be foremost
  • Barbiturates probably are not practical.

• Evaluate for confirmation of death.
  • Lack of a heartbeat.
  • Lack of respiration.
  • Lack of corneal reflex.
Euthanasia

- Human safety is most important---cannot be ever be superseded by animal condition or incident needs.
  - Safety glasses
  - Ear plugs
  - Respiratory protection
  - Full body coverage clothing
  - Use body armor available
    - Appropriate helmets, face shields, etc.
The following records need to be maintained for each euthanized animal:

- Animal ID: Eartag, Registered name
- Animal description
- Reason for euthanasia: broken extremity, burn, extreme trauma, unable to get up, etc.
- Responsible party for prescribing euthanasia
The following records need to be maintained for each euthanized animal, continued:

- Person responsible for executing euthanasia
  - Local veterinarian is best option. Onsite service may not be necessary or required
  - Important for others to be trained in humane euthanasia
    - Those trained should be included on Emergency Contact Sheet
- Method of euthanasia: Firearm, captive bolt, pharmaceutical
Carcass Disposal

- Plan ahead: identify facilities in Emergency Contact Sheet.
- Know state and local regulations.
- Develop plan to handle mortalities far in advance of an actual incident.
  - Detail options for animals of domestic and international origins.
  - Possible options for disposal include:
    - Landfill
    - Composting
    - Burning
    - Burial
    - Rendering
- Final disposition of mortalities needs to occur ASAP.
Animal mortalities should be handled with the same dignity and respect as human mortalities.

- Critical that visual barriers be used in public areas.
- Maintain carcass integrity to every extent possible.
  - Various equipment can be used to help extract animals.
    - Heavy tarps, straps, Ag. (grain elevator, baler), mine/conveyor belts

**Loading**

- Appropriate heavy machinery needs to be available.
  - Local/State highway departments
  - Consider using local private machinery
    - Detail contact info in Emergency Contact Sheet / Disinfect afterwards
    - Heavy tarps, straps, Ag. (grain elevator, baler), mine/conveyor belts
It’s critical that we understand the potential dangers and relative unpredictability of livestock at large.
THE END