



**OFFICE OF THE STATE FIRE MARSHAL
STATEWIDE TRAINING AND EDUCATION ADVISORY COMMITTEE
DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

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Date: October 14, 2016

Attachment 2

To: Ronny J. Coleman, Chairman
Statewide Training and Education Advisory Committee
c/o State Fire Training

From: Rodney Slaughter, Deputy State Fire Marshal

Subject/Agenda Action Item: Large Animal Rescue Curriculum Update

Recommended Actions: Information/Discussion

Background Information:

State Fire Training currently has an approved 8-hour Large Animal Rescue (2003) Fire Service Training and Education Program (FSTEP) class that was started back in 1996. This proposal will provide a update and replace the existing curriculum with an 8-hour Animal Technical Rescue (Awareness) class and a 24-hour Animal Technical Rescue (Technician) class. The FSTEP course plan is predicated in correlation to the NFPA standards. The subject matter experts who have helped design these classes come from the veterinarian science and emergency response communities.

Analysis/Summary of Issue:

The proposed courses represent a comprehensive revamping of the existing Large Animal Rescue FSTEP course. Since the program's inception, significant changes to NFPA 1670 (2014) have occurred. This proposal will be in alignment with the strategic direction of the OSFM in aligning our courses with NFPA Standards.

Animal Technical Rescue (Awareness) Course Description:

This awareness course provides the knowledge and understanding of skills and resources necessary to respond to an Animal Technical Rescue (ATR) incident as a single incident, or as a component of large scale disaster involving large and small animal and human elements, and to do so in a safe and effective manner, with low impact for ongoing emergency services operations. This course meets and exceeds NFPA 1670 Chapter 17.1 - 17.2 guidelines and covers the most likely animal species that first responders are called to rescue and manage: cattle (beef and dairy), horses, including working horses (police mounts, SAR), companion animals and working dogs (SAR, K-9). It will teach responders about the complications that animal involvement brings to natural disasters, terrorist attack and chemical, biological, radiological, nuclear and explosive (CBRNE) incidents, and will discuss recovery and decontamination of animal victims that could contaminate our food and water supply. The course will consider Soft Target events such as parades, rodeos and horse races with the potential for human/animal entanglement and will teach concepts and unique technical skills for rapid extrication and stabilization, utilizing equipment on hand. Through standard classroom presentations, demonstration utilizing a combination of live

animals, mannequins, and tabletop scenarios, students will learn about appropriate resources and how to stabilize an animal until additional resources arrive.

Animal Technical Rescue (Technician) Course Description:

This Technician level 3 day course will offer first responders the exposure and hands on learning to prepare them to safely handle an emergency animal incident they may encounter as a result of terrorist activity. This course meets and exceeds NFPA 1670 Chapter 17 guidelines. The course will cover the most likely animal species that first responders are called to rescue and manage: companion animals, horses and cattle including service animals. The course will combine the most likely terrorist incident type affecting our food supply, flood, fire evacuation, technical rescue or other CBRNE incident with the most likely species encountered. Skills from swift water, slack water and high/low angle rescue techniques will bridge the discussion to application on large animals.

The importance of the ICS, scene safety, animal welfare and standardized rescue techniques using equipment on hand will be emphasized. As animal rescue scenes are media intense, additional attention will be given to developing agency PIO's to comfortably handle the outcome of a rescue attempt. The importance of the role of the veterinarian in improving scene safety and animal welfare will be emphasized.

State Fire Training currently has 18 registered Large Animal Instructors who have extensive fire-rescue backgrounds along with experience in teaching technical animal rescue techniques, each of whom will be historically recognized to teach the updated Large Animal Rescue curriculum. The course will combine standard classroom presentations with realistic scenario driven field exercises utilizing a combination of live animals and mannequin types.



Animal Technical Rescue

Awareness

Course Details

Certification: Animal Technical Rescue (ATR) - **Awareness**

Description: This course provides the knowledge and understanding of skills and resources necessary to respond to a ATR incident as a single incident, or as a component of large scale disaster involving large and small animal and human elements, and to do so in a safe and effective manner, with low impact on ongoing emergency services operations.

This course meets and exceeds NFPA 1670 Chapter 17.1 - 17.2 guidelines and covers the most likely animal species that first responders are called to rescue and manage: cattle (beef and dairy), horses, including working horses (police mounts, SAR), companion animals and working dogs (SAR, K-9). It will teach responders about the complications that animal involvement brings to natural disasters, terrorist attack and NBC (Nuclear, Biological, Chemical) incidents, and will discuss recovery and D-con of animal victims that could contaminate our food and water supply. The course will consider Soft Target events such as parades, rodeos and horse races with the potential for human/animal entanglement and will teach concepts and unique technical skills for rapid extrication and stabilization, utilizing equipment on hand. Through standard classroom presentations, demonstration utilizing a combination of live animals and mannequin types, and tabletop scenarios, students will learn about appropriate resources and how to stabilize an animal until resources arrive.

Designed For: Services Planners, Fire Service Personnel, Animal Service Officers and Organizations, Law Enforcement, and Veterinarians

Prerequisites: #1: ICS 100
On line "Animal Handling and Behavior Basics Course" optional

Standard: Complete all activities and mandatory skills

Hours: Lecture: 3.5 hours
Activities: .5 hours
Demonstrations and Skills: 3 hours

Animal Technical Rescue

Hours (Total): 7:00

Maximum Class Size: 45

Instructor Level: Registered Primary Instructor with ATR experience

Instructor/Student Ratio: 1:45 (Lecture/Activities) 1:15 (skills)

Restrictions: none

SFT Designation: FSTEP

Required Resources

Instructor Resources

To teach this course, instructors need:

- CA State Fire Training Student Manual Animal Technical Rescue – Awareness
- Personal protective equipment (including head and hand protection)

Online Instructor Resources

The following instructor resources are available online at

<http://osfm.fire.ca.gov/training/instructorscorner.php>:

- Animal Handling and Basics (proposed on-line supplement)
- Skills Exercise 1: stabilization/rapid extrication strapping (proposed on-line supplement)
- Skills Exercise 2: size-up of large animal transports (proposed on-line supplement)

Student Resources

To participate in this course, students need:

CA State Fire Training Student Manual; Animal Technical Rescue - Awareness

- Personal protective equipment (including head and hand protection)

Facilities, Equipment, and Personnel

Facilities

- Classroom that accommodates up to 45 students
- Projection equipment and screen
- Activity 2 – 2: Table top scenario and worksheets for 45
- Training area that accommodates multiple demonstration/skills stations
 - Sanitation facilities
 - Rehab area (shade, hydration, first aid)
 - Containment for 1 or 2 live horses
 - Trailer parking
 - Area to accommodate strapping and moving one life-size horse manikin

Animal Technical Rescue

Equipment

- **Incident action plan (IAP)**
- **Incident planning and ICS forms:** Tactical worksheets, ICS 201
- **Tools:** J-hooks, Connell Flex Guides, LAR rescue straps, wildland hose, 2 full sets of 1" web, halters, lead lines, water rescue rope, caution tape, blankets
- **Large Animal Transport Vehicles:** choose from Living Quarters Goose-neck, Stock trailer, slant or straight load Bumper-pull
- **Victims:** manufactured or improvised life size horse manikin, manufactured or improvised life size dog manikin, manufactured or improvised human manikin

Personnel

- Lecture
 - One primary instructor
- Skills/demonstrations
 - One registered primary instructor (for a group of 15 students)
 - One assistant instructor (for each additional group of 15 students)
 - One designated safety officer (per group of 15 students)

Unit 1: ATR – Awareness: Orientation, Administration and Certification

Topic 1-1: Orientation and Administration

Terminal Learning Objective

At the end of this topic, a student will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, resources, evaluation methods, and participation requirements in the course syllabus.

Enabling Learning Objectives

1. Identify facility requirements
 - Restroom locations
 - Food locations
 - Smoking locations
 - Emergency procedures
2. Identify classroom requirements
 - Start and end times
 - Breaks
 - Electronic device policies
 - Special needs and accommodations
 - Other requirements as applicable
3. Review course syllabus

Animal Technical Rescue

- Course objectives
- Calendar of events
- Course requirements
- Student evaluation process
- Assignments
- Activities
- Required student resources
- Class participation requirements

Discussion Questions

1. To be determined by the instructor

Activities

1. To be determined by the instructor.

Topic 1-2: Animal Technical Rescue – Awareness Certification Process

Terminal Learning Objective

At the end of this topic, a student will be able to identify different levels in the Animal Technical Rescue Certification Track, the courses and requirements for Awareness Level certification, and other complimentary technical rescue skills.

Enabling Learning Objectives

1. Identify the different levels of certification in the certification track
 - Level 1 Animal Technical Rescue -Awareness
 - Level 2 Animal Technical Rescue Technician
2. Identify the courses required for each level
 - Animal Technical Rescue- Awareness
 - ICS 100
 - Animal Technical Rescue – Technician
 - Animal Technical Rescue Awareness level
 - Working knowledge of rope systems
 - FEMA course IS-10.A Animals in Disasters
 - FEMA course IS 11.A Animal in Disasters Community Planning
 - FEMA course IS 111.A Livestock in Disasters
 - ICS 100, 200, 700 and 800
3. Explain how complimentary technical rescue skills can be adapted for ATR
 - a. Vehicle Extrication
 - b. Swift Water Rescue
 - c. Trench Rescue
 - d. Low angle Rope Rescue
 - e. High angle Rope Rescue

Discussion Questions

1. How can Trench Rescue skills be applied to ATR?

Activities

1. To be determined by the instructor.

Unit 2: ATR – Awareness: Disaster/Evacuation/ATR

Topic 2-1: Disaster/Evacuation/ATR

Terminal Learning Objective

At the end of this topic, a student will be able to identify the need for and difference between Technical Rescue and Evacuation, and understand the social, political, and public issues related to animal rescue services. The student will be able to describe types of disasters and how ATR might be a component of disaster or evacuation responses.

Enabling Learning Objectives

1. Describe the importance of animals
 - a. Economic value
 - b. Working animals value
 - c. Emotional value
 - d. Historic value
 - e. The value of rescue animals
2. Identify different types of disasters and the impact on Large Animals and the human population.
 - a. Natural disaster
 - i. Pending
 - ii. Immediate
 - b. Man-made disaster
 - i. NBC, Terrorist
 - ii. Soft targets
3. Explain the difference between LAR in a disaster setting vs. a single incident and the potential for human involvement
4. Identify resources that are desirable and challenges to getting those resources on scene

Discussion Questions

1. What is the difference between EVAC and Extrication
2. Which will happen in the event of an earthquake?
3. What could a bio-terrorist do to attack the food industry?
4. What value do working animals provide to Police and Search and Rescue situations?

Activities

1. To be determined by the instructor.

Topic 2-2: Natural Disaster and challenges to response

Terminal Learning Objective

At the end of this topic, a student will be able to plan for an animal technical rescue by understanding the organizational system and resources for ATR within the context of disaster or single incident response, and will be able to describe challenges to these responses.

Animal Technical Rescue

Enabling Learning Objectives

1. Describe the application of the ICS system to ATR, expanding or contracting according to incident and possible matrixes
2. Identify specific planning and ICS forms
3. Explain jurisdictional agencies and how they can blend into a Unified Command
4. Identify and know how to request the appropriate resources
5. Explain possible hazmat considerations with ATR responses
6. Identify agencies and resources for a HAZMAT component of an ATR incident

Discussion Questions

1. What is the difference between EVAC and Extrication
2. Which would happen in the event of an earthquake?
3. How would animal extrication play a part in the food chain?
4. What additional CIS components are needed in a ATR?
5. Give an example of a animal involved hazmat and it's potential results.

Activities

1. To be determined by the instructor.

Unit 3: ATR – Awareness: Animal Behavior, Characteristics and Rescuer Safety

Terminal Learning Objective

At the end of this topic, a student will be able to identify the pertinent animal behavior and characteristics of most common species and understand how this applies to rescuer safety.

Enabling Learning Objectives

1. Identify differences between prey and predatory animals
2. Describe characteristics unique to common large animal species
 - a. Donkeys, burros, mules, cattle, llamas, alpacas, swine, and wild animals
 - i. Safety tips
3. Explain flight zone, milling and stampede
 - a. Identify types of pressure
4. Describe behaviors, postures and placement that will lead to successful herding
5. Describe possible means of containment
6. Recognize the 'Line of Fire'
 - a. Describe characteristics unique to common small animal species dogs and cats
 - b. Hearing
 - c. Approach
7. Identify appropriate PPE
8. Explain safe positioning with a prey animal or a predator

Questions

1. How do pupils vary between prey and predatory animals

Animal Technical Rescue

2. How does pupil type relate to rescuer safety?
3. What is Flight Zone
4. How do you release pressure off the flight zone?

Discussion Questions

1. What scene safety considerations apply to an animal rescue given their behavior and characteristics
2. What should be included in Rescuer PPE?

Activities

1. To be determined by the instructor.

Unit 4: ATR – Awareness Response, Resources and Scene Management

Topic 4-1: Response, Resources and Scene Management

Terminal Learning Objective

At the end of this topic, a student will be able to identify the organizational system and resources for Animal Technical Rescue within the context of disaster or single incident response.

Enabling Learning Objectives

1. Describe the application of the ICS system to ATR, expanding or contracting according to incident
2. Explain jurisdictional agencies and how they can blend into a Unified Command
3. Identify and know how to request the appropriate resources
4. Explain possible hazmat considerations with ATR responses
5. Identify agencies and resources for a HAZMAT component of an LAR incident

Discussion Questions

1. What is the difference between EVAC and Extrication
2. Which would happen in the event of an earthquake?
3. How would animal extrication play a part in the food chain?
4. What additional CIS components are needed in an ATR?
5. Give an example of a hazmat

Activities

1. Table top exercise, given a photo of a rescue situation, students will determine the level of response and available resources,

Unit 5: ATR – Awareness: Animal Rescue Equipment

Topic 5-1: Animal Rescue Equipment

Terminal Learning Objective

At the end of this topic, a student will be able to identify commercially built ATR equipment and learn about adapting equipment and accessory tools from a type 1 engine or Rescue equipment cache.

Animal Technical Rescue

Enabling Learning Objectives

1. Describe commercially built ATR rescue straps
2. Identify proper diameter hose to make a rescue strap
3. Describe accessory tools to facilitate application of strapping and slings
4. Describe the commonly used small animal tools
 - a. Commercially made
 - b. Impromptu made
5. Explain how standard engine or rescue truck equipment can facilitate an ATR
 - a. Ropes, webbing
 - b. Lifting bags
 - c. overhead lighting
 - d. radios
 - e. hydraulic equipment

Discussion Questions

1. What equipment can be used as a Rescue Strap?
3. What equipment can be used to move or extricate an animal?
4. What equipment can facilitate a night rescue
5. What equipment can facilitate entrapped or entangled animals?

Activities

1. To be determined by the instructor.

Unit 6: ATR – Awareness: Trailer Awareness, Scene Safety

Topic 6-1: Trailer Awareness, Scene Safety

Terminal Learning Objective

At the end of this topic, a student will, given a trailer, be able to identify the different trailer types, their safety concerns, and options for extrication utilizing appropriate resources and equipment.

Enabling Learning Objectives

1. Identify the different types of animal transport trailers
2. Identify the different styles of trailer doors and how they might impact extrication efforts
3. Identify inherent hazards of trailer types
4. Identify the different equipment needed to deal with each door type
5. Demonstrate proper approach and size up to a trailer accident scene
6. Demonstrate a knowledge of the potential hazards involving a trailer accident

Discussion Questions

1. What are the common trailer types used in your area?
1. What is the importance of knowing the different door types?

Animal Technical Rescue

2. What information does this provide?
3. What special equipment might be needed in a trailer rescue
4. What scene precautions need to be taken upon response and on scene?
5. What is the greatest danger to the public in a animal transport incident?

Activities

1. Observe and discuss the general approach to a trailer incident
2. Observe and discuss the door configurations, make observations of the different door types.
3. Conduct a “walk around” and note general scene safety hazards
4. Observe and discuss the hazards and construction specific to each trailer type
5. Observe and discuss the opening of windows and doors
6. Discuss the potential hazards of approach to a trailer incident
7. Observe and discuss scene management and scene set up

Instructor Notes

Using 1 or 2 different trailers (preferably one being a living quarters trailer), walk around the trailers and identify the attributes, problems and advantages observed, and scene safety issues.

Unit 7: ATR – Awareness: Approach and Handling

Topic 7-1: Approach and Handling

Terminal Learning Objective

At the end of this topic, a student, given a 1” web, 25 to 30 feet water rescue rope and operating guidelines, will be able to approach, herd or catch, apply an emergency hauler and lead and contain a horse.

Enabling Learning Objectives

1. Identify proper length rope, and type of rope, or webbing to make an emergency halter and lead line
2. Demonstrate proper approach and positioning to catch a horse
3. Demonstrate herding techniques
4. Identify improvised materials for containment
5. Demonstrate the proper way to put an emergency halter on an animal
6. Understand when herding vs use of a halter is appropriate.
7. Demonstrate proper animal leading

Discussion Questions

1. What equipment can be used to make an emergency halter?
2. What precaution need to be taken when leading an animal?
3. What animals will an emergency halter work on, not work on?
4. When will herding of the animals be used?

Animal Technical Rescue

Activities

1. Approach a horse
2. Determine the "Flight Zone"
3. Observe the animals reactions
4. Move the animal using herding techniques
5. Apply an emergency halter using a ½" rope
6. Apply an emergency halter using a 1" web
7. Demonstrate proper lead line techniques
8. Demonstrate proper animal leading

Instructor Notes

1. Using a live horse demonstrate approach, haltering and leading, have students do same.

Unit 8: ATR – Awareness: Stabilizing the animal patient

Topic 8-1: Stabilizing the animal patient

Terminal Learning Objective

At the end of this topic, a student, given a commercially built or improvised rescue strap, web, and accessory tools (J-Hook, Connel Flex Guide, lunge whip), while working outside of the "Line of Fire", will be able to re-position a horse to free a human patient, or to stabilize a horse patient.

Enabling Learning Objectives

1. Identify position of the animal and indicate the "Line of Fire"
2. Identify the best position for a down horse or cow to be in
3. Describe how to change the position of the animal
4. Explain rapid extrication to save a human impinged by the animal vs. standard strapping techniques

Discussion Questions

1. What equipment can be used as a Rescue Strap?
2. What equipment can be used to move or extricate an animal?
3. What equipment can facilitate entrapped or entangled animals?

Activities

1. Demonstrate the usage of the J-Hook and Connel Flex Guide
2. Show an improvised Rescue Strap from fire hose
3. Using a life size horse manikin, demonstrate the usage of 1" webbing to apply a Rescue Strap
4. Using a life size horse manikin, demonstrate strapping to roll a horse
5. Using a life size horse manikin, demonstrate strapping to rotate a horse

Animal Technical Rescue

- Using a life size horse manikin, demonstrate moving changing a horse's position for rapid extrication of a human victim

Instructor Notes

- Emphasize working outside of the "Line of Fire"

Time Table

Segment	Lecture Time	Activity Time	Total Unit Time
Unit 1: Introduction			
Topic 1-1: Orientation and Administration			
Lecture	15		
Activity 1-1: To be determined by instructor		0	
Topic 1-2: Certification Process			
Lecture	15		
Activity 1-2:		0	
Unit 1 Totals	30	0	30 minutes
Unit 2: Response vs Evacuation			
Topic 2-1: Response vs Evacuation			
Lecture	45		
Activity		0	
Topic 2-2: Natural Disaster and challenges to response			
Lecture	45		
Activity		0	
Unit 2 Totals	45	0	1 hour 30 minutes
Unit 3:			
Topic 3-1: Animal Behavior and Rescuer Safety			
Lecture	45		
Activity 3-1:		30	

Animal Technical Rescue

Segment	Lecture Time	Activity Time	Total Unit Time
Unit 3 Totals	45	30	45 minutes

Unit 4: Response, Resources and Scene Management			
Topic 4-1: Response, Resources and Scene Management			
Lecture	30		
Activity 4-1: Resource table top exercise		15	
Unit 4 Totals	30	15	45 minutes

Unit 5: Animal Rescue Equipment			
Topic 5-1: Animal Rescue Equipment			
Lecture	45		
Activity 5-1:		0	
Unit 5 Totals	45	0	45 minutes
Lecture, Activity, and Unit Totals:			
Unit 6: Trailer Awareness and Rescuer Safety			
Topic 6-1: Approach and Handling			

Animal Technical Rescue

Lecture	0		
Activity 6-1: Trailer Awareness and Rescuer Safety		1 hour	
Unit 6 Totals	0	1 hour	1 hour

Unit 7: Approach and Handling			
Topic 7-1: Approach and Handling			
Lecture	0		
Activity 7-1: Approach and Handling		1 hour	
Unit 7 Totals	0	1 hour	1 hour

Unit 8: Stabilizing the Patient			
Topic 8-1: Stabilizing the Patient			
Lecture	0		
Activity 8-1: Stabilizing the Patient		1 hour	
Unit 8 Totals	0	1 hour	1 hour

Course Totals

Total Lecture Time (LT)	4 hours
Total Activity Time (AT)	3 hour

Total Testing Time (TT)	0
Total Course Time	7 hours

DRAFT



Animal Technical Rescue Technician

Course Details

Description: This course provides the knowledge and understanding of skills and resources necessary to respond to a LAR incident as a single incident, or as a component of large scale disaster involving large animal and human elements.

This course meets and exceeds NFPA 1670 Chapter 17 guidelines and covers the most likely animal species that first responders are called to rescue and manage: cattle (beef and dairy), horses including working horses (police mounts, SAR), companion animals and working dogs (SAR, K-9). It will teach responders about the complications that animal involvement brings to natural disasters, terrorist attack and CBRNE incidents, and will discuss recovery and D-con of animal victims that could contaminate our food and water supply. The course will consider Soft Target events such as parades, rodeos and horse races with the potential for human/animal entanglement and will teach concepts and unique technical skills for extrication and lifting, utilizing equipment on hand. Through standard classroom presentations, demonstration utilizing a combination of live animals and mannequin types, and scenarios, students will learn about appropriate resources and response.

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- Designed For:** Fire Service personnel, Urban Search and Rescue, Law Enforcement, Emergency Services Planners, Animal Service Officers and organization, Veterinarians
- Authority:** NFPA 1670 Standards for Technical Rescuer Professional Qualifications (2014)
- Prerequisites:** ICS 100, 200, 700, 800 and Animal Technical Rescue Awareness Level
- Corequisites:** None
- Standard:** Complete all activities and mandatory skills, attend all scenarios
Attend lesson plans, complete worksheets,
Complete written test with a minimum score of 80%.

Animal Technical Rescue

Hours: Lecture: 8:00
 Activities: 1:00
 Skills: 15:00

Hours (Total): 24

Maximum Class Size: 28

Instructor Level: Registered Primary Instructor with ATR experience

Instructor/Student Ratio: 1:28 (Lecture/Activities); 1:7 (skills)

Restrictions: none

SFT Designation: FSTEP

Required Resources

Instructor Resources

To teach this course, instructors need:

- CA State Fire Training Student Manual [Animal Technical Rescue - Technician](#)

Online Instructor Resources

The following instructor resources are available online at

<http://osfm.fire.ca.gov/training/instructorscorner.php>:

- Animal Handling and Basics Course
- CA State Fire Training Student Manual [Animal Technical Rescue - Awareness](#)

Student Resources

To participate in this course, students need:

- CA State Fire Training Student Manual [Animal Technical Rescue](#)
- PPE, long sleeve shirt, lug soled boots, helmet, gloves

Facilities, Equipment, and Personnel

Facilities

- Classroom that accommodates up to 25 students
- Projection equipment and screen
- Tabletop worksheets
- Training area that accommodates multiple skills stations
 - Sanitation facilities
 - Rehab area (shade, hydration, first aid)
- Training area with varied terrain for scenarios

Equipment

- **Incident action plan (IAP):** One for each skills day
- **Incident planning and ICS forms:** Tactical worksheets ICS 201
- **Tabletop worksheets**
- **Hand tools:** pike pole, Superclip or equivalent remote carabineer application device, haligan, shovel, webbing, water rescue rope, hardware and webbing to build 3:1, 4:1 systems and anchors, brake bar Duct tape, J-hook, Connell flex guide, rescue straps, wildland hose, ladder (folding or other).
- **Power tools :** Capstan winch (optional)
- **Stabilization equipment:** High pressure air bag set, Para-tech struts or Air-shore struts, cribbing
- **Vehicles:** 1 or two upright trailers for demonstration, 1 trailer for rollover scenario
- **Victim immobilization and transport equipment:** 1 Glide backboard for horses or cows with 2 HDP slipsheets, webbing, prusiks, carabineers, 1 mil-spec cargo net, human victim packaging system to include backboard, strapping, head bed
- **Victims:** Manufactured or improvised rescue manikins (determined by number of scenario stations, 1 human manikin, 1 – 4 life sized articulated horse manikins
- **Lifting equipment:** Rescue air bag set, Choice of one or all sling systems: Large Animal Lifter, Belly Band Net Lift system, 2-Strap system, Anderson Sling, Upsy-daisy cow lifter, Single jacket 1 1/2" hose less couplers
- **Other equipment as needed:** salvage covers, tarps
- **For all equipment, ensure that you have the operating supplies (fuel) and cleaning supplies**

Personnel

- Lecture
 - One registered primary instructor
- Skills
 - One registered primary instructor (for a group of 25 students)
 - One assistant instructor (for each additional group of 6 students)
 - One capable horse handler
 - One safety officer

Unit 1: Orientation

Topic 1-1: Orientation and Administration

Animal Technical Rescue

Terminal Learning Objective

At the end of this topic, a student will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, resources, evaluation methods, and participation requirements in the course syllabus.

Enabling Learning Objectives

Identify facility requirements

- Restroom locations
- Food locations
- Smoking locations
- Emergency procedures

Identify classroom requirements

- Start and end times
- Breaks
- Electronic device policies
- Special needs and accommodations
- Other requirements as applicable

Review course syllabus

- Course objectives
- Calendar of events
- Course requirements
- Student evaluation process
- Assignments
- Activities
- Required student resources
- Class participation requirements

Discussion Questions

1. To be determined by the instructor

Activities

1. To be determined by the instructor.

Topic 1-2: Animal Technical Rescue (ATR) Technician Certification Process

Terminal Learning Objective

At the end of this topic, a student will be able to identify different levels in the ATR Certification Track, the courses and requirements for Technician Level certification, and be able to describe the testing process.

Enabling Learning Objectives

1. Identify the different levels of certification in the certification track
 - Level 1 ATR - Awareness
 - Level 2 ATR - Technician

Identify the courses required for each level

- ATR - Awareness

Animal Technical Rescue

- ICS 100
- ATR – Technician
 - ATR Awareness
 - Working knowledge of ropes and rope systems
 - FEMA course IS-10.A Animals in Disasters
 - FEMA course IS 11.A Animal in Disasters Community Planning
 - FEMA course IS 111.A Livestock in Disasters

Identify any other requirements for ATR - Awareness. None

Describe the testing process

- Complete all prerequisites and course work
- Complete all job performance requirements
- Must have identified evaluator verify individual task completion via signature
- Schedule skills evaluation test and pass within 80%

Discussion Questions

1. What FEMA classes provide background information for ATR?

Activities

1. To be determined by the instructor.

Unit 2: ATR – Application of Physics to ATR

Topic 2-1: Application of physics to ATR

Terminal Learning Objective

At the end of this topic, a student will be to explain how physics theory can dictate many components of ATR and how it can help establish technique and protocol.

Enabling Learning Objectives

1. Explain vectoring with 1" web
2. Explain the use of single vs double lead lines
3. Explain locating anchor dynamics
4. Explain shock loading systems
5. Identify the center of gravity of horses
6. Describe the importance of purchase points and pick points
7. Describe the impact of friction on the animal and the haul systems

Discussion Questions

1. How could a horse shock load a rope system?
2. Why are double lead lines bad to use with horses?
3. What are some impacts of friction on an ATR?

Activities

1. To be determined by the instructor.

Unit 3: ATR – Animal anatomy, locomotion, physiology and first aid

Topic 3-1: : Animal anatomy, locomotion and physiology

Terminal Learning Objective

At the end of this topic, a student given a horse manikin and common terminology, will be able to identify vulnerable areas and systems of the equine skeletal structure and know how to utilize anatomical features for equipment placement, equipment purchase points for extrication and lifting, and how to assist mobility of the ambulatory animal.

Enabling Learning Objectives

1. Identify significant parts of an animal
 - a. Skin and hair covering
 - b. Nerve blanket and bundles
 - c. Skeletal structure
 - i. Head
 1. Location of the poll, occipital bones in relation to the brain case
 2. Thick and thin bone formations in the skull
 3. Ligaments connecting the C1 vertabrate to the skull
 - ii. Vertabrate
 1. Placement in the neck
 2. Extension into the tail
 3. Spinal processes
 - iii. Scapulas
 - iv. Hip bones and pelvic girdle
 - v. Ribs and sternum
 - vi. Hoofs
2. Describe front and rear leg systems
 - a. Quadriped locomotion vs. Biped locomotion
 - i. Differences in spinal processes and nuchal ligaments
3. Circulatory system and vascular areas
4. Respiratory system
 - i. Areas of greatest expansion
 - ii. Diaphram
5. Identify the different purchase points on the animal
6. Identify the different equipment access points on the animal
7. Explain vital signs and monitoring condition throughout rescue
8. Understand the indications and contraindications of using chemical restraint
9. Describe the importance of post rescue rehab
10. Define the “Line of Fire”
 - a. In reference to large animals
 - b. In reference to small animals
11. Identify safety considerations for the animal patient
 - a. Large animals

Animal Technical Rescue

b. Small animals

Questions

1. Describe a critical position for an animal to be in
2. What are the benefits of thrashing?
3. What are the dangers of using chemical restraints?
4. Are there any “safe” places with an animal? Where?

Activities

1. To be determined by the instructor

Topic 3-2: : Animal first aid

Terminal Learning Objective

At the end of this topic, a student given common terminology, will be able to identify Basic first aid needs and the application of basic first aid to large and small animals.

Enabling Learning Objectives

1. Identify significant first aid situations for large and small animals
 - a. Broken bones
 - b. Cuts/bleeding
 - c. Physiological issues
2. Identify the safety issues when administering and first aid to animals
3. Understand the issues involved in the application of badages/bleeding control
 - a. To large animals
 - b. To small animals
4. Understand the issues involved in applying splints to broken bones
 - a. Describe when splinting is a valid option
 - b. Describe when splinting is not advised
5. Understand when restraint is needed
6. Understand when no treatment advised

Activities

1. To be determined by the instructor

Unit 4: ATR – Response, Resources and Scene Management

Topic 4-1: Response and Resources

Terminal Learning Objective

At the end of this topic, a student will be able to identify organizational systems, resources, and operational adaptations for Large Animal Rescue within the context of disaster or single incident response. Students will learn how various agencies can work in concert with each other to resolve an ATR incident.

Animal Technical Rescue

Enabling Learning Objectives

2. Describe the application of the ICS system to ATR, expanding or contracting according to incident
3. Explain jurisdictional agencies, and how they may contribute to operations
4. Identify and know how to request the appropriate resources
 - a. Animal handler
 - b. Extrication/haul team
 - c. Containment Leader
 - d. Safety Officer
 - e. Public Information Officer
 - f. Veterinarian
5. Identify rescue concepts
6. Identify scene setup
7. Understand PPE and adjuncts to PPE

Discussion Questions

1. What similarities are there between a HAZMat and a ATR?
2. Name some guidelines for setting up operations
3. Name agencies that have jurisdiction in a local county park

Activities

1. To be determined by the instructor.

Topic 4-2: Rescue Concepts

Terminal Learning Objective

At the end of this topic, the student will be able to explain effective rescue concepts that support safety for the rescuer and the animal, and strategy supported by tested tactics. The student will understand patient management for both recumbent and ambulatory animals.

The student will be able to distinguish between skills necessary to move an animal patient and how to modify those skills for rapid extrication of a human patient impinged by a horse.

Enabling Learning Objectives

1. Explain what it means to facilitate self-extrication for the animal who is stranded
 - a. Identify the criteria for self-extrication and explain how the following can contribute to success:
 - i. Soundness and condition of the animal patient
 - ii. Ability to stabilize footing
 - iii. Ability to eliminate and/or control hazards and obstacles
 - iv. Patient History and capability
 - v. Available containment after extrication
 - vi. Situational awareness and control
 - b. Identify how rescuers can support a self-extrication
 - i. Describe placement of staffing

- ii. Describe operational zones
 - iii. Describe safe sheltering
 - iv. Describe escape routes for the animal and the patient
 - v. Describe possible equipment and staffing resources
2. Explain what it means to assist movement/extrication for the animal who is stranded or entangled
 - a. Distinguish between
 - i. Removal of the object from the animal
 1. Identify best progression for removal
 2. Identify appropriate equipment and tools for spreading or cutting or dismantling
 3. Identify possible barriers for the animal and the rescuers
 - ii. Removal of the animal from the stationary object
 1. Identify appropriate equipment for extrication
 - iii.
3. Explain what it means to perform extrication of an anesthetized animal
4. Explain optimal purchase points and strapping technique for rapid removal of an animal from a human
 - a. Describe a side pull that straps around the gaskin and lateral side
 - i. Vectoring to full advantage
 - b. Describe a dorsal pull that straps around the back at the girth, assisted by purchase points on the head and forelegs
 - c. Describe the use of lift bags to assist

Unit 5: ATR – Animal Rescue Equipment

Topic 5–1: Animal Rescue Equipment

Terminal Learning Objective

At the end of this topic, given adapted and commercially built LAR equipment and PPE, a student will be able to select and apply the most appropriate straps and slings, while observing the “Line of Fire”, maintaining correct position, with adequate back-up and escape routes, to extricate, lift, or transport animals.

Enabling Learning Objectives

1. Identify proper diameter hose to make a rescue strap
2. Describe correct rescuer working position with a recumbent animal
 - a. Describe best position to attach a lead line from
 - b. Describe how to support and protect the rescuer during application of equipment
 - c. Describe logical escape routes
3. Describe application to move an animal
 - a. Frontwards

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- b. Backwards
 - c. Sideways
 - d. Roll over
 - e. Rotate
4. Identify proper diameter and length of hose to make a lifting sling
 - a. Explain how to apply a vertical lift tie out of fire hose
 - b. Explain the application of a lifting tie to a small animal
 5. Describe accessory tools to facilitate application of strapping and slings
 6. Identify an animal backboard system and packaging
 7. Understand types of lifting slings
 8. Understand the standard small animal equipment
 - a. Manufactured
 - b. Improvised
 9. Explain how standard engine or rescue truck equipment can facilitate a LAR
 10. Describe operations resources such as Lift bags, overhead lighting, radios, hydraulic equipment
 11. Understand miscellaneous equipment
 - a. Head protector
 - b. Ear plugs
 - c. Blindfolds
 - d. Entry tools
 12. Identify safety considerations

Discussion Questions

1. What equipment can be used as a Rescue Strap?
2. What equipment can be used to move or extricate an animal?
3. What equipment can facilitate a night rescue
4. What equipment can facilitate entrapped or entangled animals?

Activities

1. To be determined by the instructor.

Instructor notes:

use an articulated wooden horse artist's manikin to demonstrate

Unit 6: ATR – Trailer Operations

Topic 6–1: Trailer Operations

Terminal Learning Objective

At the end of this topic, a student, given structural and damage characteristics and potential victim positions, will be able to determine the access and egress points of a common horse

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or livestock trailer, and use existing entry and exit points for victim extrication while protecting stability of the trailer.

Enabling Learning Objectives

1. Identify the different trailer types and various materials used for trailer construction
2. Identify the special problems involved with animal trailers
3. Describe the different trailer doors and ramps and how they influence rescue efforts
4. Identify special safety considerations needed for a trailer collision
5. Understand equipment and techniques that can simplify extrication efforts
6. Understand trailer manipulation
7. Identify safety considerations

Discussion Questions

1. What equipment can be used to alter an animal's position in a trailer?
2. What equipment can be used to move or extricate an animal?
3. What is the difference between a slant load and a straight load trailer, and how do they determine position of the occupants after a roll over?
4. How do dividers, mangers and tack rooms hamper extrication?

Activities

To be determined by the instructor

Unit 7: ATR – Raising and Lowering Systems and Operations

Topic 7–1: Raising and Lowering Systems and Operations

Terminal Learning Objective

At the end of this topic, given types and positions of anchors, a student will be able to identify the different rope systems, slings, and mechanical equipment and how to adapt them to more safely move or lift an animal.

Enabling Learning Objectives

1. Identify the capacity of a 3:1 system and how to increase its mechanical advantage
2. Identify the capacity of a 4:1 system and how to increase its mechanical advantage
3. Describe complications with utilizing heavy equipment to move a large animal
4. Identify the different adaptations to operations in an animal response
 - a. Anchor considerations
 - b. System dynamics
 - c. Shock load issues
 - d. Cut aways
 - e. Rest or stopping point considerations
 - f. Vertical lifting considerations

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5. Understand the benefits and hazards associated with a helicopter lift of a large animal
6. Understand how to utilize a ladder for access and anchoring on an ATR
7. Identify safety considerations

Discussion Questions

1. What needs to be considered when setting up a rope hauling system?
2. What needs to be considered when setting up a vertical lifting system in a structure?
On a tree?
3. What is the importance of shock load to the system anchor?
4. Is a vehicle a good anchor?
5. Why do we want to have a “cut away” in the rope system?

▪ Activities

To be determined by the instructor

Unit 8: ATR - Water, Mud and Ice Operations

Topic 8-1: Water, Mud and Ice Operations

Terminal Learning Objective

At the end of this topic, a student will be able to identify the adaptations needed to manage scene setup, operations, and safety for incidents involving an animal stranded in mud or water.

Enabling Learning Objectives

1. Identify animal behavior and handicaps in mud, water, and ice situations
 - a. Mud conditions
 - b. Standing water conditions
 - c. Moving water conditions
 - d. Pool conditions
 - e. Ice/cold conditions
2. Identify the different resources needed in an animal response involving mud and water situations
 - a. Swift Water Rescue response
 - b. Fire Department
 - c. Animal Control
 - d. Veterinarian
 - e. Animal Owner
3. Understand the application of a rescue strap in mud, water or ice situations
4. Identify the basic rescue strategies
 - a. Mud
 - b. Water/Swimming pool

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- c. Ice/Moving water
 - d. Small animal
- 5. Understand scene set up considerations
- 6. Understand decontamination
 - a. Rescuer
 - b. Animal
- 7. Identify safety considerations

Discussion Questions

1. What is the biggest limitation in a water/ice rescue?
2. What will most animals do when being directed out of water?
3. What scene considerations do we need to take?

Activities

To be determined by the instructor

Unit 9: ATR - Animal decontamination

Topic 9-1: Animal decontamination

Terminal Learning Objective

At the end of this topic, a student will be able to identify situations and techniques for the decontamination of animals.

Enabling Learning Objectives

1. Identify situation where decontamination may be needed
 - a. Mud conditions
 - b. Chemical exposures
 - c. Disease situations
2. Identify the different techniques for decontamination of animals
 - a. Small animal decontamination
 - b. Large animal decontamination
 - c. Equipment
 - d. Trailers
3. Understand situations where decontamination is not advised
 - a. Disease/infection
4. Identify safety considerations

Discussion Questions

1. What is the need for decontamination?
2. What options are available in a disease and why?
3. What scene considerations do we need to take?

Unit 10: ATR - Helicopter Operations

Topic 10-1: Helicopter Operations

Terminal Learning Objective

At the end of this topic, a student will be able to identify the equipment needed, adaptations needed to manage scene setup, operations, and safety for incidents involving the helicopter lifting of an animal.

Enabling Learning Objectives

1. Identify situations where helicopter operations may be needed
 - a. Remote locations
 - b. Extreme conditions
2. Identify the equipment needed to perform a helicopter operation
 - a. Appropriate lifting harness
 - b. Appropriate helicopter
3. Identify the scene management needed to perform a helicopter lift
 - a. Lifting operations
 - b. Landing operations
4. Identify safety considerations

Discussion Questions

1. What is the biggest limitation in conducting a helicopter lift?
2. What additional operational needs are involved with helicopter lifts?

Unit 11: ATR - Euthanasia

Topic 11-1:- Euthanasia

Terminal Learning Objective

At the end of this topic, a student will be able to identify the potential need for euthanasia of the animal patient, acceptable methods of euthanasia, potential danger to bystanders of euthanasia, and understand sheltering in place and comfort care until field euthanasia can be accomplished by a qualified individual.

Enabling Learning Objectives

1. Understand the definition of euthanasia
2. Identify the potential need for euthanasia in an animal response
 - a. Animal injuries, criteria for determination of euthanasia
 - b. Terminal illness
 - c. Hazard to itself or others
3. Understand the traumatic results of euthanasia

Animal Technical Rescue

- a. On responders
- b. On owners
- c. On bystanders
4. Describe comfort care to the animal patient
5. Explain insurance considerations and constraints
6. Understand accepted methods, qualification to administer, and method of delivery
7. Explain method of determining death
8. Understand recovery of the animal patient

Discussion Questions

1. What are the accepted methods of euthanasia?
2. What are the dangers of using a gun?
3. What is the role of the Public Information Officer in the case of euthanasia?
4. If the owner is not available, who has responsibility for determine euthanasia?

Activities

1. To be determined by the instructor.

Unit 12: ATR – Basic Rescue Skills

Topic 12-1:- Basic Animal Manipulation

Terminal Learning Objective

At the end of this topic, a student given webbing, rescue strap, J-hook, lunge whip, Connel flex guideand rope, and a full size manakin, students will apply equipment and preform basic animal manipulation operations.

Enabling Learning Objectives

1. Understand the dynamics of equipment application
2. Understand proper positioning
3. Understand appropriate situations where different techniquics are used
 - a. Large animals
 - b. Small animals
4. Understand the best access points for equipment application
5. Animal rolling
 - a. Equipment placement
 - b. Proper pulling
6. Horizontal drag
 - a. Equipment placement
 - b. Proper pulling
7. Front drag
 - a. Equipment placement
 - b. Proper pulling

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8. Rear drag
 - a. Equipment placement
 - b. Proper pulling
9. Sternal roll
 - a. Equipment placement
 - b. Proper pulling
10. Tail tie
 - a. When appropriate
 - b. Steady pull
 - c. Angle of pull

Discussion Questions

1. What is the accepted substitute equipment is available on a fire engine?
2. What are the additional uses of lunge whips?
3. When is “tethering” of the rescuer appropriate?

Activities

1. To be determined by the instructor.

Topic 12-2:- Basic Trailer Operations

Terminal Learning Objective

At the end of this topic, a student given webbing, rescue strap, Conell Flex Guide, ropes a full size manakin, and a standing horse trailer, students will perform a scene assessment, discuss horse trailer construction, observe the various methods and options for applying a rescue strap to an animal inside a trailer and it's extrication.

Enabling Learning Objectives

1. Understand the dynamics of a trailer incident
2. Understand proper scene assesment
3. Understand/demonstrate the proper method for exanimating the interior of a trailer
4. Understand the dest access points for equipment application
5. Understand releasing the dividers from the exterior of the trailer
6. Understand how to handle a tethered animal
 - a. Understand the different tethering methods
 - b. Understand when to cut down a tethered animal down and the consequences
 - c. Understand how to slowly release a tethered animal
7. Understand how to attach a long lead line
8. Understand a demonstrate the proper methods for opening a trailer door
 - a. Preporation of scene
 - i. Set up a pareimiter
 - ii. Establish animal area and human safety areas

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- b. Preparation or opening the door
 - i. Measure the door swing
 - ii. Measure the ramp drop area
- c. Methods for opening a door
 - i. Single web with a pole
 - ii. Double webbing
 - iii. Clearing the butt chain/butt bar
 - iv. Retriving the lead line
- 9. Understand when removal of the animal is appropriate and not
 - a. Terminally injured animal
 - b. Medically impaired animal
 - c. Damaged trailer
- 10. Demonstrate the proper methods of applying a rescue strap without entering the trailer
 - a. Equipment placement
 - b. Proper pulling techniques

Discussion Questions

- 4. What is the accepted substitute equipment is available on a fire engine?
- 5. What are the additional uses of lunge whips?
- 6. When is “tethering” of the rescuer appropriate?

Activities

- 1. To be determined by the instructor.

Topic 12-3:- Verticle Lifting/Emergency Hauler Operations

Terminal Learning Objective

At the end of this topic, a student given webbing, piece of 1 ½” single jacket wild land hose without couplings, J-hook, lunge whip, webbing, rope pieces, Connel flex guide, a full size manakin fiberglass horse and a full size horse manikin, students will, observing proper positioning and safety apply rescue equipment

Enabling Learning Objectives

- 1. Understand the dynamics of applying equipment to a live animal
 - a. Large animals
 - b. Small animals
- 2. Understand proper positioning
- 3. Understand appropriate situations where different techniquics are used
- 4. Understand the best access points for equipment application
- 5. Understand and demonstrate the application of a verticle lifting tie
 - a. Application to a standing animal
 - b. Application to a recumbent animal

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- c. Attachment of the lifting point, wrap three pull two
6. Understand and demonstrate the application of an emergency hauler
 - a. Using a rope
 - b. Using 1" webbing
 - c. Application to a stranding animal
 - d. Application to a recumbent animal
7. Understand and demonstrate the application of a lead line
8. Understand and demonstrate proper assessment of the animals vitals
 - a. Taking a pulse
 - b. Observing respirations

Discussion Questions

1. What consideration need to be made when working close to an animal?
2. What optional equipment on a fire engine can be used?

Activities

1. To be determined by the instructor.

Unit 13: ATR – Senerio Training

Topic 13-1:- Rolled Trailer Accident

Terminal Learning Objective

At the end of this topic, a student given webbing, rescue strap, Conell Flex Guide, ropes a full size manakin, and a rolled over horse trailer, students will perform a scene assessment, discuss horse trailer construction, establish a command structure, secure the scene, apply rescue equipment and extricate the manikin from the trailer.

Enabling Learning Objectives

1. Students will conduct a scene safety analysis
2. Establish an incident command
3. Determine appropriate resources needed
4. Determine the needed teams
 - a. Extracation equipment application
 - b. Haul
 - c. Paremeter
 - d. Stablization/Door opening
 - e. Containment
 - f. Safety
5. Teams will determine needed equipment
6. Students will establish a parimeter
7. Students will safely apply the extracation equipment
8. Students will safely open the trailer door

Animal Technical Rescue

9. Students will extricate the animal

Discussion Questions

1. What are the accepted methods of equipment application?
2. What is the trailer construction?
3. How can that construction type be used to assist in operations?

Activities

1. To be determined by the instructor.

Topic 13-2:- Animal Over the Side

Terminal Learning Objective

At the end of this topic, a student given webbing, rescue strap, J-hook, lunge whip, Connel flex guide and rope and rope systems, and a full size manakin, students will preform a scene assessment, establish a command, order resources and equipment, apply equipment, establish a hauling system and preform an animal rescue.

Enabling Learning Objectives

1. Understand the dynamics of over the side rescues
2. Understand the dynamics of equipment application
3. Understand proper positioning and safe access to the animal
4. Students will conduct a scene safety analysis
5. Establish an incident command
6. Determine appropriate resources needed
7. Determine the needed teams
 - a. Equipment application
 - b. Haul team
 - c. Personnel access team if needed
 - d. Animal Handler
 - e. Containment
 - f. Safety
10. Teams will determine needed equipment
11. Students will apply rescue equipment
12. Students will move the animal to a safe location

Discussion Questions

1. What additional precautions are needed in an over the side situation?
2. Does position of the animal affect the rescue efforts?

Activities

1. To be determined by the instructor.

Topic 13-3:- Trapped Animal with Verticle Lift

Terminal Learning Objective

At the end of this topic, a student given webbing, rescue strap, J-hook, lunge whip, Connel flex guideand rope and rope systems, and a full size manakin, students will remove the animal from an entrapment, move it to a lifting location, apply lifting equipment and lift the animal.

Enabling Learning Objectives

1. Students will conduct a scene safety analysis
2. Establish an incident command
3. Determine appropriate resources needed
4. Determine the needed teams
 - a. Extracation equipment application
 - b. Haul
 - c. Paremeter
 - d. Stablization/Door opening
 - e. Continament
 - f. Safety
5. Teams will determine needed equipment
6. Students will establish a parimeter
7. Students will safely apply the extracation equipment
8. Students will extricate the animal
9. Students will move the animal to a lifting location
10. Students will apply lifting equipment
11. Students will lift the animal

Discussion Questions

1. What is the accepted substitute equipment is available on a fire engine?
2. What are the additional concerns when lifting an animal?

Activities

1. To be determined by the instructor.

Topic 13-4:- Rolling a Trailer

Terminal Learning Objective

At the end of this topic, a student given webbing, ropes and a rolled over horse trailer, students will preform a scene assessment, discuss horse trailer construction, establish a command structure, secure the scene, apply equipment and roll the trailer back to it's wheels.

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Enabling Learning Objectives

1. Students will conduct a scene safety analysis
2. Establish an incident command
3. Determine appropriate resources needed
4. Determine the needed teams
 - a. Haul
 - b. Stabilization/equipment application
 - c. Safety
5. Teams will determine needed equipment
6. Students will establish a perimeter
7. Students will safely apply the equipment
8. Students will safely roll the trailer back to it's wheels

Discussion Questions

1. What are the needs for the "moving" anchors at the trailer hitch?
2. What trailer construction issues will affect the rolling of the trailer?
3. What animal conditions allow rolling of the trailer?
4. Why do we need to control both the lowering and hauling sides at the same time?

Activities

1. To be determined by the instructor.

Time Table

Segment	Lecture Time	Activity Time	Total Unit Time
Unit 1: Introduction			
Topic 1-1: Orientation and Administration			
Lecture	.25		
Activity 1-1: To be determined by instructor		0	
Topic 1-2: [Certification Track] Certification Process			
Lecture	.25		
Activity 1-2: [Activity Title]		0	
Unit 1 Totals	.5 hour	0	.5 hour
Unit 2: Applications of Physics to ATR			
Topic 2-1: Application of physics to ATR			
Lecture	.5		
Activity 2-1:		0	

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Segment	Lecture Time	Activity Time	Total Unit Time
Unit 2 Totals	.5 hour	0	.5 hour
Unit 3: Animal Anatomy, Locomotion, Physiology and First Aid			
Topic 3-1: Animal Anatomy, Locomotion			
Lecture	1.0		
Activity 3-1: [Activity Title]		0	
Topic 3-2: First Aid			
Lecture	.75		
Activity 3-2: [Activity Title]		0	
Unit 3 Totals	1.75 hours	0	1.75 hours
Unit 4: Response, Resources, and Scene Management			
Topic 4-1: Response and Resources			
Lecture	.5		
Activity 4-1: [Activity Title]		0	
Topic 4-2: Scene Management			
Lecture	.5		
Activity 4-2: [Activity Title]		0	
Unit 4 Totals	1.0 hour	0	1.0 hour
Unit 5: Animal Rescue Equipment			
Topic 5-1: Animal Rescue Equipment			
Lecture	1.0		
Activity 5-1: [Activity Title]		0	

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Segment	Lecture Time	Activity Time	Total Unit Time
Unit 5 Totals	1.0 hour	0	1.0 hour
Unit 6: Trailer Operations			
Topic 6-1: Trailer Operations			
Lecture	1.0		
Activity 6-1: [Activity Title]		0	
Unit 6 Totals	1.0 hour	0	1.0 hour
Unit 7: Raising and Lowering Systems and Operations			
Topic 7-1: Raising and Lowering Systems and Operations			
Lecture	.75		
Activity 7-1: [Activity Title]		0	
Unit 7 Totals	.75 hour	0	.75 hour
Unit 8: Water, Mud and Ice Operations			
Topic 8-1: Water, Mud and Ice Operations			
Lecture	1.0		
Activity 8-1: [Activity Title]		0	
Unit 8 Totals	1.0 hour	0	1.0 hour
Unit 9: Animal Decontamination			
Topic 9-1: Animal Decontamination			
Lecture	.5		

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Segment	Lecture Time	Activity Time	Total Unit Time
Activity 9-1: [Activity Title]		0	
Unit 9 Totals	.5 hour	0	.5 hour
Unit 10: Helicopter Operations			
Topic 10-1: Helicopter Operations			
Lecture	.5		
Activity 10-1: [Activity Title]		0	
Unit 10 Totals	.5 hour	0	.5 hour
Unit 11: Euthanasia			
Topic 11-1: Euthanasia			
Lecture	.5		
Activity 11-1: [Activity Title]		0	
Unit 11 Totals	.5 hour	0	.5 hour
Unit 12: Basic Skills			
Topic 12-1: Basic Animal Manipulation			
Lecture	0		
Activity 12-1: Basic Animal Manipulation		1.0	
Topic 12-2: Basic Trailer Operations			
Lecture	0		

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Segment	Lecture Time	Activity Time	Total Unit Time
Activity 12-2: Basic Trailer Operations		1.0	
Topic 12-3: Verticle Lifting/Emergency Haulter Operations			
Lecture	0		
Activity 12-3: Verticle Lifting/Emergency Haulter Operations		1.0	
Unit 12 Totals	0	3.0 hours	3.0 hours
Unit 13: Senerio Training.			
Topic 13-1: Rolled Trailer Accident			
Lecture	0		
Activity 13-1: Rolled Trailer Accident		1.0	
Topic 13-2: Animal Over the Side			
Lecture	0		
Activity: 13-2: Animal Over the Side		1.0	
Topic 13-3: Trapped Animal with Verticle Lift			
Lecture	0		
Activity 13-3: Trapped Animal with Verticle Lift		1.0	
Topic 13-4: Rolling a Trailer			
Lecture	0		
Activity		0.5	
Topic 13-5: Horse Impingement on Human			
Lecture	0		
Activity		0.5	
Unit 13 Totals	0	4.0 hours	4.0 hours
Lecture, Activity, and Unit Totals:	0		

Course Totals

Total Lecture Time (LT)	8.0 hours
Total Activity Time (AT)	7.0 hours
Total Testing Time (TT)	1.0 hour
Total Course Time	16.0 hours