

LARGE ANIMAL EMERGENCY EVACUATION & DISASTER HOMEWORK

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TLAER STUDY GROUP at <https://www.facebook.com/groups/taer/> - it is a **STUDY GROUP – not a PRAYER GROUP** – What I mean is - lurk for a while and see what we do in the rules... first.

You are also welcome to connect with me on my personal FB page where I post all kinds of silliness... but the TLAER group is more serious and dedicated to large animal rescue with 22k people.

Overview introduction to TLAER - <https://www.youtube.com/watch?v=KvxsftaEHXk> webinar for free – if you learned something – share it.

FULL WEBINAR SERIES PLAYLIST - <https://www.youtube.com/watch?v=7S76fiddJ4s&list=PLp9h6qS29SfzKoUS2OZJys5cYZPckWfCv>

If you didn't do the PRE-COURSE RECOMMENDATIONS - Online registration and certification are free through FEMA for US students at <http://www.training.fema.gov/IS/> Other countries also have similar training in Incident Command Systems. TLAER course attendees at any level will benefit from the knowledge obtained from these topics and will be able to better understand some of the basic, yet vital, components of disaster incidents and emergency responses taught throughout the courses.

Incident Command System 100 <http://www.training.fema.gov/EMIWeb/IS/IS100b.asp>

Livestock in Disasters <http://training.fema.gov/EMIWeb/IS/is111a.asp>

Animals in Disaster - Module A, Awareness and Preparedness

<http://training.fema.gov/EMIWeb/IS/is10a.asp>

Animals in Disaster - Module B, Community Planning <http://training.fema.gov/EMIWeb/IS/IS11a.asp>



LIVESTOCK EMERGENCY RESPONSE TRAINING IN CANADA – Victor MacPherson

<https://www.farmfoodcareon.org/emergency-training/> Online and In Person

SOME SIMPLE REALISTIC EQUIPMENT & PPE PURCHASES

Be a hero to your horses (and large animals) and get some of the simple things that you can ACTUALLY use to save your animals, and keep yourself safe in the event of an emergency. These simple tools allow you to perform a huge variety of simple rescue manipulations of animals trapped in mud or ditches or holes or with a hoof thru a stall divider or even trailer entrapment.

SOURCES OF EQUIPMENT THAT TLAER, INC. uses and recommends:

Dr. Kathleen Becker HAST – SLINGS, HEAD PROTECTORS, NICOPOLOUS NEEDLE, STRAP GUIDE, VARIOUS TLAER TOOLS - <https://rescue.hastpsc.com/products/products.html>

Tori and Justin McLeod FOURHOOVES SMART – GLIDES, SLINGS, VARIOUS TLAER TOOLS - <https://4hoovessmart.com/online-store-1> (also working with Dr. Becker above)

VICTOR MACPHERSON – RESCUE GLIDES AND VARIOUS OTHER EQUIPMENT FOR CANADA –
<https://www.ebsprescue.com/rescue-equipment-1> also Livestock Overturn Response Training

GRAINGER ROUNDSLINGS – USA - <https://www.grainger.com/category/material-handling/lifting-pulling-positioning/rigging-and-lifting-slings/round-slings>

GRAINGER ROUNDSLINGS – CANADA - <https://www.grainger.ca/en/category/round-slings/rigging-and-lifting-slings/c/12776>

To me, this is a wiser use of purchasing power than many things in the horse catalogs you see

- 2 Webbing (10 cm wide, 6-10m long with looped ends) \$100 see HAST
<https://rescue.hastpsc.com/products/accessories/straps/straps.html>
- Gloves \$15 locally available
- REFLECTIVE CONSPICUITY TAPE for your trailer (\$65 - 100 for kit) I like 3 M Diamond Tape or you can get pre-done sets at <https://reflective-tape.com/retro-reflective-tape-for-horse-trailers/>
- HELMET (with chinstrap) \$120 Rescue quality Petzl – available online many places
- Firearm (price varies – for field euthanasia – locally available – GET TRAINING!)
- RECIPROCATING SAW with Battery pack \$120 locally available at hardware stores
- Heavy duty cane, telescoping Boat Hook or Reach Tool \$20 (marine or dock stores)
- 10 m of rope (1/2 inch preferred) \$25 local hardware stores
- VEST / JACKET WITH REFLECTIVE / BRIGHT \$15 local safety or hardware store
- Identification / Certification tags (If you are part of a legitimate organization)
- HAND TOOLS, Duct Tape, Hay Twine \$15 local hardware store

TOTAL = \$500 (sans firearm)

Familiarize yourself with use of the webbing and tools for cast or down animals before you try it -
<https://thehorse.com/156728/best-practices-for-moving-down-horses/> Best Practices for Manipulations of Down Horses (a cow is not much different and perhaps more SANE.)

Basic issues with downed cattle – managing and moving them humanely: From Dairy Australia -
<https://www.dairyaustralia.com.au/resource-repository/2020/09/01/how-to-manage-a-down-cow-factsheet>

https://www.academia.edu/40591421/How_To_Manipulate_a_Recumbent_Horse_Entrapment_Clinical_or_Technical_Emergency_Rescue_Situations Manipulations of downed horses – lift, drag, slide

<https://aaep.digitellinc.com/aaep/sessions/2298/view> online purchase - intro to manipulations. 

<https://thehorse.com/197456/how-veterinarians-can-safely-restrain-down-horses/> METHODS on HOW to HOLD DOWN A RECUMBENT HORSE from AAEP - if you HAVE to – safer for people, easier to do – and very slow to be adopted because it is new! I encourage vets, techs to TRY it and share as appropriate.

WITH EQUINE GUELPH – Large Animal Manipulations Reference Sheets – recumbent, cast, trapped

<https://thehorseportal.ca/large-animal-rescue-training-resource-infosheets/>

YOUTUBE VIDEOS OF MANIPULATIONS - https://www.youtube.com/playlist?list=PLYlnkrl6BP-lp45NugXcy_vY0giKzx9Z



EQUINE PRACTICE PRACTITIONERS EDUCATION CERTIFIED TRAINING PROGRAM

– several presentations available – See list about halfway down the page.

This is a *paid service particularly for veterinarians and technicians* – from any country.

<https://www.theequinepracticecompany.com/practitioner-program-new>

LOOK at your personal WILDFIRE, HURRICANE or FLASH FLOODING or CATASTROPHIC PREDICTION PREPAREDNESS for an EVACUATION of your property. Do you know how to be alerted if there is a predictable disaster coming? Do you have the apps on your phone or computer that can track the progress of wildfires, hurricanes or other looming disasters? **When you KNOW you are in a looming disaster evacuation zone – there are some basic things you need to do so that you can literally LOAD AND GO with your family, animals and personal valuables in a couple of minutes if you have to:**

- Truck(s) hitched to Trailer(s)
- Animals with Priority are separated out, penned and easy to load, under ANY conditions.
- Truck fueled, hitched to trailer, loaded with gear and pointed down the driveway
- 3 days worth of food, meds, water loaded up (minimum)
- Valuables packed and ready and locked up (whatever you cannot live without)
- GO BAGS packed and loaded (whatever YOU need to live and function in a disaster shelter)
- Everyone contributes to, communicates and knows the plan – and is willing to participate
- GO TO location / shelter coordinated ahead of time (animals, people, pet locations)
- Regular updates on fire radio and media - see <http://www.nws.noaa.gov/nwr/>

GENERAL DISASTER PREPARATION to do before any disaster happens – these efforts will pay off by determining the hazards that can ACTUALLY happen to you (your RISK ASSESSMENT) and then you can make better individual plans to respond if something actually happens.

- In the USA - Find where your property lies in the FLOODING MAPS (LITERALLY - type in the address at <https://msc.fema.gov/portal/home> and also see <https://www.fema.gov/risk-map-program-information-homeowners-renters-and-business-owners>)
- CANADA Floodmapping by Province - <https://floodsmartcanada.ca/floodplain-maps/>
- WILDFIREAPS <https://www.weather.gov/fire/> and <https://www.wfas.net/> and <https://www.fir elab.org/project/wildfire-hazard-potential>
- GET A WEATHER RADIO learn to use it. Cheap insurance! <https://www.weather.gov/mob/nwr>
- WEATHER RADIO CANADA - <https://www.canada.ca/en/environment-climate-change/services/weatherradio/find-your-network.html>

- DOWNLOAD and USE APPS FOR EVACUATION ZONES FOR NUCLEAR FACILITIES OR EARTHQUAKES OR MUDSLIDES, ETC. see https://www2.usgs.gov/natural_hazards/ if you live in one of these geological hazard zones.
- There is a barn fire online awareness tool available for free at Equine Guelph website (Ontario) <https://www.equineguelph.ca/Tools/fireprevention.php> and EG has a short course online in Fire Prevention a couple times a year.... sign up for a short course!
- Regularly FIX the fences, clean up the hazards in your pastures, and put in a SECONDARY FENCE and a GATE to prevent animals escaping your property – usually at the gate area. If you lose them – **webinar on catching loose horses** - <https://www.youtube.com/watch?v=XxLy78Zn9KY>
- Maintain your truck and trailer at all times so that you can evacuate in an emergency – I see way too many people leave hay or the lawnmower on their trailer when they think they aren't using it, or take forever to get tires fixed or other maintenance done. **IT should be READY!**
- FENCE any DAM, POND or WATERHOLE OFF for the winter (or summer droughts) to prevent mud entrapment and surface ice emergencies. If the animals HAVE to use watercourses for access to fresh water – ensure the ice is regularly broken and that there is no chance of the animals going out onto the surface ice.
- **Disaster preparedness for horses on pasture and small properties** – free webinar at <https://www.youtube.com/watch?v=aX68UNuLijQ> webinar
- Develop an evacuation plan and actually PRACTICE IT, hitch the trailer, load the stuff, load some animals, etc. and drive to a local park to practice. **TIME IT.** How can you improve the plan? What did you forget that you would need in a real emergency? **MAKE A LIST!** Where would you really go if it was out of state or out of the region? Coordinate these things ahead of time.
- CALL YOUR LOCAL FIRE DEPARTMENT and set up a PRE-PLAN visit to your farm to help you find the problems and solutions that are special to where YOU live!

If you keep horses or cattle in a barn or any kind of structure – you will want to make sure you are preventing fires. (Research shows that actual removal of horses from barn fires is rare, difficult and dangerous – and it requires someone to be present when the fire starts to remove animals within 5 to 7 minutes. Cattle are actually easier because they are more used to moving as a herd than stalled horses.)

The MOST important change you can make is to contact an electrical contractor and have them update all Electrical Wiring and Power Panel to provide the service for what your barn is ACTUALLY using. A challenge for barns in many areas is that they don't require adherence to codes because they are agricultural – *just because the lights turn on doesn't mean it is a safe place for your animals.* 

Within the barn – everyone must work together to manage the facility to eliminate or reduce all the combustibles (don't store hay in the barn, clean it regularly) and remove obstacles blocking egress for both people and animals – ensure that there are exits / egress sufficient for size of barn (less than 50 feet to an exit). Fundamental to finding barn fires before they ignite is a functional Smoke Detection and Alarm System that will alert you and the fire department to the smoldering fire. This isn't a \$5 battery detector from your local store – this needs to be hardwired into the barn and connected to the security system and notification system. **Call a contractor and get a quote on a system** that is appropriate for outdoor use in barns – so that you can sleep at night! At the VERY least get a detector that can find CARBON MONOXIDE. (While you're at it – upgrade your house and business – most are not up to code).

Access to Stalls FROM AN OUTSIDE DOOR is the best way to allow responders to extricate animals from a barn once it is on fire – it is extremely dangerous to go down the interior aisleway due to smoke and the danger of roof collapse. This adds to the cost of building (or retrofitting) a barn – but it offers a realistic method of removing animals. **Even better is to plan for or build in a runout plan** from the inside or outside doors so that animals can leave to a pasture away from the barn *without having to be individually caught*.

Download PDF – <https://aaep.org/sites/default/files/issues/proceedings-08proceedings-z9100108000160.pdf> Strategies for prevention (this is horse barns but similar concepts for others)

and

[https://www.academia.edu/18599726/How to Configure an Equine Facility to Prevent and Better Respond to Barn Fires](https://www.academia.edu/18599726/How_to_Configure_an_Equine_Facility_to_Prevent_and_Better_Respond_to_Barn_Fires) How to prevent and respond for barn fires with large animals.

One of the fundamental parts of smooth evacuation from disasters (or evacuation of your horse to a veterinarian!) is having a functional and safe TRAILER that your animals will load into, and having a plan for multiple trips if you don't have enough room to evacuate them all in one trip. This applies to day to day use of trailers, as well as emergencies.

LEARN ABOUT: AXLES / BEARINGS, WHEELS, TIRES / BRAKES, HITCHING, BUY REFLECTIVE, AIR IN TIRES, TOOLS FOR FIXING IT, LUBE BEARINGS, ETC. Maintenance. DOWNLOAD FOR FREE: <https://ppp.purdue.edu/wp-content/uploads/2017/02/PPP-114.pdf> **UNDERSTANDING THE HORSE TRAILER RIG – Purdue University, Dr. Robin Ridgeway**

Especially for equine veterinarians - **Responding to horse trailer wrecks** - <https://aaep.org/sites/default/files/2022-05/Husted,%20Rebecca.pdf>

Specifically for vets and techs - **Accidental Hypothermia in Horses** - <https://www.afac.ab.ca/wp-content/uploads/2019/04/The-Hypothermic-Horse.pdf>

For owners and all responder types – **prevention for horse trailer wrecks** – free webinar - <https://www.youtube.com/watch?v=AYDU4Vy2Kvk>

Livestock liner wrecks - YOUTUBE video on LARGE ANIMAL TRANSPORTATION RESPONSE - with AFAC in CANADA - recorded version - <https://youtu.be/LBqQuh9MYN8> actual presentation starts 9 minutes in.



Victor MacPherson working with CFIA and Ontario Farm and Food Care have a

website with a TON of resources, fact sheets and information at

<https://www.farmfoodcareon.org/livestock-emergencies/>

Free download of PDF - https://www.researchgate.net/publication/283794562_Non-Commercial_Horse_Transport_New_Standards_for_Trailers_in_Canada or

https://www.academia.edu/18507742/Non_Commercial_Horse_Transport_The_need_for_standards

by Dr. Sharon Creiger and Dr. (Gimenez) Husted – issues and challenges for horse trailer manufacturers – it is free and you can learn a lot from it. **ESPECIALLY if looking at buying a horse trailer!**

Three webinars – **Horse Barn Fire Prevention and Horse Trailer Safety part 1 and 2** – hosted by the **US Hunter Jumper Association** at their archived webinars – link - <https://www.ushja.org/education/educational-forums/educational-webinars/archives>

Trailer Safety: Part 2 Dr. Rebecca Husted from Technical Large Animal Emergency Rescue returns to further discuss all aspects of trailer safety. This webinar will continue the discussion from Trailer Safety: Part 1 and look at common mistakes with trailers giving you important information that will increase your personal safety in the truck, your horses' safety in the trailer and prevent a crash in the first place! The webinar is free to the public and can be accessed here .	May 3, 2022
Trailer Safety Dr. Rebecca Husted from Technical Large Animal Emergency Rescue returns to discuss all aspects of trailer safety. This webinar will look at common mistakes with trailers and give you important information for prevention and mitigation that will increase your personal safety in the truck, your horses' safety in the trailer and prevent a crash in the first place! The webinar is free to the public and can be accessed here .	November 2, 2021
Barn Fire Safety and Prevention Dr. Rebecca Husted from Technical Large Animal Emergency Rescue discusses everything you need to know for barn fire safety and prevention. This webinar will provide an essential checklist for horse owners, riders and barn managers to do the prevention and mitigation that will increase the efficiency of response to the reality of barn fires. You only have five to seven minutes to remove everything you love—will your plan work? Find out in this webinar! The webinar is free to the public and can be accessed here .	October 18, 2021



NFPA 150 information - here is the "simple overview version" of what we are doing for LIFE SAFETY and FIRE SAFETY in ANIMAL HOUSING- <https://www.nfpa.org/News-and-Research/Publications-and-media/NFPA-Journal/2018/November-December-2018/Features/The-Critter-Life-Safety-Code>

This is the complicated version of what we are doing at NFPA 150 for BARN FIRE and LIFE SAFETY improvements - read the document for free at <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=150> If you download or print – there is a fee.

Link to the research on the **INTRA-THECAL method of euthanasia** - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4895652/>

AAEP's standard procedure for intrathecal euthanasia with lidocaine - https://aaep.org/sites/default/files/2021-03/Intraethecal_Euthanasia.pdf

This link has all the updated USA Guidance Protocol info and links within it – for euthanasia <https://thehorse.com/197960/aaep-issues-updated-horse-euthanasia-guidelines/>

HUMANE EUTHANASIA DOWNLOADS – HOW TO DO IT CORRECTLY – Dr. Jan Shearer - <https://vetmed.iastate.edu/vdpam/about/production-animal-medicine/dairy/dairy-extension/humane-euthanasia> there is a document with all the information, and a link to the DOWNLOADABLE materials page for posters, wallet sized print outs, etc. for all species – horse, cow, deer, cat, dog, etc.

Humane Handling Guidelines for Horses (Alberta, CANADA - in PDF) - <https://www.afac.ab.ca/wp-content/uploads/2018/12/humane-handling-horses.pdf> Excellent resource

RESCUE



Canadian Code of Practice for VARIOUS ALL Animals

– <https://www.nfacc.ca/codes-of-practice>

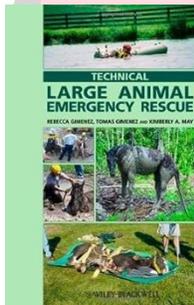
– For Equine <https://www.nfacc.ca/codes-of-practice/equine>

- For Beef Cattle <https://www.nfacc.ca/codes-of-practice/beef-cattle>

Online tool for owner education that Equine Guelph has put out - I think it is a GREAT way to educate along the way and clients might enjoy learning while doing it. They have a ton of ONLINE TOOLS that anyone can access for free - <https://thehorseportal.ca/healthcare-tools/senior-horse-challenge-tool/> Give it a try - they have put a bunch of educational information that owners and veterinarians will appreciate for educating their clients. INCLUDING - pain issues, euthanasia decisions, and other topics that are sometimes difficult to address. If you like it- share with colleagues and organizations. I just did!

Indirectly related and I use TLAER as a good example here... free webinar <https://www.youtube.com/watch?v=SERKMDcmZQg> SOCIAL LICENSE to OPERATE and WELFARE at equine events. If you are involved in the Horse Industry – you really need to get familiar with these concepts and be able to speak to them as you work and teach others. If you have questions – contact me directly. Feel free to share ANY of these links!

The PLAYLIST OF VIDEOS related to TLAER is at <https://www.youtube.com/playlist?list=PLQn1j6xFu5I319no-IHTj6AJrely2gYkV> and I add new ones regularly – all of these are free and sharable.



TEXTBOOK in TECHNICAL LARGE ANIMAL EMERGENCY RESCUE is available from various sources online –

Includes Manipulations, Flooding/Wildfire/Disaster Planning, Large Animal Emergency Planning, Correct Vertical Lifting, Rope and Mechanical Advantage systems for TLAER events, Communications for Incidents, Unstable Ground / Mud Rescues, Livestock Overturns, Euthanasia, Helicopter Operations, Ambulances for Equines.

USA - https://www.amazon.com/Technical-Large-Animal-Emergency-rescue/dp/0813819989/ref=sr_1_1?keywords=technical+large+animal+emergency+rescue&qid=1691250429&sr=8-1

Canada - <https://www.amazon.ca/Technical-Large-Animal-Emergency-Rescue/dp/0813819989>

Be your animal's hero by prevention, planning and coordinating ahead of time.