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## Equine Camp Participants Embrace Work During Spring Break

Mary Hightower, Assistant Director of Communications and Marketing

When spring break rolls around, most make it a point to avoid working. 4-H'ers from all across Arkansas spent their spring break working – but working with something they love – horses.

Teens from Faulkner, Lonoke, Marion, Pope, Saline, Stone and White counties shuttled between the C.A. Vines Arkansas 4-H Center in Ferndale and Diamond TR Ranch near the Pulaski-Perry county line for nearly a week of lessons and other activities during the 2011 Spring 4-H Equine Camp.

“The camp is an opportunity for participants to improve their riding and all-around horsemanship skills,” said Mark Russell, extension instructor-equine for the University of Arkansas Division of Agriculture.

The camp participants witnessed horseshoeing and

hoof care demonstrations from a local farrier and watched a vet perform routine care on horses, such as worming. Of course, there was plenty of work to be done. Stalls had to be cleaned, stall bedding had to be changed and horses, in the midst of shedding winter coats, needed a good brushing.

Shannon Caldwell, 4-H camping coordinator, said that in between riding sessions, the camp participants did a wide variety of non-horse activities, including:

- Learned constellations in a portable planetarium (StarLab)
- Made cakes in a scooped-out orange at the campfire
- Participated in an egg toss competition

On the final day of camp, the participants honed their equine communications skills as Russell asked them to drop their reins and steer their

horses with only their legs and weight. It's a skill that takes a confident seat and an ability to ensure the horse is paying attention to its rider's signals. Once the riders were able to navigate the edges of the ring, Russell set up a more challenging test – setting up a line of cones for a rein-less slalom.

“It was really great to see the riders' skill level grow so much in such a short time,” Russell said. “On the first day, one rider could barely even mount her horse. By the end of the camp, the two were working as a team.”

This is the first time the 4-H Equine Camp has been offered during spring break. 4-H is a program of the University of Arkansas Cooperative Extension Service.

For more information about the 4-H equine program, visit [www.uaex.edu](http://www.uaex.edu) or contact your county extension office.

## Arkansas 4-H Horse Activities Benefit From Plum Creek Grant

Mary Hightower, Assistant Director of Communications and Marketing

Arkansas 4-H horse activities will benefit from of a \$5,000 grant from the Plum Creek Foundation, said Mark Russell, equine instructor for

the University of Arkansas Division of Agriculture.

“Our workshops, clinics and competitions are conducted statewide and are

open to any interested child,” Russell said. “This grant will guarantee that we are able to extend these opportunities to all children – even those

who do not own or have access to horses – in pursuit of our goal to spread the joys of horsemanship.”

The funds will help provide education materials and supplies. The funds will also help pay for a computer system to tabulate scores, trail equipment, show supplies and handheld radios for show personnel and trail guides to communicate, he said.

The grant was provided to the Arkansas 4-H Foundation, a nonprofit

organization that supports the educational mission of the Arkansas 4-H program, which is part of the University of Arkansas Division of Agriculture.

“Plum Creek recognizes the importance of The Arkansas 4-H Foundation within the community and we are proud to play an important role in ensuring the future success of this valuable organization,” said Richard Stich, senior wildlife biologist for Plum Creek.

For more information about 4-H, contact your county extension office or visit <http://www.kidsarus.org/> or [www.uaex.edu](http://www.uaex.edu).

Plum Creek is the largest and most geographically diverse private landowner in the nation with approximately 7 million acres of timberlands in major timber-producing regions of the United States, including 747,000 acres in Arkansas. For more information, visit [www.plumcreek.com](http://www.plumcreek.com).

## Giving Horses Intramuscular Shots

Mark Russell, Instructor – Equine

In the course of owning or caring for horses, it may be necessary to give them intramuscular shots. It is imperative to use only the best areas to apply the shots and be aware of the repercussions of not properly applying the shots. You should always consult your veterinarian prior to administering any type of shots. There are four separate ways to administer shots to horses:

- Intravenous injections administered into a vein
- Intradermal injections administered into the skin
- Subcutaneous injections administered underneath the skin
- Intramuscular (IM) injections administered into a large muscle mass

In this article, we will focus on intramuscular shots. Look for next month’s article on intravenous injections.

When approaching your horse to administer the shot, it is best to spend a few minutes with the horse to ensure that he or she is in a calm state and ready to be handled. Horses that have had shots before tend to remember and may refuse if they had a negative experience or simply do not like shots. Keep in mind that a horse that objects to the shot can easily hurt the handler. Additionally, many drugs given to horses can have adverse reactions if absorbed into human skin or if accidentally injected into the handler or person administering the shots. It is crucial to discuss the drug with your veterinarian

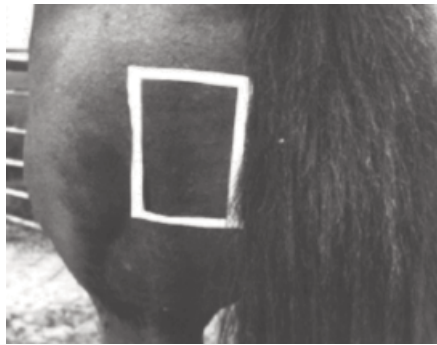
to identify any precautions that must be taken. It is also best to double check the label prior to giving the shot to ensure that it is the correct drug, the expiration date has not passed and you are sure of the recommended dosage.

1. Apply generous amounts of alcohol to the area intended for the injection. If no alcohol is available or to achieve maximum sterilization, shave the area where the shot will be given.
2. With needle in hand, rub up and down on the injection site. This will distract the horse and desensitize the area.
3. While rubbing and in one continuous movement, insert the needle,

### Injection Sites



The area outlined by the white triangle indicates the proper location for intramuscular (IM) injections in the neck.



The large muscles inside the square are a good area for IM injections. For safety reasons, it is best to stand very close to the horse on the opposite side of where the injection will be given (should the horse kick out).



The rectangle outlines the area for an injection in the pectoral muscles. However, using this area can put the handler in an unsafe position as well as resulting in stiff, sore muscles in the horse. Thus, this area should only be used when all other areas have been exhausted.

- continuing to rub the area after the needle is inserted. Practice is essential to make this go smoothly.
- Once the needle is placed, a syringe can be attached.
  - The plunger on the syringe should be drawn back, creating negative pressure. If blood appears in the hub of the needle, it is in a vessel. The needle should be taken out and the entire process started over again.
  - After attention has been given to ensure the injection will not be given in a vessel, the injection should be given and the needle removed.
  - Observe the horse for any signs of allergic reaction for about 30 minutes after giving the injection.

### Helpful Tips

- Follow the recommended method of drug storage.
- Do not mix individually packaged drugs in the same injection. It is better to play it safe and give the horse two separate injections.
- Untie the horse and hold its lead rope or have someone else hold it.
- If the horse tries to kick, pull his head toward you (this will swing its rear end away from you).
- Make sure you use a sterile needle and syringe. Individually packaged, disposable sterile needles and syringes are the easiest way to ensure sterile equipment. Open the packages immediately before use, and dispose of them immediately after use. Never reuse a needle, because a contaminated needle can easily introduce an infection into a horse.
- The size of the needle depends on the medication being injected. A large-diameter needle (18 gauge) works best with thick solutions such as penicillin, while a smaller-diameter needle (20 to 21 gauge) can handle a thin, watery solution. Remember, a larger gauge number equals a smaller diameter. Larger gauge needles may break more easily than smaller gauge. If your horse reacts adversely to the injection and breaks the needle, you should make sure you can find both pieces of the needle. If you suspect a piece of needle may be retained in the horse's muscle, consult your veterinarian.
- It is also a good practice to use more than one injection site (for example, the neck and the buttocks) when giving several separate medications or vaccines at once. Then if the horse has a drug reaction, it may be easier to identify the drug that caused the problem.

*Photos courtesy of Cynthia McCall, Ph.D., Auburn University. Special thanks to Drs. Cody W. Faerber, Kevin Hill, S. Mario Durrant, Cindy McCall, William E. Day and Tiffany Julen Day for their contributions to this article.*

## Horse First-Aid Kit

Mark Russell, Instructor – Equine

As we all know, horses are naturally some of the most curious animals. It isn't a question of if our horse gets hurt, but when their curiosity puts them in a situation and gets them hurt. With a plan in place and some prior preparation, the occurrence of an injury can be less stressful on both horse and owner.

One of the most important items a barn can have is a first-aid kit. There are first-aid kits that can be purchased fully furnished with necessary items. Or, the items can be purchased and the horse owner can put the first-aid kit together. Items that should be included are:

- Clean towels. These are used to stop a wound from becoming more contaminated and to apply pressure to stop bleeding.
- Flexible, self-adhesive bandages (vet wrap) or stable/polo wraps to hold the towels in place. Gauze is also useful to place under leg wraps. These wraps should be kept in a ziplock bag so they remain clean.
- Flashlight. Examining the severity of a wound is aided greatly by the use of a flashlight. Check batteries frequently and keep extras on hand.
- Cutters. A pair of sharpened scissors (to cut bandages) and wire cutters (should you get caught in the fence).
- Mercury or digital thermometer. The quickest way to tell if a health problem exists. Be sure to write down any abnormal temperatures and the date/time the temperature was taken. It is also a good idea to keep rubbing alcohol in the kit to clean the thermometer prior to and after use.
- Tweezers. These can be used to remove splinters, thistles or other fragments that may be lodged in the horse's skin.
- Antiseptic wound cleaner. Hibitane, Betadine or Novalsan scrubs are useful in cleaning skin infections, cuts and punctures.
- Stethoscope (to monitor horse's vital signs).
- Instant ice package.
- Twitch. Can help calm and restrain your horse.
- Fly repellent. Most horse owners keep fly repellent handy in the barn. However, keeping a new bottle in the first-aid kit will always ensure that some is available.
- Salts. Epsom salts draw out infection on cuts and scrapes.
- Antiseptic cream or ointment. Cuts, nicks and scrapes will heal quicker if the skin is kept moist and clean.
- Your veterinarian's phone number. It is also good to keep other local veterinarians' phone numbers on hand in case your regular veterinarian can't be reached.
- Up-to-date vaccination records for every horse in the barn.

There are many companies offering first-aid kits that come ready to be used with everything you may need. However, some of these ready-made first-aid kits are pricey. Building your own may save you

some money. They can be as small and simple as this kit:



They can also be as large and detailed and specific as this kit:



It may seem simple, but it's extremely important that the kit is kept in an easily accessible place somewhere in the barn or as close as possible to the barn. Periodically check the first-aid kit to ensure that items remain in good working order, should the need for them arise.