Manure and Pest Management

More than just cleaning stalls...

Compost 101

Many farms are composting their manure. What exactly does that mean and why is it a good idea for horse wonders? Your job as a club is to answer these questions then approach a local barn that currently does not compost their manure and work together to start a program. Listed below are some of the benefits of composting that can be found on the Natural Resource Conservation Service under HEAP (Horse Environmental Awareness Program).

- The composting process kills parasites and weed seeds in horse waste
- Finished compost improves the soil quality of the fields to which it is applied
- Since compost is already broken down, it does not cause nitrogen depletion in the soil.
- Finished compost contains plant nutrients in a stable form which slowly deliver some fertility to the plants and crops that receive it.

Find out more by visiting the following website:

Fun Fact: After manure is composted it can be spread on pastures, using in the garden or sold as fertilizer to local growers!
Stall Cleaning 101

Identify Tools and Teach Stall Cleaning Techniques

1. Create a poster that identifies and describes the different equipment used in stall cleaning and manure management.

   Tools to include:
   - Plastic pitchfork
   - Metal pitchfork
   - Muck bucket
   - Wheelbarrow
   - Tractor
   - Shovel
   - Sawdust
   - Boots

2. Make a video or power point that outlines the steps to cleaning a stall or pasture of manure.

   Highlight proper use of the tools and safety around the horses.

   Show what a properly cleaned stall looks like versus a stall that was not completely cleaned.

   If you are cleaning a pasture demonstrate safety around a tractor, gates and horses in the open.

   Keep it fun and educational!

Fun Fact: A 1000 pound horse produces 31 pounds of feces and 2.4 gallons of urin a day adding up to a total of 51 pounds of daily waste. (Taken from http://ww.esc.rugers.edu/FAQs/management_faq.htm)
Fly Control 101

Horse owners spend a lot of money on keeping flies away from their horses. There are tons of different methods riders swear by including certain brands of fly spray, feed through supplements or traps in the barn. Manure management is key to keeping the population of flies low in the barn.

1. With so many products out on the market these days for fly control it’s important to know what actually works and is the most cost effective.

Help riders and owners pick the best fly control by testing different methods. Create an experiment that tests the effectiveness of the fly spray methods and ranks them by cost.

Compare the following in your study:

- Brands of fly spray
- Synthetic vs. Natural
- Application methods:
  (spray, roll-on, wipe-on)

Ask local tack shops if they would be willing to donate to your study or post your findings at their store. You could also bring your findings to the next 4H horse show to share with other riders and 4Hr’s.

2. Unfortunately, topical treatments like fly spray are not always effective or horses may be allergic to them.

Research alternatives to typical fly sprays. Investigate:

- Feed through methods
- Manure management/Stall cleanliness
- Introducing fly eating bugs into the environment
- Mudding legs
- Fly repellant leg bands
- All other things that could be used to repel flies...

Create a pamphlet to hand out to horse people that describes their options outside of fly spray. This could also be a great public speaking topic.
The location of manure on a farm impacts the appearance, water quality and air quality. It also can significantly change the soil quality because manure contains nutrients and chemicals that change the makeup of the soil.

If you are planning on having horses graze on a field or are going to harvest hay from a field, you should first take a soil sample to make sure all of the essential nutrient requirements are being met by the pasture or grasses that your horses are eating.

University of Connecticut Soil Testing Lab

- Prepare a sample to be sent to the soil lab by following the steps below:
  1. For each area tested, use a clean spade or trowel
  2. Take 10 or more slices of soil from different spots in the pasture or field.
  3. Dig down 3-4 inches if you are testing a grass pasture or field.
  4. Place the slices from each area into a big bucket
  5. Mix the samples together
  6. Removes one cup of the soil
  7. Place the sample in a sealed zip lock baggie
  8. Label the baggie if you are taking samples from different locations
  9. Obtain a pamphlet from the soil testing lab by calling the office: (860) 486-4274
  10. Fill out the questionnaire and mail it in with the soil sample

Now What??

- Gather samples from the pasture, any fertilized fields and directly under or next to the manure pile.
- Compare the results of the soil sample
- Discuss which nutrients you should add to the to the soil for the pasture and where to buy them.
- Do the same with the place that the manure was located. Discuss how the concentration of nutrients is different from the pasture.

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