

# Building a Better Barn

When it comes time to build that new barn or renovate an existing facility, choosing materials that are efficient and good for the environment results in a better place for horses and people.



## Projects

Club: Trail Clean Up/Recycling Drive

Ages 7-8 Making something out of nothing

Ages 9-11 Solar Energy

Ages 12-15 Model Barn

## Hit the Trails!

With the number of usable public trails dwindling, it is vital that we keep the ones we still have in the best of shape. Take your club to a local trail riding spot or choose a barn in the area and organize a trail clean up. Garbage, rocks and sticks can be collected and used in later activities. Discuss why it is important to leave the trails better than when you rode on them and how trash and debris make for hazardous riding and environmental conditions.

Or, organize a recycling drive for plastic bottles, paper bags, and scraps of wood or newspaper among other things. All of these could be turned into something useful on the farm for horses or riders!

## Recycling Fact

Recycling a single run of the Sunday New York Times would save 75,000 trees.





## One Man's Trash Is Another Man's Treasure

Use materials gathered from the recycling drive to useful and effective things for every barn!

1.

Item: Plastic Soda Bottles

Remake: Stall Toys

Cut a few holes into a plastic soda bottle, big enough for a small treat to fall out of if the bottle was jiggled around.

Put a few treats in a couple bottles, then tie a few up together using baling twine and hang it in the stall of a particularly busy body pony.

They will spend the time trying to get the treats out of the bottle and reduce the likelihood to pick up any bad habits like cribbing or weaving.

2.

Item: Paper Grocery Bags

Remake: Tupperware for grain

Does your barn travel to overnight shows? Or maybe they ship horses for new owners. Paper bags are a great way to portion out meals of grain and supplements. As long as the horse's feed is relatively dry, they can be used numerous times.

You can also roll them up and stuff them in your boots to help keep the shape.

3.

Item: Scrap wood

Remake: Jumps, woodchips, filler for X-Country Jumps

As long as the wood hasn't rotted, scrap wood can be used pretty

much anywhere on the farm. Make rails for hunter jumps, fillers for big X-Country boxes or process the wood and make woodchips to put around the base of the barn outside.

4.

The Item: Cardboard

Remake: Bedding for overweight ponies

Shredded cardboard is a great alternative for bedding if your horse is overweight from eating the straw or shavings. It is biodegradable and can be mixed with the waste from the other stalls.

If you have mats in the stalls, it takes the same amount or slightly less to fill the stall and does not need to be replaced as often.



# Solar Energy

Ages 9-11



## Ice Cube Race

Have members getting groups of 2 (try pairing younger 4H'rs with older members) and come up with a way to insulate a container against the heat from the sun. Members will be learning about solar energy and how certain building materials can be used to keep barns cool OR keep them heated from the sun.

### Materials

- Ice cube(s) for each group
- One container for each group
- Cup or spoon to measure water from melted ice
- Insulating materials supplied by leader and members:
  - Styrofoam
  - Cloth of various textures and colors
  - Packing peanuts
  - Aluminum foil
  - Construction paper
  - Tape
  - Newspaper
  - Bubble paper
  - Paper towels

### Method

#### Preparation

1. Discuss appropriate safety issues.
2. Provide each group with one or two ice cubes, making sure that they have the same amount and the cubes are the same size.
3. Provide each group with identical containers. (Cup, glass, bowl, can, etc.)
4. Allow students to use materials of their choice to insulate the containers against heat.
5. Place insulated containers with ice cube(s) in sun.
6. After allotted time, students will measure the amount of water that has melted. The winning team will have the smallest

amount of water.

#### Procedure

1. Place your ice cube in the container.
2. Insulate the container with your choice of Materials.
3. Record the materials you used to insulate your ice cube.
4. Place your container in the designated place.
5. Wait the designated amount of time.
6. Unwrap the container and pour out, measure, and record the amount of water from the melted ice cube.



# Model Barn

Ages 12-15



The key to being a good horse person is being resourceful. These 2 activities require members to do some research and use their creative side to assemble the barn of their dreams using recycled materials.

## Activity 1: Research Poster

Members should research to see what popular eco-friendly building materials are being used to build barns in their area. Examples include: solar roof panels, recycled wood beams, insulation and footing alternatives.

Create a poster that explores one of the materials. Include the pros and cons of using the material as well as the cost and practicality of the product.

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## Activity 2: Model Barn

Using natural materials and recyclables have members build a small scale barn of their dreams. Allow members to use materials that are practical and creative. They can simply build the barn or add accessories like jumps or horse equipment.

Have them present to the rest of the club and explain why they chose certain materials over others.

### Examples could include:

- Bark: Roof shingles, siding
- Shredded Leather: footing for an indoor arena
- Bottle cap: shingles
- Shredded cardboard: bedding
- Scrap fleece: insulation or blankets for horses