

DeSoto National Wildlife Refuge's Visitor Center

Activity Sheet - Middle School

DISPLAY AREA

1. Looking at the *Wetlands, Cottonwood Forest, and Prairie*, choose a display that best represents where you live. Answers will vary
2. What mammal do you see in the Wetland? River otter
3. Name 2 birds in the Cottonwood Forest? Turkey, great horned owl, cardinal, blue jay, bobwhite, red-bellied woodpecker, flicker, Harris Sparrow.
4. What predator do you see in the Prairie? Coyote

Striking It Rich

1. List three tools or materials used by miners. What were they used for?
 1. shovel, drifting pick, candle lantern, power keg, matches,
 2. blasting fuse, mortar and pestle. (mercury - not shown in display)
 3. 7 possible answers
2. How were fish affected by "striking it rich"? Killed native fish and destroyed habitat by polluting clear mountain streams with silt and other sediments.

Cutting the Tall Timber

1. List two tools used to cut down trees. How did they work?
 1. two-man crosscut saw, log chain, whetstone, ax, circular saw and mandrel.
 2. 5 possible answers
2. How do you think logging changed the lives of animals and birds like the pileated woodpecker? Homes (habitat) eliminated. Presence of people caused wildlife to abandon the area (relocate). Increased competition. Erosion in streams.
3. How has timber cutting improved our lives?
Better homes, improved furniture, and other life comforts. Trees area a renewable resource and provide jobs for people.

Bustin' the Prairie Sod

1. What is meant by "bustin' the prairie sod"?

Plowing the soil

2. How did this change the land and affect the wildlife?

Changed native prairie and wetlands into farmland. Created an environment unsuitable from many species of wildlife.

3. Look at the map next to this display, name 2 of the 6 states that the Missouri River flows through besides Nebraska or Iowa. (Challenge: Try to name all 6)

Missouri, South Dakota, North Dakota, Montana, Iowa, Nebraska.

4. Why should we be concerned if North Dakota is polluting the river?

If the water is polluted upstream in North Dakota, it will eventually flow downriver and pollute our waters.

Towns: Making Nowhere Somewhere

1. List three tools used to build up towns on the new frontier.

1. saw, tape measure, wood plane, files, hatchet, hammer, auger bits,

2. pocket level, folding ruler, and pommel brace

3. 10 possible answers

2. Name two animals which did not benefit from the growth of towns.

1. Bobolink, upland sandpiper, black-footed ferret,

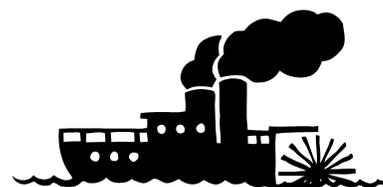
2. grizzly bear, wolf, etc.

3. Why couldn't these animals survive where towns were built?

Developing these areas reduced the habitat and food supply for animals. Many animals need large areas of land and cannot adapt to the presence of humans.

CARGO AREA

The *Bertrand* was a steamboat used to carry cargo and people up and down the Missouri River. This cargo supplied all of the merchandise a store in Montana would sell during an entire year. Imagine the *Bertrand* as a "Wal-Mart on the water".



Find three artifacts from the cargo for each category below. For each artifact record a similarity and difference for a similar item that you would find in your home today.

Household items and tools

Planes, files, wrenches, hatchets, screwdrivers, bits, plastering trowels, chisels, leather working tools. Shovels, picks, anvils spigots, coffee grinders griddles, waffle iron, corkscrews. Doorknobs, padlocks, keys, scales, drawer pulls, matches, pipes, ink, pencils, combs, pocket knives, cowbells, lamps (oil), candles.

Similarity/Differences

Many of these items are the same or similar, today: although some are much more sophisticated. Many of today's household products are made of different material, i.e. plastic.

Food items

Brand cocktails, (stomach) bitter, champagne, ales, wines, sardines, oysters, gooseberries, yeast, ginger, strawberries, brandied peaches, lemonade, peanuts, catsup, mustard, lemon syrup, honey, jelly, tomatoes, pickles, peppers, pepper sauce.

Similarity/Differences

Many of these items are the same, or similar, today: although some are much more sophisticated. Methods of processing and packaging has changed.

Clothing items

Boots, shoes, shoelaces, felt hats, coats socks, trousers, shirts, neckties women's hats, buttons, sewing supplies, yard goods, ice skates, blankets.

Similarity/Differences

Some of these item are the same or similar, today. However, major changes have been made in materials used and method of construction, (Also, there are major differences in styles, and attitudes toward clothing).

OBSERVATION AREA



1. List wildlife or evidence of wildlife (tracks and nests) you notice while looking out at the refuge. Turtles, fish, deer, coyote, geese, ducks, and other various birds. Bird's nest, woodpecker holes, wood duck house (box), raccoon tracks, deer tracks, coyote tracks, beaver cuttings. (Note: animal signs depend on the time of year, weather conditions, etc.)

2. DeSoto National Wildlife Refuge is land and water set aside to provide habitat for wildlife. List 5 plants or animals that you think live on the refuge. White-tailed deer, wild turkey, skunk, eastern cottontail (rabbit), painted turtle, Canada Goose, butterflies, carp, catfish, bats, raccoon, badger, fox, beaver, squirrel, mice, snakes, toads, frogs, 240 species of birds, etc.

3. Looking out the windows, what changes can you see that people have made to this area? List as many as you can see. Why have they made these changes? Roads, cars, buildings, trains, pilings in the water (historically used to stop bank erosion on the river), wood duck box, screen around trees to prevent beaver damage, channelization of Missouri River and formation of DeSoto Lake (dikes), increased farmland, less forested area, etc.

4. What do you think this area would look like if DeSoto National Wildlife Refuge did not exist? Be specific
Answers will vary

5. Why is DeSoto National Wildlife Refuge important to you?
Answers will vary

6. What things can you do to help preserve the refuge for future generations? Recycle, pick up trash, be respectful to wildlife and their habitat, teach others, ride your bike, leave things as you find them, get involved in various conservation organizations, etc.

Post-site activity:

Write a story, poem, or song or draw a picture, cartoon, or caricature about your experience at DeSoto National Wildlife Refuge.