

The Lewis and Clark Scavenger Expedition

Scavenger Hunt
GRADES 3-6



Saint Louis Zoo
Animals Always®

Scavenger Hunt

Lewis and Clark Scavenger Expedition

Teacher's Guide

Updated: 2007

APPROXIMATE TIME: 60 Minutes

Suggestions for teachers:

Today you and your students will be going on your own expedition to explore the animals that were originally seen by the Corps of Discovery 200 years ago. Most of these animals were unknown to the scientific world before the expedition. Your voyage will be guided by the use of narration and landmarks (which were very useful for Lewis and Clark).

Once you find your specific animal, observe it as if it is the first time you have seen this animal. Note some of the characteristics that make the animal unique. To find more information about an animal, read the information display about the animals to help you answer your questions.

Keep in mind that this is a zoo and that animals have basic needs as humans do. In some instances the animals may be off display for various reasons. If this occurs, use the information sign about the animal in question. Also look at the exhibit and imagine the habitat the animal would live in (i.e. river or prairie)

One last note, spelling had not yet been standardized when these journals were written. One researcher found that the word Sioux was spelled no less than 27 different ways! Also the punctuation and capitalization were not always consistent. The quotes from Lewis and Clark are copied exactly as they were transcribed, along with all of the errors to keep them authentic.

Library Resources:

-Check out our library resources at <http://www.stlzoo.org>.

Scavenger Hunt

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Answer Key

Because the animals at the Zoo are living creatures with very special needs, at certain times some of the animals referred to in this scavenger hunt may not be on public display. **Please remind your student to do their best to complete the hunt by carefully observing the animals they find and not to worry about any that are off display.** We update our scavenger hunts on an annual basis during the summer months to be able to provide you with the most accurate information about our animals.

APPROXIMATE TIME: 60 MINUTES UPDATED: 2007

1. No
2. The black bear's nature is shy and not extremely aggressive.
3. The black bear's color can vary considerably, from black brown to even blue!
4. The grizzly is a fast runner at with speeds up to 35 mph. Grizzlies would attack the corps members. The grizzly is a very large and powerful bear.
5. Fish
6. B) Five gallons
7. The Prairie Dog got its name form its bark.
8. No, it's not really a dog but is related to the squirrel. You can see it by the shape of its body, and the shape of its head.
9. The otter has oily fur to be waterproof, it can hold its breath for eight minutes, has webbed feet to swim better. The shape of its body is long and narrow to better slice through the water.
10. The patterns and colors mimic the shadows and patches of grass that would be on the ground in a prairie.
11. Webbed feet, snorkel like snout to stay submerged
12. Pumas lead solitary lives they don't usually seek companionship.
13. The puma's fur is solid and the tiger's fur is striped.
14. Tiger's stripes help them hide in tall grass. The puma.s uniform color helps them blend in with their surroundings including open range. It also is similar to the color of deer, their primary food.
15. Raccoon
16. c) Black bear
17. No
18. 70 lbs
19. A cat
20. Beaver
21. All three are true! The largest dam reported, from near Three Forks, Montana, was 652 meters (2,140 feet) long, 4.3 meters (14 feet) high at the highest point, and seven meters (23 feet) thick at the base.

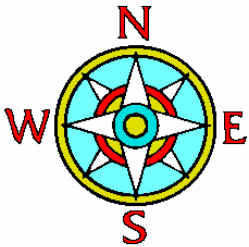
Scavenger Hunt

Lewis and Clark Scavenger Expedition

Student's Activity Pages

History:

Today you are about to follow in the footsteps of two famous explorers, Meriwether Lewis and William Clark. These men led an expedition to study and bring back scientific information and specimens from the west. Meriwether Lewis was chosen by President Thomas Jefferson to map the recently acquired Louisiana Territory and gather as much information as possible. In 1804, in what came to be called the Louisiana Purchase, the United States bought 850,000 square miles west of the Mississippi River from the French, which nearly doubled the size of the United States.



Lewis and Clark mapped and studied many features of the new territory including: climate, the Missouri River, local Native Americans, and most interestingly, animals. They used many scientific instruments on the expedition; thermometers, compasses, and telescopes were just some of the many items taken. Lewis and Clark, as well as the corps members, kept journals as a record of what they discovered and learned.



While on the expedition, Lewis and Clark transported their supplies in a keelboat. It was 50 feet long and could hold 10 tons, about equal to the weight of 16 elephants!!



START YOUR HUNT AT THE BEAR PITS

Remember to look at the informational signs near each exhibit to help you answer the questions.

Black Bear

Lewis and Clark saw this animal on numerous occasions. The Black Bear was very important to the expedition because its fat could be used for oil.

1. Based on the Black Bear's nature, do you think it was a threat to the Corps of Discovery? _____

2. What are your reasons?

"I am induced to believe that the Brown, the white and the Grizzly bear of this country are the same species only differing in colour from age or more probably from the same natural cause that many other animals of the same family differ in colour."

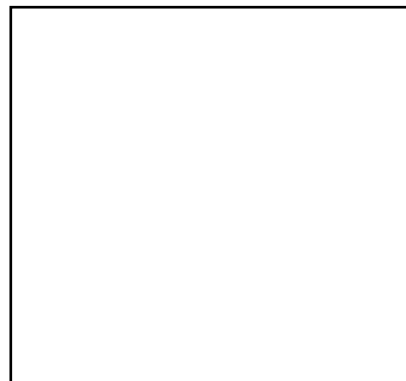
—Meriwether Lewis

3. Why do you think Lewis thought that the grizzly bear was the same as the black bear?

Observe the bear carefully and make a sketch of some feature of it in the box below. When you have finished your drawing, move on to the next bear and observe the same feature. How are the two bears similar? How are they different?



Grizzly Bear



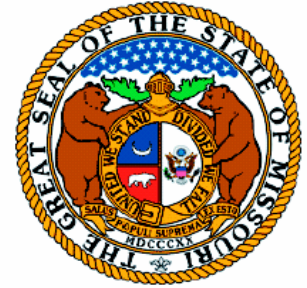
Black Bear

Differences _____

Similarities _____

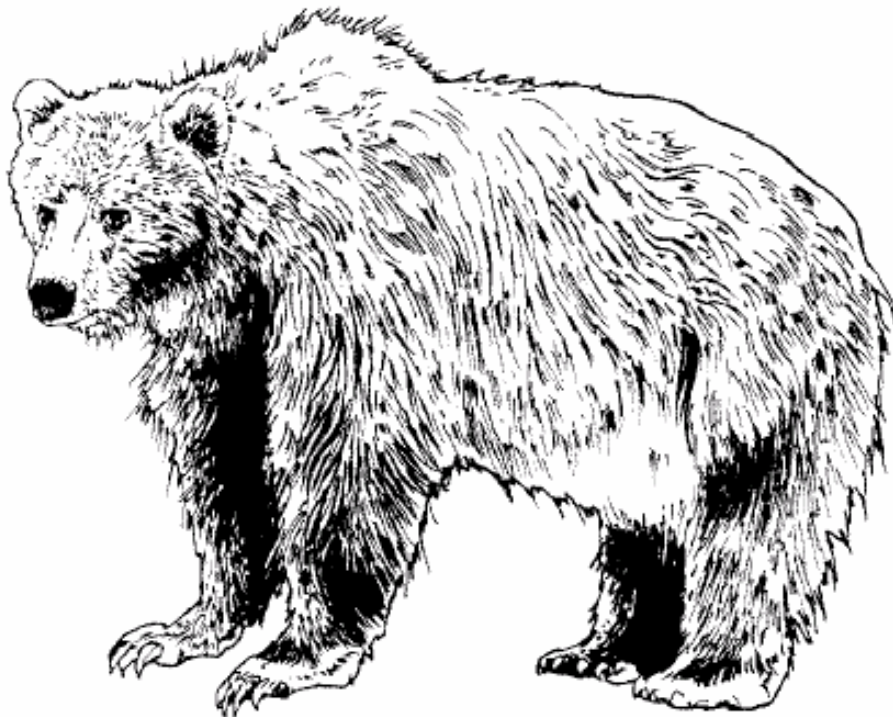
Grizzly Bear

Did you know that the grizzly bear is on the state seal and flag of Missouri? Lewis and Clark thought that the Native Americans were exaggerating about the ferocity of the Grizzly bear. They presumed that it was hard to kill only because the Native Americans did not have the firepower that the Corps of Discovery had. This was not the case, as the Corps soon found out.



“It is a much more furious and formidable animal and will frequently pursue the hunter when wounded. It is astonishing to see the wounds they will bear, before they can be put to death.” “The White [Grizzly] bear have become so troublesome to us that I do not think it prudent to send one man alone on an errand of any kind, particularly where he has to pass through the brush”
—Meriwether Lewis

4. What are some characteristics that made the Grizzly such a threat to the Corps of Discovery?
-



OPPOSITE THE BEAR CLIFFS, THERE IS A LARGE LAKE. KEEP ON YOUR RIGHT AS WALK AROUND IT. YOU SHOULD HAVE AN UNOBSTRUCTED VIEW OF THE WATERFOWL. LOOK FOR LARGE WHITE BIRD WITH A SIZEABLE BILL

Pelican

"I saw a great number of feathers floating down the river those feathers had a very extraordinary appearance as they appeared in such quantities as to cover pretty generally sixty or seventy yards of the breadth of the river. For three miles after I saw those feathers continuing to run in that manner, we did not perceive from whence they came, at length we were surprised by the appearance of a flock of Pelican at rest on a large sand bar attached to a small Island the number of which would if estimated appear almost in credible; they appeared to cover several acres of ground. . ."

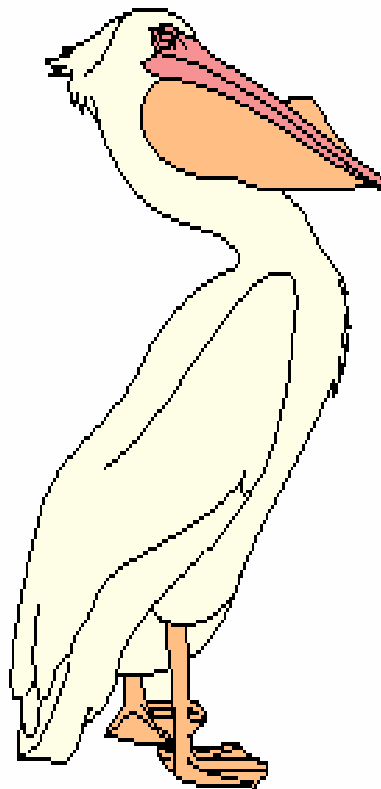
-Meriwether Lewis

5. As you can see, pelicans live near and on the water. What aquatic organisms could be the primary source of food for the pelicans?
-

Pelicans use their beaks like large sacks to scoop up their food. At the same time, they get lots of water in their beaks. When a fish has been caught, a pelican will spill the water out of its beak and eat the fish.

6. Take a guess at this fun fact! When they filled a pelican's pouch with water, Lewis and Clark learned that it could hold:

- A. Two Gallons
- B. Five Gallons
- C. Seven Gallons



WHEN OBSERVATIONS ARE COMPLETE; CONTINUE IN THE SAME DIRECTION UNTIL THERE IS AN INTERSECTION. TURN LEFT AND HEAD UP THE HILL. ALMOST IMMEDIATELY, THERE WILL BE SOME BURROWING RODENTS TO YOUR LEFT.

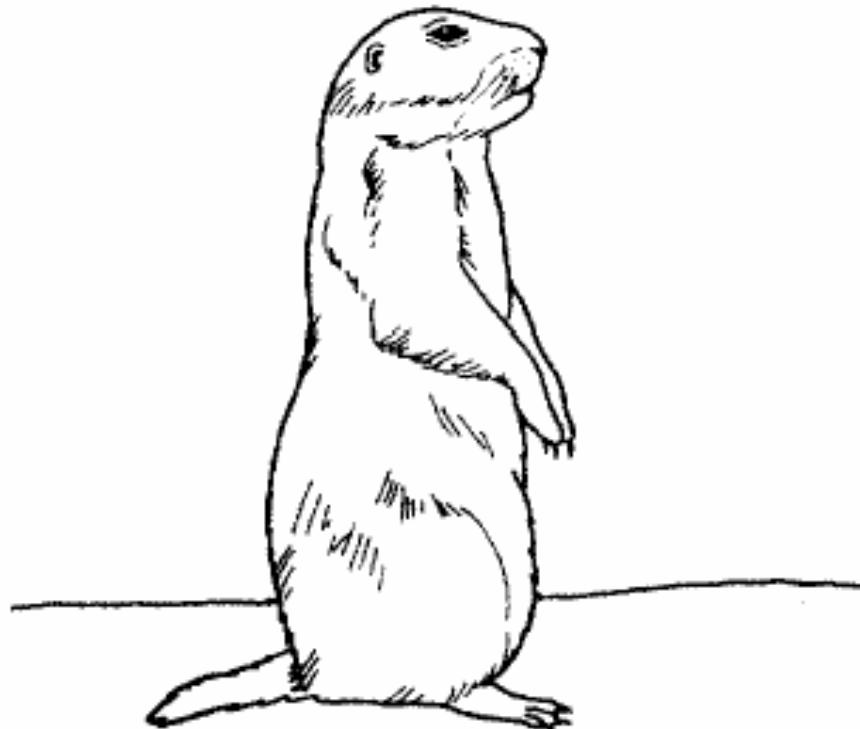
Prairie Dogs

Lewis and Clark discovered these little animals while exploring a “round mountain”. *“In descending this cupola, discovered a village of small animals that burrow in the ground. (Those animals are called by the French petit chien [little dog]). Killed one and caught one alive, by pouring a great quantity of water in his hole. We attempted to dig to the beds of one of those animals. After digging 6 feet, found, by running a pole down, that we were not halfway to his lodge.”*

–William Clark

7. What do you think is the origin of the prairie dog's name?

8. Obviously the prairie dog is not a dog! What animal do you think prairie dogs are most closely related to and what characteristics lead you to your answer?



AFTER OBSERVING THESE ANIMALS, CONTINUE WALKING UP THE HILL UNTIL YOU ARRIVE AT THE MIDDLE ENTRANCE OF THE BIRD HOUSE. TURN RIGHT AND CONTINUE WALKING UNTIL YOU ARE ON A BRIDGE. LOOK TO THE RIGHT AND OBSERVE THE ANIMAL THAT INHABITS THE EXHIBIT. AGAIN THESE ANIMALS, LIKE PRAIRE DOGS, MAY NOT BE VISIBLE.

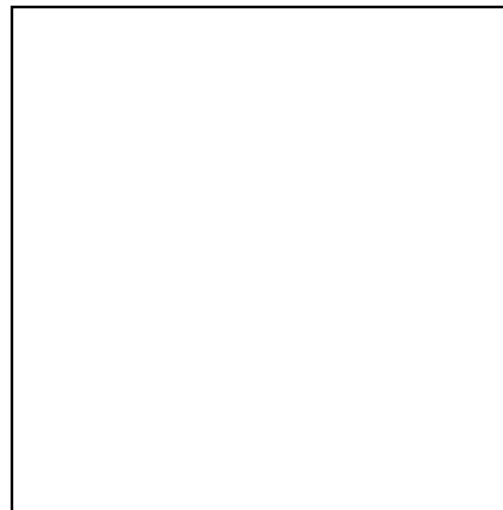
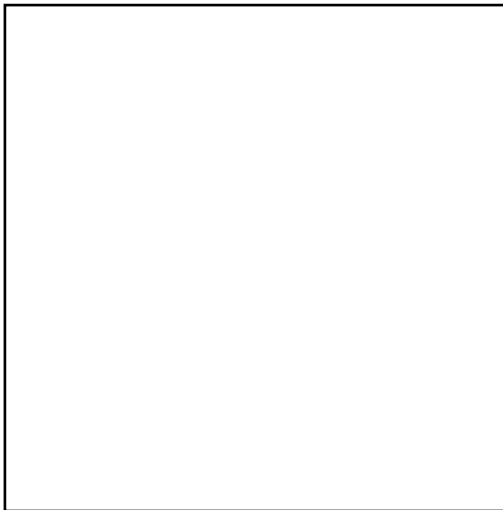
Otter

These playful animals live in and near rivers. Because their main mode of transportation was by boat, the Corps of Discovery saw many river otters on their westward voyage.

*"The otter are now plenty since the water has become suffciently clear for them to take fish."
-Meriwether Lewis*

9. Otters need to be good swimmers in order to catch fish, their primary diet. Can you see any adaptations that they have that make them good swimmers? What are they?

Sketch two of these adaptations in the boxes below.



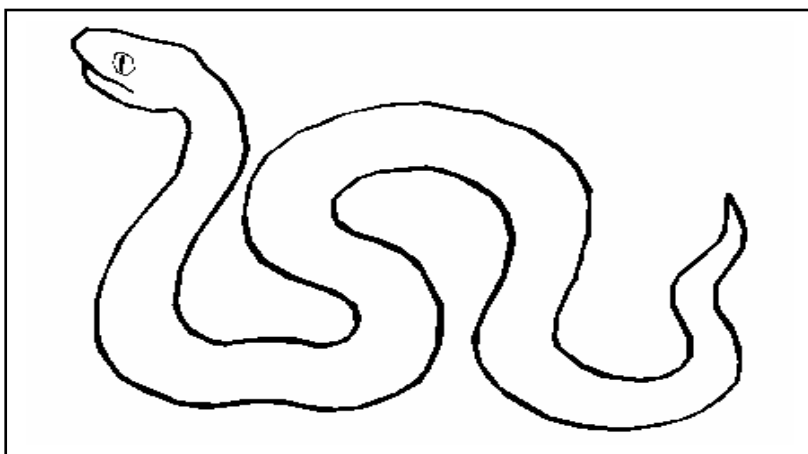
IT IS NOW TIME TO SEE SOME REPTILES AND AMPHIBIANS. TO GET THERE CONTINUE WALKING IN THE SAME DIRECTION UNTIL YOU ARE AT THE FRONT OF A BUILDING THAT HAS MANY PRIMATES IN ITS ARCHITECTURE. TURN RIGHT. KEEP WALKING UNTIL YOU SEE A BUILDING WITH SNAKES, IGUANAS, ALLIGATORS, AND TURTLES DECORATING THE OUTSIDE ON YOUR LEFT.

Bull Snake

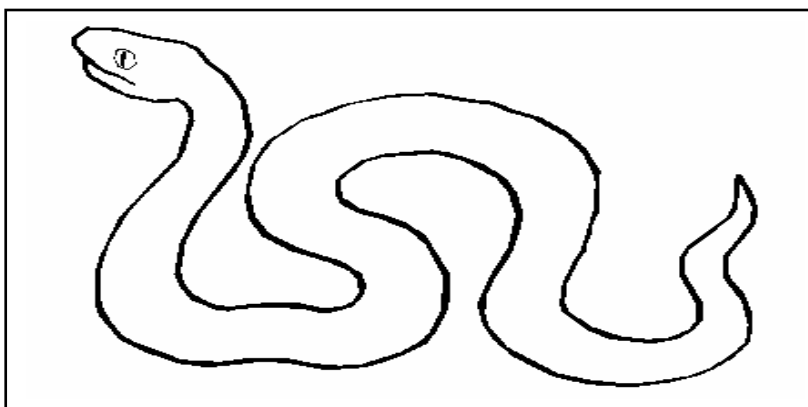
“No pison teeth therefore think him perfectly innocent— eyes, center black with a border of pale brown yellow Colour of skin on head yellowish green with black specks on the extremity of the scuta which are pointed or triangular. . .” -Meriwether Lewis

10. This snake lives in the prairies and east small rodents like mice. Look closely at the snake's colors. What coloration and patterns help it blend in with patches of grass and shadows in order to help the snake hide from predators as well as help it sneak up on prey?

In the boxes below draw in the pattern of the bull snake and the side striped palm pitviper markings and color.



Bull Snake



Sid Striped Palm Pitviper

Spiny Softshell Turtle

“ . . . I saw several softshelled Turtles which were the first that have been seen this season; this I believe proceeded rather from the season than from their non existence in the portion of the river. . . .” - Meriwether Lewis

Lewis was correct in his observation. Softshell turtles in the north usually do not become active until May. As the name suggests, this turtle has no scutes (bony scales) for protection like the other turtles. To compensate for this, this turtle has strong jaws and can strike very quickly. It also has sharp claws to defend itself. The spiny softshell turtle gets added protection by spending a lot of time under water where most predators cannot easily get to it.

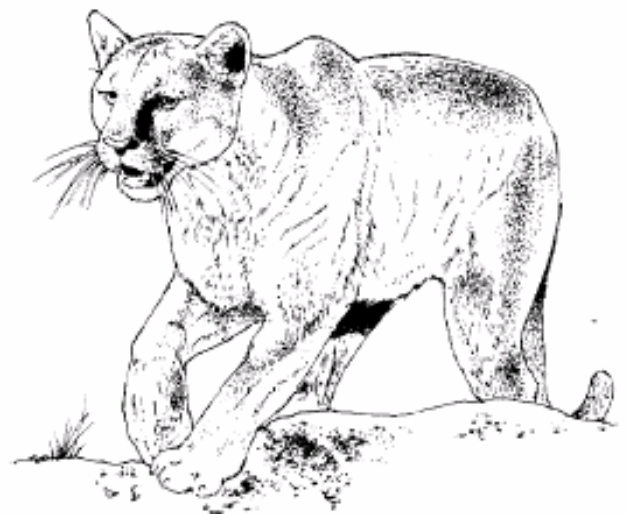
11. What are some other adaptations this turtle has that make it well suited to live in the water?

AT THE TOP OF THE HILL THERE IS A MOUNTAINOUS REGION THAT'S HOME TO MANY LARGE WILD CATS. AS YOU LEAVE THE HERPETARIUM, TURN RIGHT AND WALK UP THE HILL UNTIL YOU SEE LIONS AND TIGERS. ENTER THE AREA KNOWN AS BIG CAT COUNTRY AND TRY TO TRY SPOT THE PUMA.

Puma

*“a fair morning . . . two of our men .red at a panther a little below our camp, this animale they say was large, had caught a Deer & eate it half & buried the ballance.”
-William Clark*

*“ . . . This morning they passed a small creek on Star. at the entrance of which Reubin Fields killed a large Panther. we called the creek after that animal Panther Creek. . . the Panther which Fields killed measured seven and 1/2 feet from the nose to the extremity of the tail. it is precisely the same animal common to the western part of our country.”
- Meriwether Lewis*



12. Lewis and Clark reported seeing many “panthers” on the expedition but never mentioned seeing them in groups. Why wouldn’t these animals be found in groups?

13. Before you leave this area, look at the Siberian Tiger. How is the coloration of the tiger’s fur different from the coloration of Mountain Lion’s fur?

14. Why do you think their colorations are so different?

IT IS REPORTED THAT ON THE WEST END OF THE ZOO THERE IS A CAVE THAT CONTAINS MANY ANIMAL FOOTPRINTS IN THE GROUND. THERE ARE ALSO MANY FISH THAT INHABIT THE MISSOURI RIVER. TO GET TO THE CAVE, WALK TO THE LAKESIDE CAFÉ, AND ON THE LEFT, TAKE THE BOARDWALK THAT PARALLELS THE LAKE. WHEN THE BOARDWALK ENDS, TAKE THE PATH ON THE RIGHT. STAY ON THAT PATH; IT WILL LEAD YOU THE CAVE. AT THE MOUTH OF THE CAVE, LOOK FOR ANIMAL TRACKS ON THE GROUND.

Animal Tracks

Sketch on of these prints.



15. What native Missouri animal do you think made these prints? _____

If you are having trouble figuring out this animal, look at what is nearby. The location of these prints is accurate in relation to the surrounding area. The animal that made them never dens more than 1,200 feet from a permanent water source. The animal is an omnivore, whose varied diet includes frogs, fish, birds, crayfish, eggs, fruits, nuts, grains, small mammals, and insects.

AS YOU ENTER THE MOUTH OF THE CAVE, YOU WILL SEE TRACKS THAT GO THROUGH THE CAVE. THESE FOOTPRINTS ARE FROM AN ANIMAL THAT YOU HAVE PREVIOUSLY OBSERVED.

POP QUIZ

16. The animal that made these tracks is a
- A. Mountain Lion
 - B. Otter
 - C. Black Bear

Blue Catfish

On our return which was at 5 m after 1 Oclock we were a little surprised at the apparent size of a Catfish which the men had caught in our absence altho we had been previously accustomed to see those of from thirty to sixty pounds weight we ditermined to asscertain the weight of this fish after taking the following dementions of it—

F Inches

Length— 43 ¼

width between the eyes— 1 1

Circumpherence arond the head just above the first .ns and lower extremity of the gills being the large part of the fish—

39

The dementions of the mouth when opened to the ordinary, or easy practicable width was From the center of the lower to the upper jaw—

0 8

Width from side to side— 0 10

Weight—

Head— 44

Enterals [entrails]—very emty— 14

other parts of the carcass 65

The loss of blood, its lying out of the water six hours in the sun, & the waistage from the circumstance of being obliged to weigh it in small draughts not having any method of weighing entire may be estimated at, at least

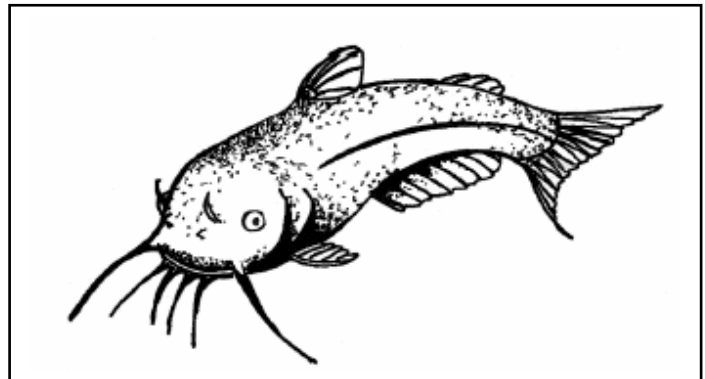
—5

Total

I have been informed that these fish have been taken in various parts of the Ohio & mississippi weighing from 175 to 200 lbs.

weight which from the evidince of the sujet above mentioned I have no doubt is authentic—

-Meriwether Lewis



17. Find the Blue Catfish in the aquarium. Do you think it actually weighs 125 pounds? _____

18. If not, how much do you think it weighs?

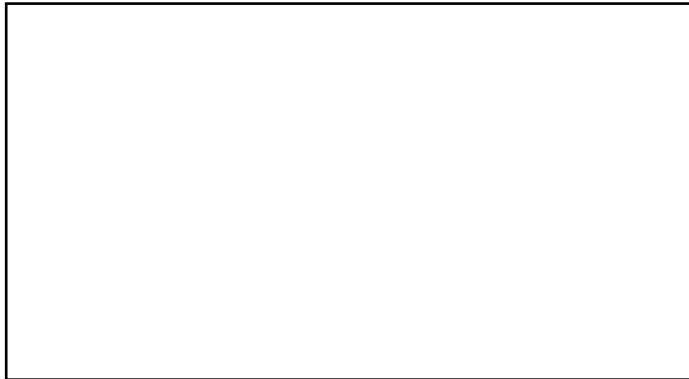
Sauger

“Goodrich who is remarkably fond of fishing caught several dozen fish of two different species— one about 9 inches long of white colour round in form and fins resembles the white chub common to the Potomac; this fish has a smaller head than the Chubb and the mouth is beset both above and below with a rim of fine sharp teeth; the eye moderately large, the pupil dark and the iris which is narrow is of a yellowish brown colour, they bite at meat or grasshoppers. this is a soft fish, not very good, tho’ the flesh is of a fine white colour.”
- Meriwether Lewis

From this animal description and the fish outlines on the side of the aquarium, which fish did Goodrich describe?

How many Saugers can you find in the tank? _____

When you pass through the cave there will be a fork in the road (there are tracks on both trails. Turn left and you will see some tracks (not the elephant tracks) that show no claws. Make a sketch of the paw print

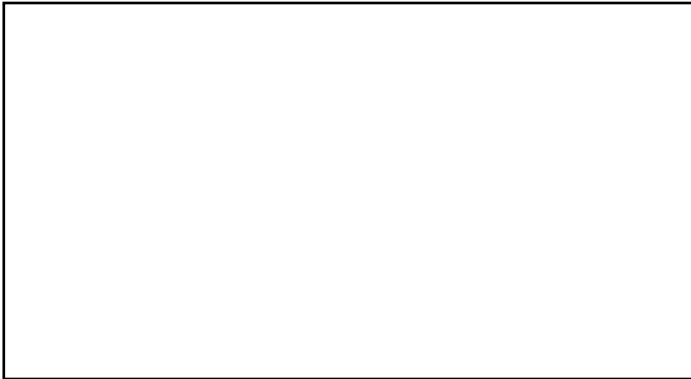


19. Can you name another animal, which is commonly kept as a pet, which can retract its claws? _____

If you haven't guessed already this animal belongs to the cat family. It is a bobcat. Like a house cat, it keeps its sharp claws retracted so that, when they leave a footprint, there are no claw marks. Like other cats, bobcats are carnivores. Bobcats can only eat about 3 pounds of meat at a time, so if they take a larger animal like a deer, they will drag it to a safe spot and cover it up and come back for it later. Bobcats can run up to 30 miles per hour!

Beaver

Backtrack to the other trail and search for the other footprints.
Sketch the animal's prints below



Hint: It is an animal that made the dam holding back the water.

20. What animal made those tracks? _____

The beaver is the largest North American rodent, ranging in weight from 30-100 pounds. Their large webbed hind feet are adapted for swimming, and their broad, flat, smooth tail serves as a rudder and propeller. Beavers make dams as part of their home. Beavers dam up a creek or stream and then make their dome shaped house in the middle of the newly created pond. These beaver houses are called lodges. Like moats to a castle, the surrounding pond helps keep beavers safe from predators.

21. Take a guess at this fun fact!

- A. 2,140 feet long
- B. 14 feet tall
- C. 23 feet thick

