

TEXAS PARKS AND WILDLIFE



5TH GRADE OUTDOOR LABORATORY
AT NAILS CREEK STATE PARK

STUDENT JOURNAL



BRENHAM
I.S.D.

Welcome

to the state parks of the Texas Parks and Wildlife Department.

We are glad you are here and know you will experience, learn and appreciate all aspects of Texas state parks and historic sites. Please note that these are YOUR parks and sites and are available to you and your families throughout the year.

The goals of this Camp is for you to become aware of the local state parks and state historic sites that surround your community of Brenham and for you to learn about the stewardship of these sites and places.

In order to enjoy this field trip we would like you to follow the park rules.

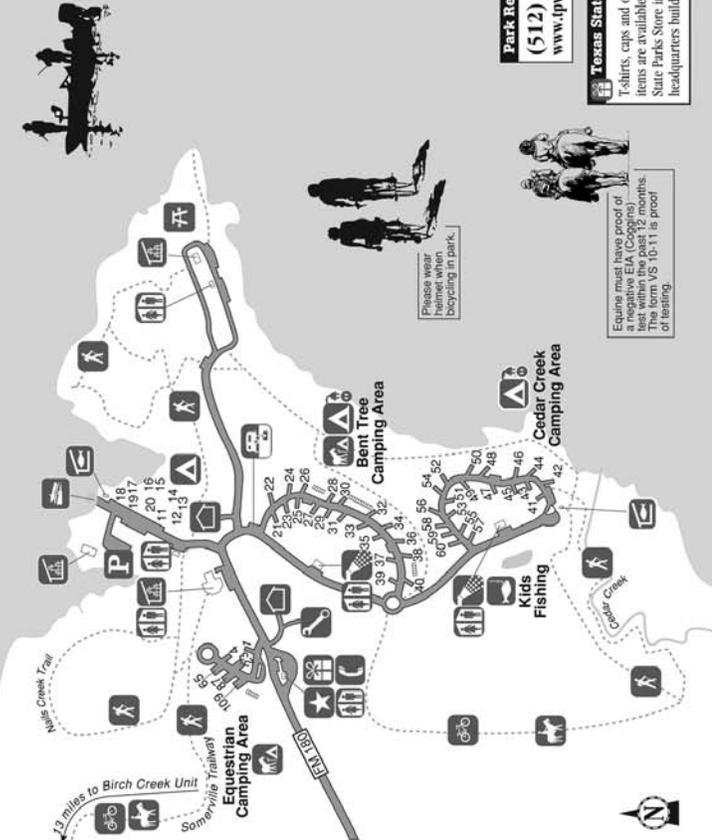
- No running on the trails.
- Keep to the trails, because straying off the trails causes more erosion and places you at risk to poison ivy.
- You must have a buddy at all times.
- Do not litter, put all trash in appropriate trash cans. Help keep our parks clean
- Take nothing but pictures and please respect the wildlife of each state park and historic site.
- The weather will be very hot, so please wear your cap at all times and make sure your water bottle is always full.

Thank you for your assistance and we look forward to seeing you back at Texas state parks.

Staff of Texas state parks

Nails Creek State Park

Lake Somerville State Park - Nails Creek Unit



Please wear helmet when bicycling in park.

Equine must have proof of a negative EIA (Coggins) test for rabies. The form VS 10-11 is proof of testing.

Park Reservations
(512) 389-8900
www.tpwd.state.tx.us

Texas State Parks Store
T-shirts, caps and one of a kind gift items are available at the Texas State Parks Store in our park headquarters building.

- Please Note:**
- CHECK OUT time is 2 p.m. or renew permit by 9 a.m. (pending site availability).
 - Public consumption or display of an open container of any alcoholic beverage is prohibited.
 - A maximum of eight people permitted per campsite. Guests must leave the park by 10 p.m. Quiet time is from 10 p.m. – 6 a.m.; unnecessary vehicle operation is prohibited during quiet hours.
 - An excess parking fee is required at campsites with more than two vehicles (including trailers).
 - Campsite must be kept clean; all trash must be picked up before leaving. Dumpsters are conveniently located on all camping loops.
 - GRAY WATER AND BLACK WATER MUST BE DISCHARGED ONLY AT DUMP STATIONS.
 - Only one unit per site is permitted to hook up to utilities.
 - Pets must be kept on leash of not more than six feet; pets must not be left unattended. Please pick up after them.
 - Valid permit required on windshield of each vehicle in park. All vehicles must remain on pavement; park only in designated parking areas or immediately adjacent to the roadway.
 - Numbered sites are for overnight camping only.
 - NO PICNICKING.
 - Firearms and fireworks are prohibited.
 - Must be 18 years old to ride in back of an open bed pickup.
 - Please observe all speed limits and watch for playing children.
- Fires:**
- Gathering of firewood is prohibited.
 - Campfires are permitted only in fire rings provided at each site. No ground fires are permitted. Please use extreme caution with any burning materials during the high-fire danger summer brings. Do not leave campfires unattended.
- All park regulations are posted at park office and rest rooms.

ACTIVITY 1

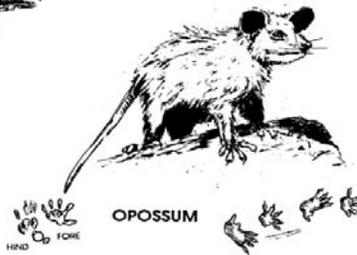
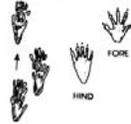
CSI-Clever Student Investigators

Texas Tracks

Do you know them?



RACCOON



OPOSSUM



SKUNK



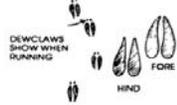
COYOTE



BOBCAT



WHITE-TAILED DEER



Field Questions

1. If you were a wildlife biologist (park ranger) what could you tell about the animals in Nails Creek State Park by studying their tracks?
2. How many different types of animal tracks could you identify around the bait/scent stations? What were they? What did you see most?

Field Notes

What did you do at this activity station? (Include all observations and what you have learned from this activity)



ACTIVITY 2

Trail to Discovery

Read the following excerpts from historic journals to learn more about how the land looked 300 years ago.

“After leaving the Red (Colorado) River, we hunted wild turkeys and deer ... We found some bear whose meat was excellent. The ground is covered with onions, of which we took good stock, and we also found small chestnuts, and nuts with shells whose meat was similar to those of Europe. I also saw wild vines.”

—Pierre Marie Francois Pages description of the area as he crossed Yegua Creek in 1767

“This branch of the river has a good supply of fish and along its banks there are ash-trees, sables, willows, walnuts and elms. In the adjacent woods there are cattle, mules, horses, bison, bears, deer, partridge, and covies of quail ... In all the rivers of Texas beaver and otter can be found in large numbers.”

—Fray Gasper Jose de Solis 1768 account of Brazos around 30 miles north of Lake Somerville

“It was situated on the slope of a ridge in the shelter of motte of trees. There were about 40 huts together and several others were seen set apart from the others.

“Indian campments would be found near water and firewood, domeshaped lodges were made of mats placed on 4 arches and would be carried on the backs of the people every 2 -3 days in search of food.”

—25km south of Lake Somerville, a French party in 1687 noted the above about Indian encampments located around present day Brenham.



Field Questions

1. What methods did you use to gather information about the wildlife and natural history of the Lake Somerville area?
2. Why is it important to document all wildlife observations when we participate in an outdoor laboratory?

Field Notes

What did you do at this activity station? (Include all observations and what you have learned from this activity)



ACTIVITY 3

Dropping in on deer

Pellet Group Plot Number	Number of Recent Pellets Groups per Plot	Other Observations (other animal signs)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		

CALCULATIONS

- A. (Total number of pellet groups) _____ ÷ (Total number of plots) _____ = _____ x 100 = (number pellet groups per acre) _____
- B. (Number pellet groups per acre) _____ ÷ 12 (Number pellet groups per deer per day) = _____ (number deer days/acre)
- C. (Number deer days/acre) _____ x (number acres in study) _____ = (number deer days in study area) _____
- D. (Number deer days) _____ ÷ 180 days = (number of deer living in study area) _____



Field Questions

1. When surveying for wildlife what signs of wildlife should you look for?
2. Why do we need to survey wildlife at state parks and wildlife management areas?

Field Notes

What did you do at this activity station? (Include all observations and what you have learned from this activity.)



ACTIVITY 4



Bug Picking - Is Your Creek Polluted?



Have you ever noticed the many small animals such as insects, snails, and worms that live on the rocks and roots at the bottom of creeks, rivers, ponds and lakes? Some of these small aquatic animals are very sensitive to changes in the water and will die if the water becomes polluted. By looking for and recognizing the different types of aquatic animals in aquatic environments, you can begin investigating the water quality of those environments.

This water appears to be (circle one): Not Polluted OK Polluted

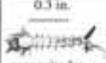
I am basing this hypothesis (guess) on:

Equipment: safe footwear for wading, forceps, magnifiers, small aquatic nets, pipettes, Bug Picking Data Sheet, pencils and shallow pans for holding specimens

Directions:

1. Wade into shallow water, turning over rocks, looking for aquatic animals ("bugs"). Replace rocks where you found them after you inspect them.
2. Place each "bug" you find in a specimen pan and begin to divide them into different types and groups according to the Bug Picking Data Sheet. (Water in the pans will keep them alive while you take data.)
3. On the Bug Picking Data Sheet, put a tally mark next to the picture that matches each aquatic animal you find. Gently return the animals to the water.
4. Look at the three different groups of aquatic animals you found in the water. To determine if your water might be polluted, answer these questions or circle the correct response.

Bug Picking Data Sheet

Group 1 Pollution Sensitive	Group 2 Somewhat Sensitive	Group 3 Pollution Tolerant
 1 in.  0.5 in.  1 in.  0.5 in.  1-2 in.  up to 3.0 in. 	 1-1.5 in.  1 in.  0.3 in.  1 in.  0.4 in. 	 0.3 in.  0.5 in.  0.5 - 1.0 in.  to 3 in.  1 in.  0.2 in.
Number of Species Found <input type="text"/> 3 or More <input type="text"/> 1 to 3 Species <input type="text"/> No Species Found	Number of Species Found <input type="text"/> 3 or More <input type="text"/> 1 to 3 Species <input type="text"/> No Species Found	Number of Species Found <input type="text"/> 3 or More <input type="text"/> 1 to 3 Species <input type="text"/> No Species Found

What could be happening upstream or on land around the water to affect the water quality where you are sampling?

This water is (circle one): Not Polluted OK Polluted

I am basing my conclusion on:

FIELD OBSERVATIONS

Blank area for field observations.

FIELD OBSERVATIONS

Blank area for field observations.

BRENHAM
I.S.D.



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