

Multi-cache Notebook: Feasting at the Table

Louisville Open Space



Can you imagine how much easier life would have been for our early explorers if they had access to GPS technology? Well luckily you do and you can use it to aid in your discovery of Louisville Open Space Property!

This multi-cache requires approximately 2 miles of walking on a family-friendly, level gravel trail. Please locate all of the caches and sign the log. Have fun learning about the native people, animals, plants, insects, rocks, and water of this Louisville Open Space!

Name: _____ Age: _____

Mailing Address:

Street: _____

City: _____ State: _____ Zip Code: _____

Email Address: _____

Phone Number: _____

Please leave no trace as you explore the Open Space. All clues and caches can be found within a few feet of established trails on the property. Please take only pictures, no samples or souvenirs. Help preserve and protect our beautiful open spaces.

When you head out to explore, you'll need:

1. This guide and pencils/crayons
2. Your GPS unit
3. Calculator
4. Binoculars (optional)
5. And for a bonus point - a camera for contributing a picture (optional)
6. The Louisville Parks, Open Space and Trail map available at the Public Library, City Hall and Parks and Recreation might be helpful (optional)

Photo Release:

I give City of Louisville Open Space permission to publish in print, electronic, or video format the photographs I submit with this form. I release all claim against the City of Louisville with respect to copyright, ownership and publication including any claim for compensation related to use of the materials.

Photographer Signature (if 18 years old or older) Date

Guardian Signature (if photographer is 17 years old or younger) Date

Liability Release:

I agree to defend, indemnify and hold harmless the City of Louisville, and its officers and its employees, and hereby release the same, from and against any and all liability, claims, demands and expenses, including court costs and reasonable attorney fees, on account of any property damage, bodily injury, sickness, damage, or other loss of any kind whatsoever, which arise out of or are in any manner connected with the program, if such injury, loss, or damage is caused in whole or in part by, or is claimed to be caused in whole or in part by, the act, omission, or other fault of myself .

Signature (if 18 years old or older) Date

Guardian Signature (if participant is 17 years old or younger) Date

Starting Point: Facts & Figures

Starting coordinates: N39 58.678 W105 09.987

At this location you will be able to find the answers to the questions listed below. The numbers generated from the answers will be used throughout the rest of your journey to develop your coordinates to the next location.

- What was the last year that the original inhabitants lived on this land? _____
- What year did coal mining activity begin nearby on this property? _____
- What year did William Davidson form the Davidson Coal and Iron Company? _____
- What decade did Davidson holdings increase to approximately 8,000 acres? _____
- What year did gravel mining begin on this property? _____
- What decade did construction of Harper Lake begin? _____
- What year did this property become a Louisville Open Space? _____
- How many acres is this Open Space property today? _____
- How many million years ago were the Rocky Mountains formed? _____
- How many feet of alluvial rock underlay this property? _____
- How many Native American nations have lived on this land? _____

Hint: Decipher QNIVQFBA ZRFN XVBFX where the letter above equals the letter below and vice versa.

ABC DE FGHI JK LM

NOPQRS TUVWXYZ

Cache #1: Funny Place for a Turkey Foot

For the first cache and a clue to the second cache proceed to N39 58.3ab W105 10.3cd. A and b equal the digits calculated by subtracting the year gravel mining began on this property from the year this property became open space. C and d equal the digits of the answer to the following equation; $cd = \text{feet of alluvial rock underlying this property multiplied by } 1.7$. As you walk to Cache #1, look for a plant that grows in clumps and is typically 2 ½ to 5 feet tall. Its inflorescence or flowers can range in color from bronze to a steely gray-blue and are slightly fuzzy. The flower branches radiate from the top of the stem.

1. From the above description do you know the plant that you are on the look-out for? Y / N
2. If so, what is the name of the plant? _____

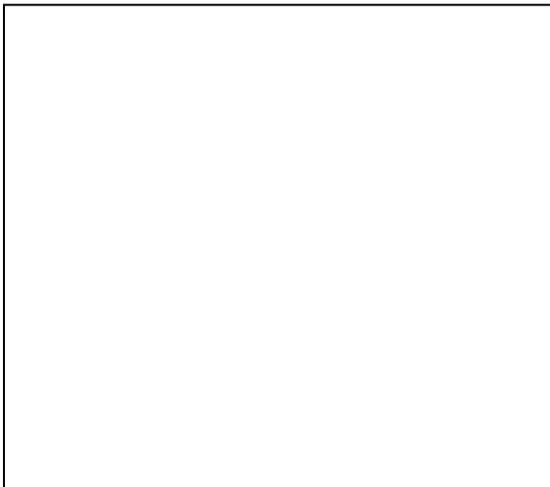
Hint: This plant is also known as Turkey Foot (because of the flower stems) or beard grass.

Several plants of this variety can be found near the trail. Check out the flowers and seeds to answer the following questions:

3. Is it flowering? _____ Try sketching the flower branches.
4. What color are the flowers or seeds now? _____
5. What do the leaves and stems look like? _____
6. How about including a drawing of them too?

Fun Fact: Did you know that this plant was once the dominate species of the tall grass prairie? It is an excellent forage, or food source, for livestock and bison. It prefers dry open places like the Davidson Mesa.

7. Please draw or list any of the observations that you have made while walking to Cache #1:



You can find the answers to these questions, as well as the clue to Cache #2 in Cache #1.

Cache #2: Purple Mountain Majesty

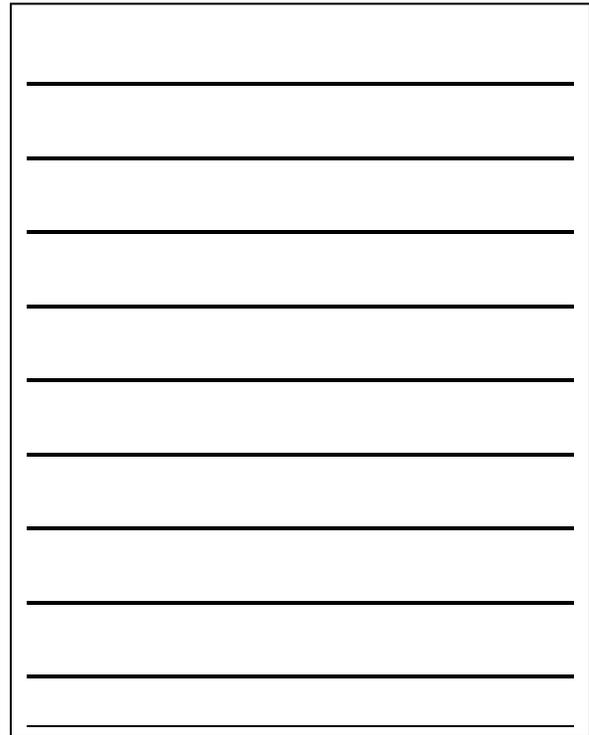
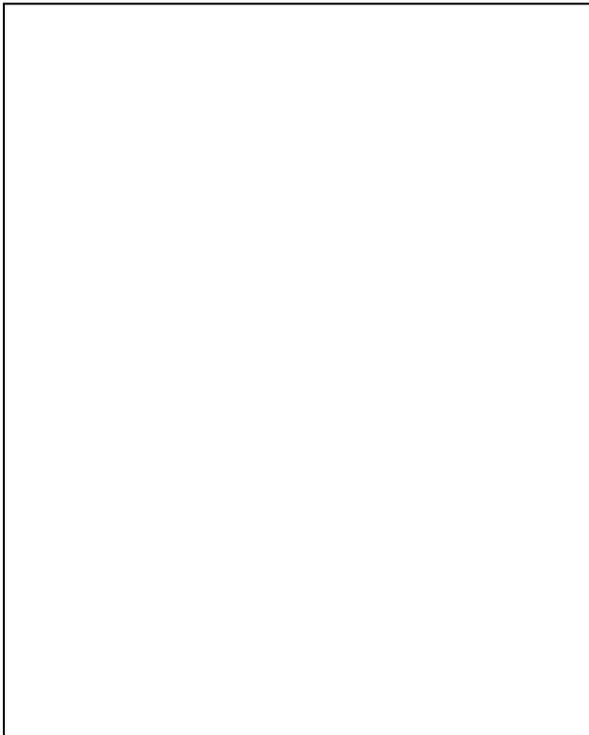
Once you reach the location of Cache #2, take a moment and view the peaks to the west. Note the difference between the near peaks and the taller peaks further away and to the right. Sketch a portion of the mountain profile you find interesting below.

8. What does the weather look like over the mountains? How does it compare to the weather on the Mesa? _____
9. Do either of the mountain ranges have snow on them? _____
10. What wilderness area takes its name from the taller peaks to the west?

11. Note the flatirons. What is the name of the peak which uses the flatirons as its base?

12. What is the elevation of the peak that forms the backdrop for Boulder? _____

Please draw or list any of the observations that you have made while walking to cache #2:



The answers to these questions and the clue to Cache #3 can be found in Cache #2.

Cache #3: Piercing Bayonets

As you make your way to this point, look for a plant that is typically 2 feet tall and 3 feet wide, with a low cluster of bayonet-like pale green leaves. In the summer you may see a 3 to 4.5 foot tall stalk with white bell-shaped flowers and woody, oblong, cream-colored seed capsules.

13. From the above description do you know what plant you are on the look-out for? Y / N

14. If so, what is the name of the plant? _____

Hint: This plant is also known as Soapweed or Spanish bayonet.

Find this plant near the trail and carefully touch the leaves.

15. What do the leaves feel like? _____

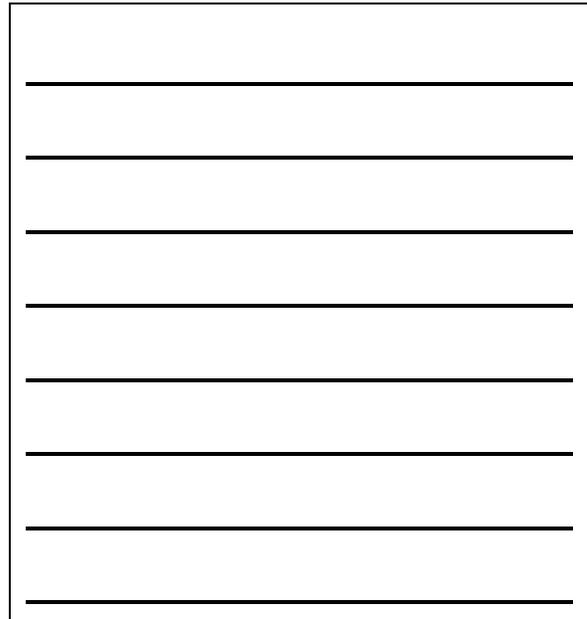
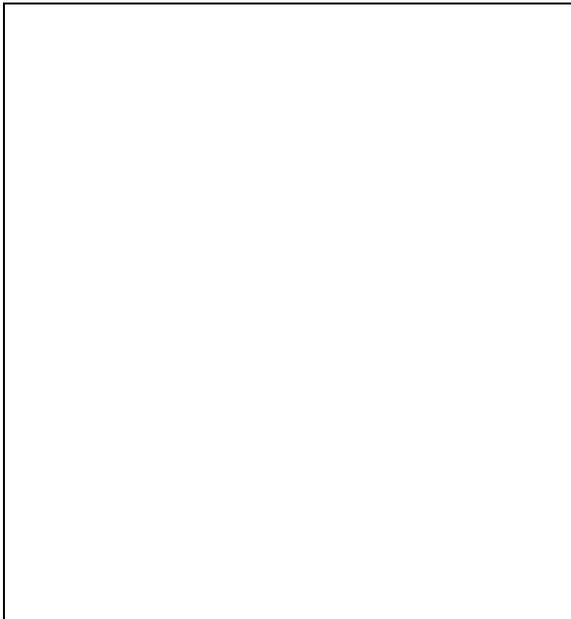
16. How many leaves do you think there are on one plant? _____

17. Does the plant have flowers or seeds at the moment? _____

Fun Fact #1: Native Americans also used this plant to make sandals from the leaf fibers and soap from the roots. The root was believed to possess medicinal qualities and was used to reduce inflammation and stop bleeding. The buds, immature fruits and raw flowers were also used as a food source.

Fun Fact #2: Did you know that only one specific insect can pollinate this plant, and that this insect's larvae cannot survive without the nutrients from the fruit of this plant?

Please draw or list any of the observations that you have made while walking to cache #3:



You can find the answers to these questions, as well as the clue to Cache #4 in Cache #3.

Cache #4: I'm Not Really a Canine

Common in this area is a large rodent named after where it lives and how it sounds and looks. You are on the lookout for a critter with brown fur, large black eyes, short legs and sharp claws developed for digging burrows. Check out its tail color because it is part of its name!

18. From the above description do you know what mammal you are on the look-out for? Y / N

19. If so, what is its name? _____

20. What is the color of its tail? _____

Hint: Despite its common name, this rodent is a member of the squirrel family not the canine family! It has a complex system of communication, including a variety of pitched warning "barks" that signal for different types of predators.

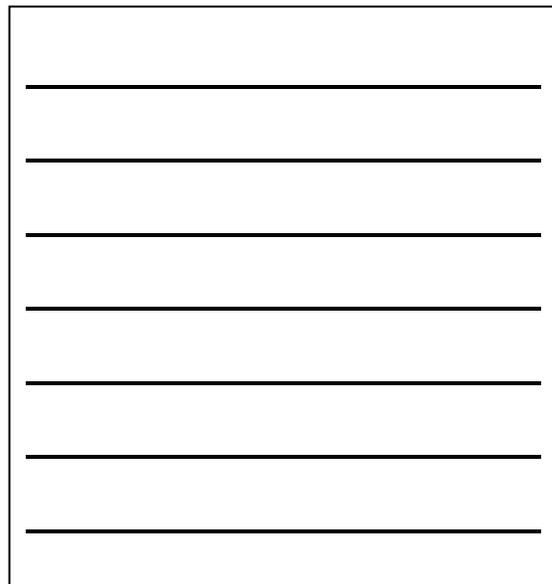
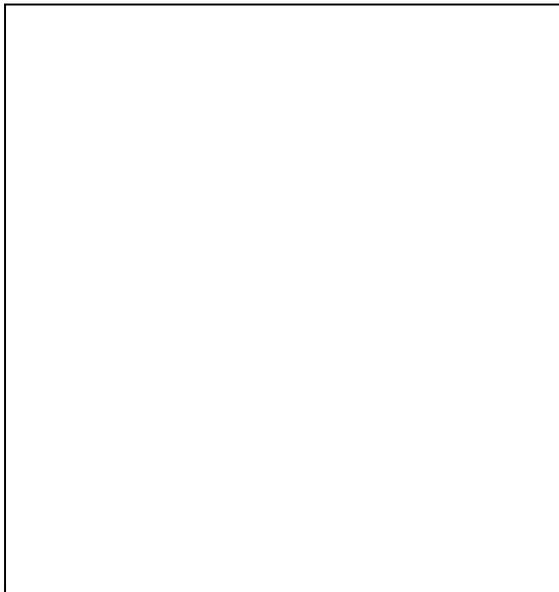
21. Once you find this mammal draw a sketch of the critter and its home.

22. When this animal senses danger it will stand up and yip. When it does this, how tall is it?

23. Watch for a few minutes and record their diet. What kinds of things do they eat?

While these rodents and their tunnels support other wildlife, overpopulation above the carrying capacity of the area can result in overgrazing, erosion and increases in noxious weeds.

24. Please draw or list any of the observations that you have made while walking to the cache:



You can find the answers to these questions, as well as the clue to Cache #5, in Cache#4.

Cache #5: Listen, I'm Learning to Sing My Song!

As you walk to Cache #5, be on the lookout for a native prairie bird that has a bright yellow chest with a v-shaped black breast band.

25. From the above introduction do you know what bird you are on the look-out for? Y / N

26. If so, what is the name of the bird? _____

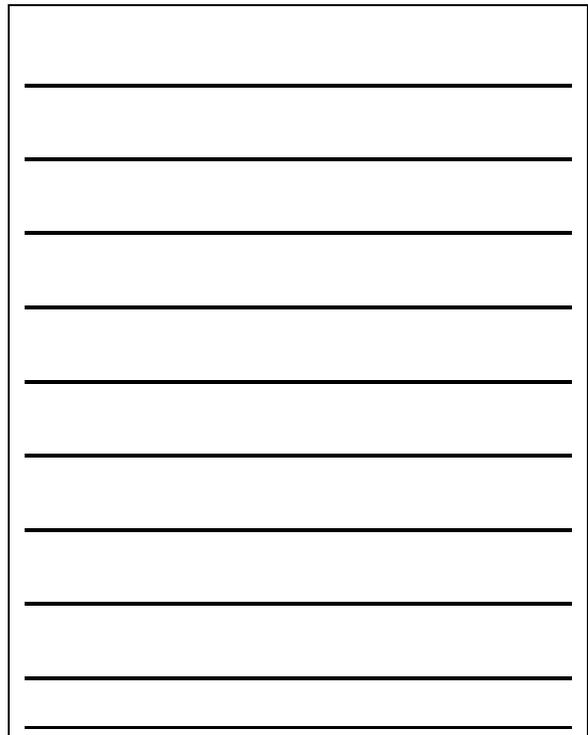
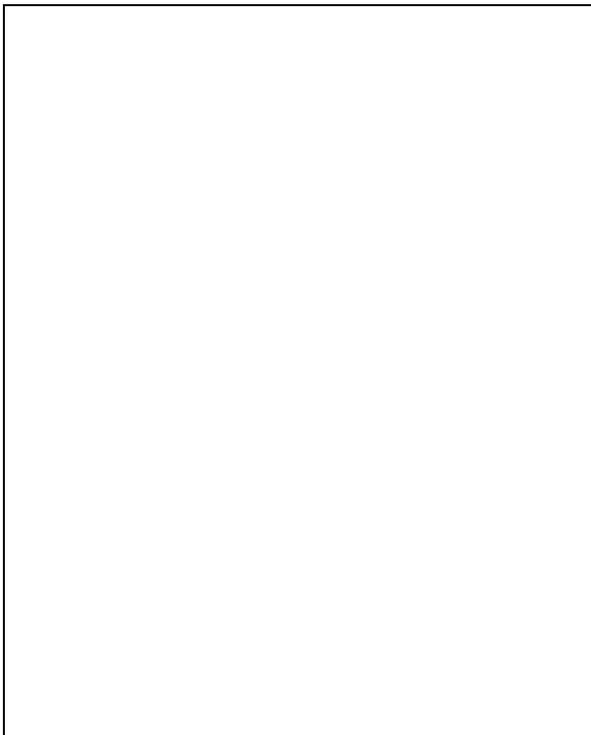
Hint: Listen closely- this bird has a flute-like bird call and may be perched on a fence post or tall grass.

27. Once you find the bird take a few moments to describe the following:

28. What patterns are on its wings and back? _____

29. What is it eating? If it's not eating, take a look at the beak, what does it look like? Based on the shape of the beak what do you think this bird eats? _____

Please draw or list any of the observations that you have made while walking to cache #5:



Congratulations!

If you found all 5 caches you have successfully completed the Louisville Open Space Davidson Mesa Multi-cache! Thank you for exploring this Open Space property and venturing into nature to learn and discover its wonders.