

Scat Dichotomy Key: *Michigan*

Developed by: Huron Pines AmeriCorps member Rachel Straughen est.2018



Q & A

- What is a dichotomous key?
 - *a tool that allows the user to determine the identity of items in the natural world, such as trees, wildflowers, mammals, reptiles, rocks, and fish. **Keys** consist of a series of choices that lead the user to the correct name of a given item. (https://oregonstate.edu/trees/dichotomous_key.html)*
- How do you use a dichotomous key?
 - *Start with #1, answer each question respectively until you reach a letter, the letter is the animal you are looking for.*

1. General Shape of Scat

a. Is the scat solid and/or dimensional? 

– Go to 2

b. Is the scat in a dried spray or fluid form (often light in color)? 

– Go to B

2. Nitrogenous (white) tip or color

a. The scat does have a nitrogenous tip/color

– Go to 3 

b. The scat does not have a nitrogenous tip/color 

– Go to 4

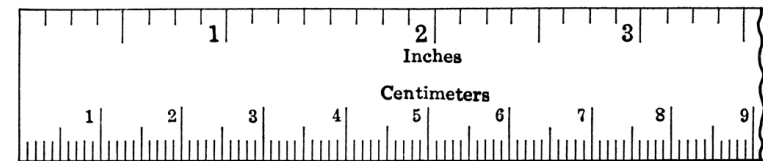
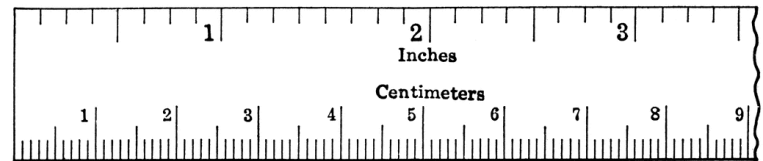
3. Size of Nitrogenous scat

a. Scat is $< \frac{1}{2}$ " long

– Go to E

b. Scat is $> \frac{1}{2}$ " long

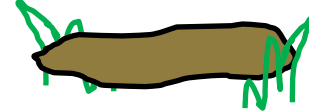
– Go to D



4. Location of scat

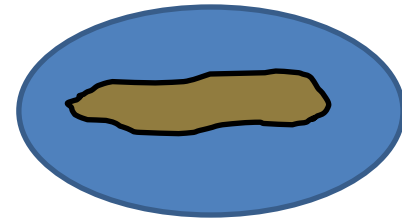
a. Was the scat found on land?

– Go to 5



b. Was the scat found in water?

– Go to C



5. General size of the scat

a. Is the scat $< \frac{1}{2}$ " and seed-like (pencil lead form)?



– Go to A

b. Is the scat $> \frac{1}{2}$ " and non-seed-like?

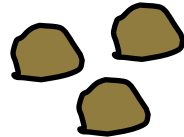


– Go to 6

6. Specific shape of scat

a. Is the scat in pellet form?

– Go to 7



b. Is the scat tubular?

– Go to 8



c. Is the scat in cord-form with nipple present?

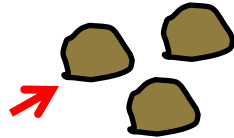
– Go to G



7. Pellet-form, Nipple presence

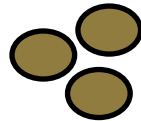
a. Does the scat have nipples?

– Go to 8



b. Is the scat smooth and round with no nipples?

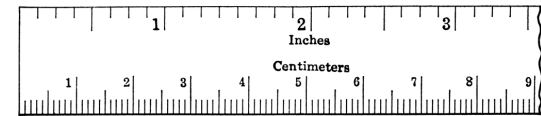
– Go to H



8. What is the length of the Scat?

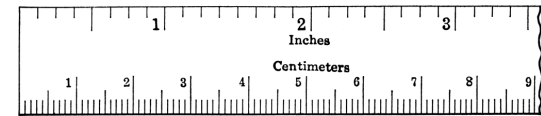
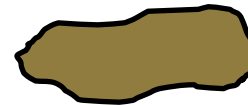
a. Is the tubular scat <1" long?

– Go to 10



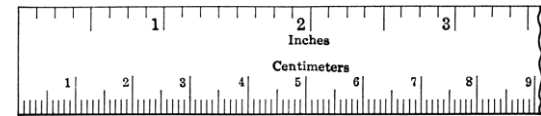
b. Is the tubular scat >1" long?

– Go to 11



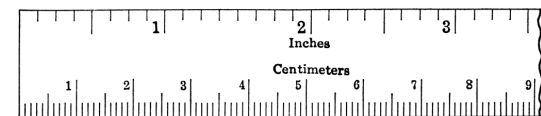
c. Is the pellet scat <1" long?

– Go to F



d. Is the pellet scat >1" long?

– Go to 9



9. Specific shape of pellet scat

a. Is the pellet more rounded?




– Go to U

b. Is the pellet more elongated?



– Go to T

10. Description of tubular scat <1" long

a. Is the scat rounded on both ends, semi smooth and appear dull? 

– Go to 12

b. Is the scat not rounded on both ends?
Irregular rough texture? 


– Go to 13

11. Description of tubular scat >1" long

a. Does the scat have flattened threads?

– Go to I 

b. Is the scat round-ish and not flat?

– Go to 14 

c. Does the scat look like large, thick cords with blunt ends?

– Go to V 

12. Composition of rounded tubular scat <1" long

a. The scat contains woody or nutshell fibers

– Go to J



b. The scat does not contain woody fibers

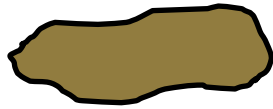
– Go to K



13. Composition of non-rounded tubular scat <1" long

a. Does the scat contain little to no insect parts?

– Go to L



b. Does the scat sparkle with insect exoskeletons?

– Go to M



14. End shape of tubular scat >1" long

a. Is the scat tubular and rounded on both ends?

– Go to 15



b. Is the scat tubular, tapered and pointed at one end?

– Go to N



c. Is the scat tubular and tapered at both ends?

– Go to 0



15. Composition of scat >1" long

- a. Hair, solitary piles, usually not covered, semi smooth, constrictions possible?
 - Go to P
- b. Usually covered, grouped, granular, even diameter, may have nuts, berries, corn?
 - Go to Q
- c. Not smooth, covered, insect parts possible, little or no plant parts, usually dark?
 - Go to R
- d. Non-distinctive, varies with food, usually smooth, Insect parts possible?
 - Go to S

A: Mouse



B: Songbird



C: Turtle



D: Snake



E: Salamander/Skink



F: White-tailed Deer



G: Frog/Toad



H: Rabbit



I: Weasel Family



J: Thirteen-lined Ground Squirrel



K: Tree Squirrel



L: Rats



M: Bats



N: Feline Family



O: Fox



P: Canine Family



Q: Raccoon



R: Skunk



S: Virginia Opossum



T: Moose



U: Elk



V: Black Bear



About the Creator:



Rachel Straughen is a Huron Pines AmeriCorps member serving for the Michigan Department of Natural Resources in Traverse City, MI for the year of 2018 as a Cooperative & Education Programs Developer. She holds a bachelor's degree from Michigan Technological University in Wildlife Ecology and Management. Rachel's AmeriCorps Site Supervisor, Project Learning Tree state coordinator and Michigan DNR Forest Resources Division Department Specialist, Ada Takacs saw the need for a dichotomous key and Rachel too had similar interests in the key via her time as an Explorer Guide in Michigan State Parks. We hope this helps in nature education efforts and that other organizations can utilize this key to benefit their programs.

To learn more about Project Learning Tree: <https://www.plt.org/>

To learn more about the Huron Pines AmeriCorps Program: <https://huronpines.org/amicorps/>

The End!

