

The Hills Above Possum Kingdom Nature Committee Newsletter Fall/Winter 2021

INTRODUCTION: It is Fall (well, it occurred on September 22nd and Winter begins on Tuesday, December 21). Your Nature Committee (Lynne Aldrich, Lynne Brown, Peter Gottschling, Wolf Patrick, Magyn Whittaker) are a little late in getting this edition out) but know you will enjoy it. Fall is a time when things begin to change - some birds leave and some begin to come in. Plants make their changes and wildlife continue to prowl. We are featuring the beauty, natural habitat, things to do and visit and just plain continue to enjoy The Hills Above Possum Kingdom - our wonderful community that offers some very unique surroundings that help us all in enjoying what nature has to offer.

SCAT: (Lynne Aldrich) Yes, poop is the topic here. While some of the things we see - the animals, the birds, the toads - can be identified when we see them. But each one has a different mark to leave when it comes to poop (scat) so we thought some helpful ways of identifying those mysterious patches found in our driveways, on our porches and all around our property might help in letting you know just what has passed by. Let's dispense with the **birds** by simply saying that normally what they leave behind are white patches (large sometimes) and well spread-out large patches at that white stuff. At nesting sites, they are easy to see with lots of poop all over the place. At times they are mysteriously just below a tree branch and can indicate perhaps a roosting owl. Unlike mammals, birds don't produce urine but excrete nitrogenous materials in the form of uric acid - a white paste (which is also difficult to wash away!!) and can be tubular shaped with a white tip. Turkey poop looks like this and note sexual dimorphism!!



FIG. 1. The five droppings left of center are those of female turkeys; the remaining four are male.

And then there are **toads** and **frogs** whose scat is huge compared to their size. The scat of these two species is very similar but because toads are nearly always bigger than frogs their scat will also be bigger. Some that we've found on our patio is huge and a mystery until we learned just what that stuff was and who was doing it. Those big piles of poop on your patio are very likely your toads and frogs just letting go.



Frog Scat



Toad scat

But mammals are another thing. Each scat is different and is composed of the eating materials of that mammal. So, let's tackle some of that scat!!

Feral Hogs - the bane of our existence out here and we all know what the damage they do looks like. But do we know what their scat looks like and how it is different from deer? Well, here it is - usually tubular filled with the mast crops and vegetation they eat and can resemble dropping from domestic dogs and horses. But because they are omnivorous their scat can make their ID difficult. In the picture on left you can see that the hog has been eating seeds and the one on the right probably less vegetation.



Hog Scat with seed



Hog Scat

Deer Scat

Note that **deer** scat can look similar but is smaller and rounded pellets while the hog is usually larger with irregular shapes.

As with hogs the deer scat (and most mammal scats) varies with diet and the amount of moisture in the diet - all dependent on the seasons and availability of foods. Deer are strictly vegetarian so their scat in the fall and winter become harder pellets that hold their shape longer.

Rabbits - you are probably going to see more rabbits than you do scat - even though they are known to poop up to 300 times a day!! Your dogs are more likely to find the poop than you are and could ingest their droppings to their detriment. Their poop is round and have a similar size and shape of garbanzo beans and are filled with plant and grass pieces and they can be lighter in color as the picture on the right shows.



Rabbit Scat

And then there are **rats** and **mice**. Lots of that poop around our house and for some reason usually around in corners or under our BBQ where it can pile up. The rats (most likely Southern Plains Woodrat) have tubular scat much longer than wide. They are about 3/4 inches long and 1/4 inches wide. Their scat is usually along their travel routes and around their burrows and nests. Mice on the other hand tend to deposit their scat in groups and in area that they explore - like in corners and dark places. They are smaller than rat droppings being about the size of a grain of rice and are smooth with pointed ends.



Rat Scat



Mouse Scat

Now to some of those more entertaining animals prowling around - Grey Fox, Coyote, Bobcat and Possum who tend to do their prowling at night time. The **Possum** scat is fairly large and can resemble dog poop being about one to two inches in length and 3/4 inches diameter and taper at the end with a tendency to curl at the end. They are smooth on the sides and tend to be brown in color. Possums will use the same site over and over again in feeding areas at the base of trees or near garbage cans.



Possum Scat



Possum Scat

Grey Fox are omnivorous so their scat will show signs of whatever it has eaten recently because many parts of their diet are not entirely digested so you might see hair and bones or seeds. The picture below is from our place and when enlarged appears to have seeds in the scat. Their scat is similar to a Coyote's but smaller. The color can be tan or brown, is tubular with pointy ends and is two to three inches long.

Coyote has a similar diet but as you can tell from the pictures below is larger than the Fox being about the diameter of a cigar and tapered at the end. Because the Coyote uses its scat to communicate, they frequently drop their load in the middle of trails (in our case in our driveway) or the borders of their territory. Coyote scat is usually darker in the winter because their diet at that time is more composed on non-vegetative materials and the blood in mammals eaten make for dark scat. The bones and fur of their prey are also usually easier to see than in a Bobcat.



Grey Fox



Coyote

Bobcat scat is about four inches long with a diameter of about 3/4 inches and is segmented with blunt ends. It is usually one long string with two or three shorter strings



Bobcat Scat



Bobcat Scat



Bobcat Scat

Because they have a good digestive system the scat is hard and doesn't compress easily that leads to a better inspection required to see the bones and hair and other diet materials that may be there. And just as Coyotes do they will mark their territory by pooping in the middle of a trail. It is difficult to tell the difference between Fox, Coyote and Bobcat scat but generally Bobcat scat is more rounded, sharply segmented and and less ropy that the other species.

And our name sake the **Possum**. Usually around one to two inches in length and 3/4 inches in diameter the droppings of the Possum are smooth on the sides and taper off towards the ends and are more curly than straight which helps in identification. They are frequently covered in white or yellowish mold growth but otherwise brownish in color. Their scat is similar to a dogs but tend to do their droppings in a pile with droppings continuous with a break in the middle. One of the most telling signs of a Possum poop is its smell - called an "unbearable smell". It urinates and poops at the same time an it's the ammonia in the urine that give it the awful smell.



Possum Scat (fresh l; old r)



Possum scat



Possum Scat with break in middle

All of the scat of these species will turn a light white when bleached by the sun so it is interesting to see this process take place as well.

And now for something really unusual - **Snake Scat**. Snake scat can be very similar to like sized carnivores being tubular and tapered at the ends. So, a small snake's scat can be only about 1/2 inches in length. Their waste is a mixture of feces and liquid so it can look white a little more liquid than a solid, but oblong droppings that have a white cap of urea. The scat will contain bones, teeth and feathers of what they have eaten. As it ages it will form a white crust of uric acid



Garter Snake



Snake pooping

From experience I know it can be frustrating to try to identify just what that poop we find is. But it is kind of fun with lots of things to learn and keeps us vigilant. Enjoy all the poop you find in The Hills!!!

A BRIEF INTRODUCTION TO OUR NEW WALKING TRAIL: (Lynne Brown) Take a stroll along our new walking trail this Fall and you'll be able to see a wide variety of trees, shrubs, flowers, and grasses that are native to The Hills. In fact, many of the species that early settlers found as they trekked through the Cross Timbers can be seen on your walk. Grasses such as Little Bluestem and Side Oats Grama, along with other native grasses, fill the open prairie areas. Trees found are Live Oak, Hackberry, Eastern Red Cedar, Juniper, Mesquite and especially Cedar Elm.

As you walk you will see Yaupon Holly in abundance, along with Prairie Flameleaf Sumac with their beautiful dark red fruits, Broomweed blooming with bright yellow flowers, purple Thistles, a field of Gayflowers, and the last of the Sunflowers and Snow on the Mountain. Near a low crossing filled with Cattails, look for an abandoned water trough – all signs of a natural spring hidden among the trees. These trees also are home to a variety of birds, so listen and see what you can identify.

There are plans for the trail to have benches, bird boxes, and identification signs for some of the trees and shrubs. Two additional trails have just been added that lead to the fishing pond. Wildflower seeds will be distributed, but we can hope that next Spring and Summer our open prairies will already be filled with Winecups, Indian Paintbrush, Indian Blanket and more.

To find the trail entrances, look for the Phillips 66 markers on Canyon Wren Loop. The trail begins and ends on the East and West sides of Canyon Wren and follows the old Phillips 66 pipeline. Soon there will be signs designating the entrances to the Walking Trail. Take your time, and enjoy all of the beautiful nature that The Hills has to provide.

WILL THE REAL CANYON WREN PLEASE STEP FORWARD: (Peter Gottschling) Canyon Wren Loop, Canyon Wren North, Canyon Wren South, what the heck is a Canyon Wren? Well, of course it is a bird. Wrens in general are birds with thin, slightly long, slightly down curved beaks that glean insects from around bushes and leaves and rocks. The most common wrens we have in The Hills are Carolina and Bewick's wrens. These two wrens sit up in bushes and tree tops in the spring and sing.

You may have noticed that we have a lot of rocks in The Hills along with rocky outcrops and dry cliffs. Well, the Canyon Wren uses these areas to find food instead of bushes and trees like the more common Carolina and Bewick's wrens and lack the white eye line of the other wrens. Canyon Wrens are slightly larger and rustier colored than Carolina Wrens and the grayish Bewick's Wren. They tend to flit in and out of rocky crevices and even under rocks if there is room. It is not unusual to see them climbing cliffs and the stucco walls on our back porch. We are on the eastern edge of their canyon habitat range but they are present in some areas of Palo Pinto County. Their long, sweet, loud, down slurred song echoing off the cliffs is unreal (see link at end). Besides the occasional bird here in our back yard you can hear them on the tall cliff below Palo Pinto Lake dam and even in the road cut going down the hill on highway 16

north toward Rock Creek bridge (where you might find some fossils in the freshly cracked rocks). Canyon Wrens get more common as you go southwest into the hill country and the mountains of west Texas. They occur from southern Mexico and western United States all the way up to British Columbia in Canada. Except in the high Rocky Mountains, they are permanent year-round residents in their range.



Canyon Wren songs and calls, note that the female has a different call which she responds to the male https://www.allaboutbirds.org/guide/Canyon_Wren/sounds

CLOSE PLACES TO VISIT: (Wolf Patrick) Most of us who live in The Hills, enjoy an out-of-doors lifestyle. One of the unique advantages of our location are the multitude of state parks that are in our general area. In this newsletter we will highlight just a sample of those in no specific order.

Palo Pinto Mountain State Park.

Up first is the exciting news that a new state park will be opening within the next year or two in our county. The town of Strawn will boast the rights to Palo Pinto Mountain State Park. This park is slated to be nearly a whopping 5,000 acres and is being developed from former ranchland. The park will have hiking, equestrian, and mountain bike trails. In addition, camping, RV sites and fishing will be available, and for the night sky enthusiast you will be able to do some great star gazing. Bird watchers will be able to

enjoy the many avian species that call the park home. Though the park includes Tucker Lake, motorboats will not be allowed. The park is still seeking donations to complete a visitor center and once open will be seeking volunteers to help at the park.

<https://tpwd.texas.gov/state-parks/palo-pinto-mountains>

Second up is Dinosaur Valley State Park.

This park is in Glen Rose Texas and of course the most interesting thing to do is look for Dinosaur tracks!! You can camp and picnic at this park. It also allows for mountain biking, hiking, and you can ride your horse there. You are allowed to swim at this park and fish. This park also offers geocache hunts; so, if you have young ones to entertain that may be something they could enjoy while there. In addition, this park has a store where you can buy souvenirs. There is also a link on their site to take a virtual tour of the park.

<https://tpwd.texas.gov/state-parks/dinosaur-valley>

Third on the list is Lake Mineral Wells State Park.

The Lake the park has is Lake Mineral Wells and spans 640 acres. This park has all the amenities that the above parks do. But it also has a few things the others do not. For instance, Rock Climbing is available; humorously at a location known as Penitentiary Hollow. Also, this park has an amphitheater that can be rented, screened in shelters and there are 20 equestrian campsites available. They also will rent you a flat bottom boat with a trolling motor and have other items such as kayaks. They will kindly allow you to borrow rods, reels and even tackle boxes.

<https://tpwd.texas.gov/state-parks/lake-mineral-wells>

Fourth up is Possum Kingdom State Park located in Caddo Texas.

PK State Park has the same amenities as our first two on the list but also allows for scuba diving and snorkeling. The park also has "Air Conditioned" cabins!! There is approx. 300 miles of shoreline to fish from and guess what – you don't need a fishing license to fish from shore in a State Park... who knew!?!? This park does have a store and you can rent supplies, boats, paddle boats, and oh yea, you can buy ice cream, sno-cones and souvenirs.

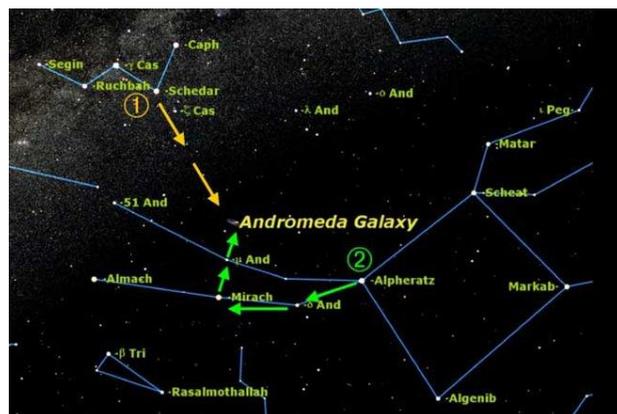
<https://tpwd.texas.gov/state-parks/possum-kingdom>

[It should be noted that due to the pandemic, park hours can vary so it is always advisable to call or check online to determine the availability of services and whether](#)

2021 FALL AND WINTER SKY OVER THE HILLS: (Peter Gottschling) The last of the summer Milky Way extends into the summer triangle (formed by the stars Vega, Deneb and Altair) and from there through seated Cassiopeia the queen. Towards the west do you see the bright Milky Way going through Cygnus the swan with the dark cleavage through the center? This truly is the absence of starlight. This patch of sky is obscured by a giant dust cloud between us and the Milky Way arm going through Cygnus. By about an hour or so after dark the beginning of the winter Milky Way has already risen in the northeast in Cassiopeia and Perseus (the hero who saves Andromeda, Cassiopeia's daughter, from Cetus the sea monster). Auriga (a large pentagram star pattern with bright Capella) and the Gemini twins following. An hour after dark the Pleiades rise out of the DFW light dome well enough to count the stars (do you see 5, 6 or 7?) you can catch Orion the hunter getting up an hour later. Look for his three belt stars and sword which is a large reflection nebula. He is followed by the one of his hunting dogs, Sirius, the brightest star in the sky. All these sights are best seen in the dark of the moon. This year that will be in the range of Oct 29-Nov 10 and then Nov 25 (if you can stay awake after all that turkey) to Dec 10. Don't forget to turn back your clocks to standard time on Nov 11.

Speaking of the moon, during the full moon on the early morning of November 19, we have a partial lunar eclipse. It starts around 1:30 AM and reaches peak eclipse of about 98% about 3 AM.

Do you see the big square of Pegasus almost overhead in the southeast after dark? The brightest star in the square, Alpheratz in the lower left corner (alpha (α) Andromedae), is the starting point to find the fuzzy glow of the Andromeda galaxy. Or, if it is easier for you to locate Cassiopeia, the chart below shows how to find the glow of one of the closest galaxies to the Milky Way and it is the other gravitationally large galaxy in our local group. With your eye you are looking 2.8 million light years into the past!



<https://www.space.com/7426-starhopping-101-find-andromeda-galaxy.html>

The Andromeda galaxy and our Milky Way galaxy are being inexorably drawn to each other by gravity. They are predicted to collide in about 4 billion years from tonight. About the same time our sun starts turning into a red giant and consuming the earth.

If you have a small telescope or binoculars, you may see this in your view of



Andromeda.

<http://earthsky.org/?p=2848>

Hard to believe, but the Andromeda Galaxy covers at least 3° of sky. That is 6 times the size of the full moon.

Another large bright galaxy to test the darkness is M33, the Triangulum Galaxy. In very dark skies this galaxy, just a few degrees south of the Andromeda galaxy, also shows a dim glow but I have never spotted it here without binoculars. How dark is our sky in The Hills? Not as dark is it could be if everyone here and in nearby PK (and the oil rigs and tank farms) shielded their outside lights to only shine down on their property and not up to brighten the sky and dim our view of the stars.

Binoculars are a great way to get people interested in astronomy. You can see hundreds of bright objects in the average pair of 7x35 or 8-10 power binoculars. The better models have a wider field of view and are still reasonably priced. A good pair of binoculars is a much better investment to enjoy the night sky than a cheap, rickety telescope from a discount store. The only other tools you will need to navigate the sky are a sky atlas and planisphere to see what are coming up in the sky. You want a planisphere that covers the range of about 30-45 degrees north to see the sky like it is in The Hills. If you are not that retro you can see star maps on the internet. The best free one for your computer is Stellarium <https://stellarium.org/>. There are free and pay versions of SkySafari and others for your phone and iPads. I use Sky Safari Pro which also controls my telescopes.