

SPRING-SUMMER NEWSLETTER - 2023

GREAT TO GET OUT INTO NATURE AND ENJOY THE HABITAT AND WILDLIFE WE HAVE HERE IN THE HILLS!! When stress begins to get you down it may just be the time that you step outside your front door, watch and listen to what is going on around you and begin to familiarize yourself with all that we in The Hills have available to us. Birds, plants, insects, snakes (yes, snakes) and all the animal wildlife that we can hear and sometimes see. And listen – you will hear the birds, you will hear the coyotes, you will hear the crickets and all of the other wildlife sounds that make our serene setting.

A wonderful article shared with us (**Therapy With Birds: Meet Holly Merker**) <https://blog.mybirdbuddy.com/post/therapy-with-birds-ornithery> tells a story of one person's experience in healthy recovery and living through birdwatching and her book on Ornithery - defined as "**mindful birding**, ornithery is a **ground-breaking approach** to connecting with birds and nature whilst paying no heed to all the other thoughts clamoring in our heads."

Having just returned from trips designated for watching birds and wildlife, I can vouch for the importance in my own life to this life long love of bird watching. I return from each trip and each day of watching with concentration on what is occurring around me with renewed energy and vigor and a more relaxed outlook on life.

The birds began to migrate into our habitat (mostly for breeding) the end of April. This time of year brings lots of birds that are just great to see. So, go out and begin to learn and see new things on your own – taking the time to let all that surrounds you absorb you in new wonder. Enjoy this issue of the Nature Committee's (Lynne Aldrich, Lynne Brown, Peter Gottschling, Wolf Patrick, Magyn Whitaker) Summer/Spring 2023 newsletter edition

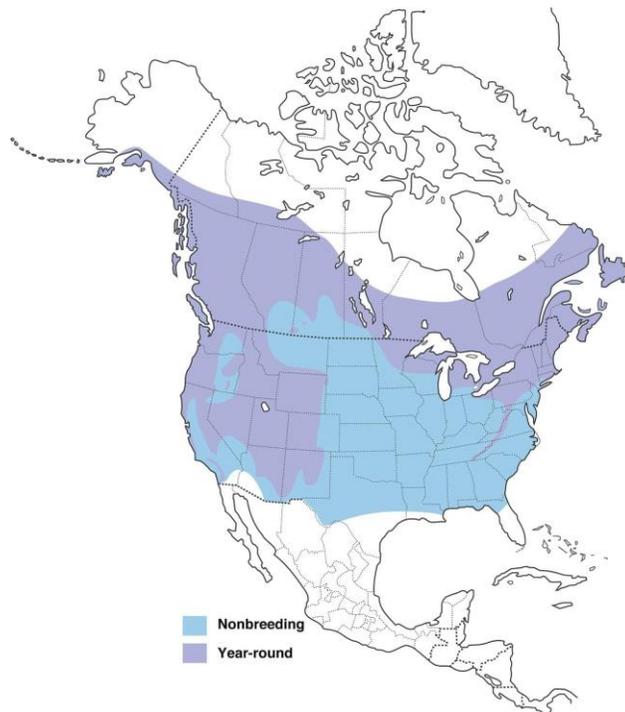
RED-BREASTED NUTHATCH (Lynne Aldrich)

While this bird is not a Spring/Summer visitor it represents something that we should all be on the look out for each day we venture out into our yards and the surrounding areas here in The Hills – something new and not seen before here or by you. This bird was seen during the winter months at our neighbor's place right here on Balcones Lane and added a new species to our Hills bird list. It hung around for several days before parting on its journey southwards – one of the early migrants that might be about.

It often comes to bird feeders (and this one did) but it loves to stick to tree trunks and limbs where it climbs up and down in search of burrows of insects. It has a very distinctive yank-yank call – sounding almost like a tiny tin horn.



You won't find it nesting here but it is one of the many migrants that can pass through here in The Hills – something to always be on the lookout for.



You can see the range map of this bird above and note that it is a non-breeding migrant in the Northern part of our state. That said – it is not a common bird to see anywhere making it all the more exciting to have it found right here The Hills.

Spring bird migration is in nearly full swing now. The Red-breasted Nuthatch is NOT one of those birds but the birds we are seeing now certainly are. In Palo Pinto County alone just over two million birds migrate over our night sky. Some will land here, some will continue on. So, the Painted Buntings, Scissor-tailed Flycatchers, Dickcissel, Chuck-wills Widow, White-eyed Vireo and Cattle Egret are some of those we are now seeing and enjoying. The birds usually begin to migrate, coming from the South, 30 –

45 minutes after sunset with the greatest number beginning a couple of hours after that and can be up to 10,000 feet overhead but weather conditions and seasonal timing can affect that height. They will ground themselves during the early morning hours and those not staying will continue on. The same pattern will replicate itself in the Fall/Winter (which is when the Red-breasted Nuthatch will be in flight). So, enjoy this migrating season as well as those nesting birds that the migration will be bringing in.

BARN OWL (Peter Gottschling)

If you have been to the fish pond lately you may have noticed a big white bird house on a cedar pole (and maybe three blue bird nest boxes also). This is a Barn Owl nest box (thank you Nate for providing muscle and running the post hole auger). The Nature Committee wants to attract a barn owl because they are some of the best rodent (mice, voles and rats) catchers around. When the nest is occupied, you can watch the box from your car and you will see the barn owl emerge after sunset and come back to the box probably before sunrise (the same schedule as a vampire that sucks mouse blood). We know there are barn owls in the area because a few years ago they nested on one of our neighbor's balconies only a few hundred yards from the fish pond. I hear them screeching as they fly around while I am up in the observatory at night and in April 2018 a barn owl was photographed by our game camera as it flew by. You might also know the box is occupied if you see pellets around the box. Owls eat their prey whole and regurgitate the skin and bones in a pellet.

Barn owls are about 15-16 inches long and have a wing span of about 42 inches. They are very pretty with their heart shaped concave white face and orange tan body. They hunt in the dark almost exclusively by sound. They can hear a mouse's footsteps under tall grass a quarter mile away. The concave face works like a parabolic microphone dish that gives the barn owl superb hearing. Their ears are inside the feathers of this dish and to make them even more sensitive to triangulate sounds, they are different shapes and heights on each side of the head. Barn owls catch 4 or 5 mice a night and probably more if they have several owlets to feed.

Barn owls nest in tree cavities, caves and crevices, abandoned buildings, open deer blinds, barns and of course undisturbed shaded balconies and barn owl boxes. Barn owls need about 40 acres of good ungrazed grassland to support a breeding pair so the area around the fish pond should be very productive. They usually lay 4-7 eggs and more if food is plentiful. They seem to have the ability to vary their egg laying time of year to coincide with the most abundant food source and can have two or three broods a year in warmer climates. After the first egg is laid another is laid every 2 or 3 days and the female starts incubating after the first one. Incubation is about 30 days but since the egg laying is staggered so is the hatching and in lean times the last birds to hatch may not get enough food to survive. Young birds can start to fly at about 50-55 days old. About 75 percent of young barn owls don't make it past their first year. Adults can live another 2-4 years. The males bring prey to the females on the nest and she tears it up for the chicks. After about two weeks the oldest birds can swallow prey whole and at this

time the female may also start hunting again. During nesting the male will roost in a nearby tree during the day so if you are lucky, you might spot one around the fish pond.



Barn Owl nest box
(Nate thinks the bright yellow will attract a barn owl)



Barn Owl nesting on neighbor's balcony, probably the male

BROWN HEADED COWBIRDS (Lynne Aldrich)

People have been asking about Cowbirds – noticing they seem to be increasing and what we can do about them. This Cowbird is a black bird, not the white egret that hangs around the cows!!!

Cowbirds are native to North America and generally are considered a nuisance bird because they will lay their eggs in the nest of other birds and work to destroy the eggs of other nesting birds. This activity has led to a loss of other species as this species continues to gain ground.

So, what is their history? As a native, they are a part of the amazing diversity of wildlife that we have. BUT they are opportunistic birds and have adapted to human activity to expand their range over time. They evolved to follow herds of grazing American Bison across the country and now follow cattle and live in most of the country. They developed a symbiotic relationship with the grazing Bisons originally. The bison kick up insects as they graze that the Cowbirds took advantage of. Because the Cowbird spent most of its time following the herds, they had little time to expend the energy needed to nest. SO, they began to develop the idea that they simply lay their eggs in the nest of other birds and work to destroy the eggs of other nesting birds as they moved on, thus releasing themselves from the need to hang around to bring the hatchlings to life. As people began to expand their own range, they cleared forests and expanded their cattle herds and agriculture fields. The nest parasitism allowed the Cowbirds to expand their own range and are now fully established across the country. Now we are seeing the Cowbirds more and more as our own habitat here in The Hills changes.

It is estimated that Cowbirds now parasitize nearly 220 bird species in their range and can lay up to 30 eggs in any given season. They usually lay one to two eggs in a nest and often the egg of the Cowbird is bigger than that of its host bird and they will often remove eggs of the host bird when they lay their own egg. They have also adapted to hatching earlier and they are usually larger than the host chicks and develop faster. As a result, the chicks of the host bird lose out in the feeding and squabbling that goes on in a nest.

One of the best things to do to help in preventing the Cowbird from laying its egg in a host nest is to be ever vigilant and chase the Cowbird away. There have been different ways suggested for chasing them with most not being all that feasible in our neighborhood! Its best actually to try to maintain a habitat that does not attract them. The short grass prairie was (and remains) an ideal place for Cowbirds. They like fields, meadows and lawns. Some of the dense brush and trees we have here in The Hills are **not** to their liking BUT, as more land is cleared and mowed the more habitat we give to the Cowbirds.

At our feeders the Cowbirds will be attracted to sunflower seed, cracked corn and millet so best to use Nyjer seeds, suet, nectar, whole peanuts, or safflower seeds instead. If

you're feeding the deer, you are probably using cracked corn so you are going to be feeding the Cowbirds too!!

As Spring comes here in The Hills, we are beginning to see our Spring migrants and those birds who will be breeding here. Our Painted Buntings, Eastern Phoebe's and all of our Vireos (White-eyed, Black-capped), Summer Tanager, Cardinal – every small bird you see will be trying to nest with us and those Cowbirds growing in population will have an impact on that nesting success.

Trying to keep the Cowbird away is going to be tricky. Making certain you don't encourage them with feeding things they like, keeping the ground around your feeders and other areas clear of other seeds, keeping more natural habitat around you are all ways to help in deterring them. Loud noises might drive them away but then that may drive the other birds away. But be aware – because Cowbirds are a native bird, they are protected by the Migratory Bird Act so even removing an egg from the nest of one of its host birds is a no, no – unless you have a permit to do so.



Cowbird eggs can resemble other bird species eggs but are larger. It will probably be after hatching that you might see whether you have a nest with a Cowbird in it. The Cowbird will be larger than the others hatchlings and will beg vigorously – exposing a bright red gape (a brightly colored area that is in the corners of the nestling's open mouth). It is a dull gray-brownish in color and can appear as large as a starling as it grows – which means that the poor host bird is often feeding a hatchling bigger than itself.

The best way to keep Cowbirds away is to be pro-active. Keep nature as natural as possible and don't create habitat that is their best friend. Once they are here there are no really good reactive ways to control them.

ALLERGIES IN TEXAS (Magyn Whitaker)

Allergies affect more than 50 million people in the United States. Texas's allergy season begins in September and is followed by a dry winter. It has terrible allergy levels due to climate cycles and weather patterns.

For some people living in this state, allergy season can be a painful time of year. Texas is 'special' (and not in a good way) when it comes to allergy season. We have this phenomenon all year round.

Why Are Allergies So Bad in Texas?

In most parts of the country, the allergy season is limited to the spring, when pollinating plants release the microscopic pollen dust that irritates sinuses and turns eyes watery and red. But once the spring turns to summer, and the pollination season is over, the allergens largely disappear. Not so in Texas.

As it turns out, one of the big reasons why allergies are so bad in Texas is the heat. But it's not those blistering summer days that are to blame. Rather, the state's relatively mild winters create the perfect environment for year-round allergens. Texas' mild winters allow for year-round plant growth, which means plants can pollinate throughout the year. While other parts of the U.S. are experiencing frigid temperatures that turn vegetation dormant, some Texas plants are undergoing another season of pollination. In fact, winter is one of the worst times of the year for allergies in Texas.

Houston, McAllen, and San Antonio are a few major cities in Texas with high allergy levels. However, Texas seasonal allergies affects the entire state and tens of thousands of people. As we, residents of The Hills, can certainly attest to.

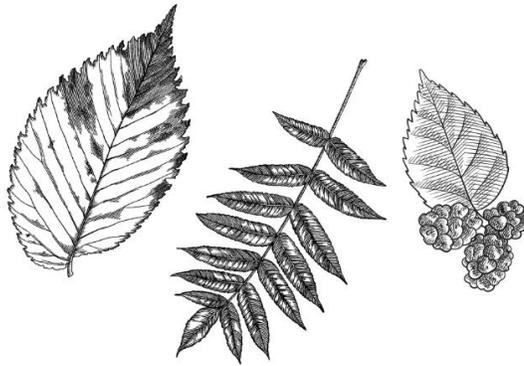
Texas' Allergy Season Calendar



November to February: Mountain Cedar

This allergen is particularly acute in Central Texas, where mountain cedar is plentiful. Additionally, since the pollen is small, light, and can travel hundreds of miles, it's difficult to avoid.

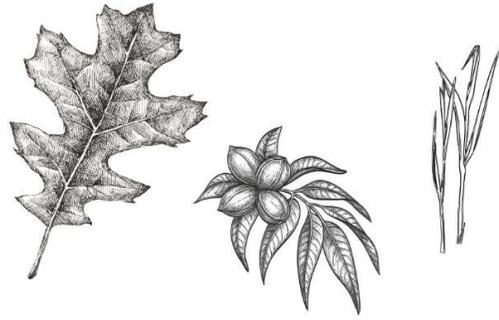
Symptoms: The pollen from these common trees can lead to itchy, watery eyes or a runny or stuffy nose and sneezing.



January to May: Elm, Ash, and Mulberry

Right as the mountain cedar season is wrapping up, Texans get hit with a trio of new allergens: elm, ash, and mulberry.

Symptoms: These three trees produce pollen that can lead to sneezing, wheezing, and asthma-like symptoms.



March to May: Oak, Pecan, and Grasses

Springtime adds oak and pecan tree pollen to the mix, as well as pollen from grasses, such as Bermuda, Johnson, and Kentucky bluegrass. Because grasses are so plentiful, this can be a particularly irritating time of year for anyone sensitive to grass.

Symptoms: In addition to the typical runny nose and watery eyes, grass allergies can lead to a sore throat and asthma-like symptoms.

June and July: A Brief Respite

The summer months offer a trade-off: blazing heat for allergy relief. By June and July, the most common sources of allergies have stopped producing pollen, and pollen counts drop.



August to November: Ragweed

In August, a new and notorious allergy culprit arrives on the scene: ragweed. Ragweed is a soft-stemmed, flowering weed that is populous in the tropical and subtropical regions of the Americas. It is particularly plentiful in the southwestern

U.S. Other prevalent allergens this time of year include dust mites and mold spores — but those are also present year-round.

Symptoms: Ragweed season brings with it runny noses, sneezing, itchy eyes, and — at its worst — asthma flares.

By the time the ragweed season begins to taper off in November, it's time for the mountain cedar to come back into bloom, and the Texas allergy season calendar restarts its ruthless cycle.

How to Avoid Irritating Allergy Symptoms:

If you suffer from allergies, there are many ways to treat your symptoms besides suffering through the pain and hoping it goes away. You can frequently clean your home to ensure there aren't any microscopic allergen particles, take over-the-counter medicine recommended by a doctor, or flush your nasal cavities with saline or a warm saltwater solution.

Natural Ways to Treat Allergy Symptoms:

Stay indoors on dry, windy days. The best time to go outside is after a good rain, which helps clear pollen from the air. Avoid lawn mowing, weed pulling and other gardening chores that stir up allergens. Remove clothes you've worn outside and shower to rinse pollen from your skin and hair.

The Best Foods to Help You Fight Allergies:

Yogurt and food with live cultures. Even though studies have not specifically targeted which probiotics and other “good bacteria” combat allergies, studies have shown probiotics may be a promising boost for allergy prevention and treatment. Studies have also shown probiotics and “good bacteria” help regulate and strengthen your immune system as “good bacteria” and flora in our bodies can affect our immune responses positively.

Turmeric. Turmeric is commonly thought to help with allergies because it contains curcumin. Research has shown curcumin can stop the production of some inflammatory molecules in mice. One study even suggests that humans might reduce allergic rhinitis symptoms with daily turmeric consumption.

Apples. An apple a day may actually help keep allergies away because apples are high in quercetin. Quercetin is found in other foods such as berries, capers, grapes, cabbage, cauliflower, onions (especially red onions), shallots, tea and tomatoes. Quercetin can help the body fight allergies because of its anti-inflammatory, antioxidant and antiviral properties.

Fish. Omega-3 fatty acids are found in two common fish: tuna and salmon. The omega-3 fatty acids in these fish may help protect against inflammatory conditions such as allergies. Omega-3 fatty acids can also be found in walnuts and flaxseed.

Nuts. Almonds and cashews are both high in magnesium. Magnesium, one of the most abundant minerals in your body, helps reduce inflammation and stress, as well as regulate blood pressure, nerve transmission and insulin metabolism. Other foods high in magnesium include wheat bran, kelp, legumes, fruit, fish and meats.

Oranges. The vitamin C in oranges can enhance the immune system. Vitamin C largely is used to prevent the common cold, but the intake of all types of nutrients also can be used to strengthen the immune system against allergies. Other foods high in vitamin C include broccoli, strawberries and red peppers.

And my favorite....local honey!! The theory behind eating local honey for allergies is like the idea behind allergy drops and injections: Consuming local pollen allergens in honey will help build immune system tolerance to these pollens.

It seems reasonable in theory (and quite tasty), but the concentration of pollens in honey is much less than that needed to induce immune tolerance. The specific benefit of using local honey for allergies is a myth. However, various kinds of honey from different plant sources have been found to contain quercetin, which can boost health and disease resistance.

While there is no 'cure-all' for allergy symptoms, at least we have an understanding of things and practices we can utilize to minimize the misery that comes with our year round allergy seasons. Cheers to living in the Great State of Texas!!

LET'S TALK ABOUT DANDELIONS (Wolf Patrick)

There is always a question and debate amongst us humans when it comes to our lawns.... keep it or kill it? So, let's explore some of the reasons to keep this particular plant (actually an herb), and consider safe ways to ecologically rid yourself of it if you feel you must.

First a little history. They were named after lions because of their lion-toothed leaves. This morphing plant has been around for approximately 30 million years and has many more beneficial properties than the average person may be aware. A neat saying, I ran across – you can look at a field of daisies and choose to see a field of weeds, or a field of wishes. This goes along with that childhood habit of making a wish then blowing the seeds of the puff ball (that daisies turn into) into the wind. Ever heard of wishing on a star? Well, there is another saying that the daisy represents three celestial bodies: The yellow flower represents the sun, the puff ball represents the moon, and the blowing seeds represent the stars. Now you know why we make a wish and blow the seeds into the wind (wishing upon a star). In general, dandelion seeds can redisperse up to five miles.



Why are dandelions important to us as humans?

Let me count the ways. This herb packs more vitamins, minerals, and medicinal properties than most vegetables you eat. The plant contains more vitamin A than spinach, more vitamin C than a medium sized tomato, and is called a powerhouse of iron, calcium, and potassium. Holy Popeye!

In Victorian times the very wealthy ate dandelions in their salads and sandwiches because the leaves stimulate digestion and act as a diuretic, whereas the root removes liver and gallbladder toxins. Overall, the plant boosts the immune system. Its Latin name *taraxacum officinale* means remedy for disorders.

So, what about that dreaded dandelion in the lawn?

If you are like my husband, if it isn't bought in a nursery "it's a weed!" However, I can tell you that many store-bought flowers and plants started out in nature as so-called weeds. This herb pops up where soil is highly compacted, giving you a clear indication of the health of your soil. But it doesn't just say *hey I am here because your soil can't breathe*, it also says *I am going to help you with that*. The rooting system extends up to 15 feet, which is why the Chinese called it the earth-nail, and drives deep into the compacted soil, forcing aeration while pulling calcium upward, which would otherwise have been unavailable to other plants whose roots are less extensive. It acts as a natural fertilizer for your grass, and as a good steward of the land is one of the first to establish themselves in fire disturbed areas and barren habitats.

Pollinators benefit greatly from the dandelion, especially bees. As one of the first flowers to bloom after winter, bees rely on the pollen it produces to survive that still coolish period, before other flowers become available. Incredibly, the seeds and leaves feed over 30 species of birds and other wildlife. Its early spring appearance supports other key ecosystem species like butterflies, moths, and birds, which then give us a helping hand by pollinating (or redistributing) fruits, vegetables, herbs, and other flowers that feed even more species, including us!

So, let's say you are still not sold on that dandelion in the lawn.

First, be aware that herbicides used to kill dandelions take a horrific toll on wildlife. It is estimated more than seven million birds die annually from the use of lawn pesticides. Americans are estimated to use 80 million pounds of pesticides on an annual basis, to prevent weeds in their lawns. The U.S. Fish and Wildlife Service reports that “homeowners use up to ten times more chemical pesticides per acre on their lawns than farmers use on crops.” That’s saying a lot. In addition, these pesticides wreak havoc on mason bee populations, because they seep into the ground where they build egg chambers for their young.

But let’s say you are still convinced that the dandelion must go! There are environmentally safer ways to go about it. One simple solution is to let the grass grow 3 or 4 inches tall to shade out sun-loving dandelions. Other options include neem oil, vinegar, and Epsom salts (my grandmother said it cured every problem) but is definitely good for feeding the lawn. Best of all, these alternatives will not harm the bee populations.

What about fruit trees, vegetables, and landscaping flowers?

Though neem oil is great for these items, if you decide to use a commercial pesticide on fruit trees, vegetables, or landscaping plants, consider looking for a product with a “Protection of Pollinators” section on the label which will provide information on the toxicity of the product to bees. That at least will give you more information by which to compare pesticides, along with their ecological effects. You can also reduce exposure to the pesticide by treating plants late in the evening when bees are less active.

When bees can foray in a highly diverse population of pollen/nectar sources, they are much healthier; and bees are in great decline. So, after the dandelions have fed those brave early spring bees, you can squeeze out dandelions by planting flowers in bunches. If you want them gone altogether, plant perennial flowers in clumps which will out-compete the dandelion. Planting in clumps also makes it easier for the bees to hover from one flower to the next without having to expend so much energy searching.

Have a dandelion day!!

THE 2023 SUMMER SKY NIGHT AND DAY (Peter Gottschling)

I will start with the biggest event first which is a partial solar eclipse on Oct 14 starting at 10:21 AM in Graford. If you plan on watching you **MUST** be wearing eclipse glasses which you can order here [earthskystore eclipse glasses](#). Save your eclipse glasses for the April 8, 2024 total solar eclipse coming to our area. Sun glasses do not block the intense light looking directly at the sun and will damage your eyes. The Hills is still a couple hundred miles from the center of this eclipse which is an unusual Annular Eclipse. The direct path of this eclipse is a 150 mile wide swath that starts in Oregon and runs through Albuquerque NM and leaves Texas near Rockport. Annular eclipses happen when the moon lines up in front of the sun but is too far away from the earth to cover the sun completely and leaves a ring of the sun around the outside of the moon.

In The Hills we will only see a partial eclipse that will obscure about 83% of the sun's surface. On the USNO navy website there is a computer that lets you figure out exactly the times of eclipses wherever you are <https://aa.usno.navy.mil/data/SolarEclipses>. Note that to figure out local times for CDT you must subtract 5 hours from Universal Time given by the USNO computer. So doing that from the chart below you see that the eclipse starts in Graford at 10:21 AM, maximum eclipse is 11:50 AM and the eclipse ends at about 1:27 PM. Lynne and I plan on being in the middle of the eclipse path on a ranch near Eldorado TX. If you want to see the actual annular eclipse here is some information on how to get to the path center at [earthsky eclipse info](#) . A few Texas cities where the annular eclipse will be visible for over 4 minutes are Andrews, Alice, Big Spring, Corpus Christi (5 minutes 2 seconds), Kerrville, Midland, San Angelo and San Antonio. I hope you have a sunny day wherever you are during the eclipse.

The screenshot shows the 'Solar Eclipse Computer' interface for the 2023 Solar Eclipse on October 14. It provides specific data for Graford, TX, including the start, maximum, and end times in UT1, along with sun's altitude, azimuth, position angle, and vertex angle. Summary statistics like duration, magnitude, and obscuration are also listed.

Solar Eclipse of 2023 Oct. 14						
Delta T: 72.5s						
Sun in Partial Eclipse at this Location						
Graford, TX						
32.94° N, 98.25° W						
Height 150m						
Phenomenon	Day	Time (UT1)	Sun's Altitude (°)	Sun's Azimuth (°)	Position Angle (°)	Vertex Angle (°)
Eclipse Begins	14	15:21:47.4	31.1	126.1	308.0	351.3
Maximum Eclipse	14	16:50:22.5	43.7	148.9		
Eclipse Ends	14	18:26:52.1	48.8	183.0	140.7	138.4
Duration					3h 05m 04.7s	
Magnitude					0.885	
Obscuration					83.5%	

Here are some visual highlights of the night sky this summer.

June – Sunday the 4th is full moon and the new moon is Sunday June 18th. The summer solstice is Wednesday June 21. Mercury, Venus, Mars and Jupiter will be visible during the summer evenings or early mornings.

July – Full moon Monday the 3rd and new moon Monday the 17th. Jupiter will be just 2 degrees south of the moon on the 11th.

August – Full moon Tuesday the 1st and new moon Wednesday the 16th a second full moon falls on the 30th making it a blue moon. The Perseid Meteor Shower peaks the night of the 12th and morning of the 13th. It should be excellent viewing as the waning moon sets about 1:30 AM on the 13th near the peak of the shower. If you like moon pairings. The bright red star Antares in the constellation Scorpius will be about 1 degree south of the moon Thursday night the 24th.

September – The [Zodiacal Light](#) will be visible in the east before morning twilight for the first two weeks of the month. Since it was just full moon on Aug 30th you should probably wait until closer to the new moon which is the 14th for it to be dark enough to see the zodiacal light. The moon will be paired with the [Pleades](#) as close as 1.2 degrees the evening of the 5th. The bright red star Antares will again be 1 degree from the moon on the night of the 20th and morning of the 21st. Full moon is the night of the 28th.

October – The moon and the [Pleades](#) will be paired again on the night of the 3rd. Starting Thursday the 12th the [Zodiacal Light](#) will be visible in the east before morning twilight for the next two weeks and it should be favorable since new moon is the 14th. Full moon is Saturday the 28th.