

**Nature Committee Newsletter**  
**Spring/Summer 2017**

**INTRODUCTION** It is officially Spring and this is your Nature newsletter for the Spring/Summer season – put together jointly by your Nature Committee (Lynne Aldrich, Lynne Brown, Sherri Davis, Terry Davis, Peter Gottschling, Wolf Patrick, Colleen Stegall). We already are Eastern Phoebe nesting on house and Barn Owls taking neighbors (giving themselves mice, rats and rabbits littering keeping a wary lookout!!!



seeing breeding birds in action. the front porch of Peter and Lynne's over the patio of one of our away first by the array of dead the patio floor). The sentry Owl is

This newsletter features incredibly interesting and earlier history of The Hills – development that is taking land manager tells us a story of how the property was used, some of the natural aspects of it and some hidden secrets. As always, we provide some information on other species of interest we live amongst and our astronomical article this time pointing out the importance and significance of having dark skies so that we can better enjoy the magnificence of the milky way and other features that shine upon us. We hope you enjoy this quarter's as always informative and fun newsletter.

**Early History of The Hills (by Lynne Brown)** - The land that became "The Hills Above Possum Kingdom" was owned by John P. Ritchie of Mineral Wells. His properties included several tracts of land, including a much larger ranch near Brad, Texas.

**Leo Cougar**



This story begins in 1985, when Ignacio Pedraza, Sr., 27 years old, became ranch foreman of the property. The ranch land was leased to Guy Winifred Cougar, a cowboy whose family were some of the first settlers in the Possum Kingdom area. In fact, the Pickwick-McAdams Cemetery, near the intersection of FM 2353 and Park Road 36, contains its first marked grave- his grandmother, Mary M. Cougar (1850-1889). When Ignacio became foreman, the ranch was much larger than "The Hills" is today - extending across the Brazos River and

including the land that is now the high fenced ranch bordering Rock Creek, Highway 16S and Loop 533.

Ignacio began working on the property after working at a business in Austin. His dream was to do ranch work, and with the help of a friend he obtained his new position as foreman of the Palo Pinto County ranch. Ranch headquarters was located on the “lake” side of Highway 16 (then a small road), directly across from the “hills” side construction site.

It consisted of a small ranch house, where Winifred Couger and his wife Leo lived. Ignacio and his family lived in a mobile home near the ranch house. His children attended school in Graford. There were also numerous corrals, a large barn, and

**Ranch House**



**Mobile Home**



scales for weighing cattle. Ignacio’s duties included raising cattle, roping, horse breaking, brush clearing and fence mending. He supervised “controlled burning”- only when the Spring grasses first emerged- to create clear grazing land. On weekends, 13 or so cowboys would arrive to help with the cattle. When he was working on his own, Ignacio had 2 dogs trained to herd and round up cattle throughout the ranch. The “hills” side of the ranch was where the cattle, Black angus, grazed. Numerous cattle pens and feeders dotted the area. Before Ignacio’s time, goats were raised in this area as well, but were discontinued due to extreme loss from predators. Horses were kept in a pasture near the Ritchie cabin.

The landscape of the ranch was considerably different than it is today. Below our



Pond below Clubhouse



Ignacio at big rock near clubhouse



View from Clubhouse

clubhouse was a large pond, which supplied the only water to the ranch headquarters. There was no well or running water from the county. Several other ponds dotted the “lake side” of the ranch. The only roads throughout were those that Ignacio and his son, Ignacio Jr., created by chopping down cedar and brush where needed. On the “hills” side, cattle were watered in concrete watering troughs, filled with natural spring water. As described by Ignacio, one spring was located in the creek valley between Enchanted Rock and Canyon Wren Loop. Another was at the base of the “mountain” at the bottom of the steepest Canyon Wren Loop hill (behind the Snyders).

Years ago, the ranch was covered with cedar and juniper, but also by many taller hardwood trees. Ignacio and his son remember another huge fire that blazed through the ranch 20-25 years ago, destroying many of the larger trees. Deer, bobcat and mountain lion were more numerous in those days. They also have memories of exotic



Aoudad Sheep



Fish from lake



Rattlers!!!

game wandering onto the ranch, including a large curved-horn Aoudad sheep and a gigantic **black and orange striped Siberian tiger**.

Life on the ranch was tough, but Ignacio Jr. and his brother and sister spent lots of time exploring the area. The ponds were full of fish and Jr. spent much of his free time

fishing the lake and ponds. He gathered “oysters” along the shoreline for his dad to cook. He and his friends swam in Rock Creek cove. He also raised animals (particularly one bull) to show for his AG class in Graford.

The developer of “The Hills” did change many aspects about the original ranch, but on close inspection we can still discover remains from ranch life in years past. Just take a close look!

This article couldn’t have been written without a most informative interview granted by Ignacio Sr. and his son. They generously spent time with me, sharing photographs and stories about their life on the ranch. Both now continue to work in the area and operate Pedraza Ranch Work and Custom Fencing. Just about anything you need done on your property they can help you with that task. Contact them at 940-456-0298



Swimming off of Frog Branch



### **Western Diamondback Rattlesnake Characteristics (by Sherri & Terry Davis) -**

1. The western diamondback rattlesnake is the most widespread venomous snake in Texas. Although its' venom is quite potent, few deaths are reported and medical attention can result in a positive outcome for the bite victim.
2. The activity patterns of the rattlesnake have been noted as early as March 9<sup>th</sup> and as late as December 23<sup>rd</sup>. **FYI:** There was a rattlesnake sighting in The Hills this year in February. During the spring months they are active during the day. As the temperatures heat up in the Texas heat their activity is limited to early mornings and late evenings.
3. Rattlesnakes prey chiefly upon mammals such as mice, rats, rabbits and squirrels. When preparing for an ambush the rattlesnake will lie coiled quietly waiting for its' prey.
4. A communal den site is used for shelter during the winter months. These sites are typically found within southerly facing rocky outcroppings.



To help distinguish a rattlesnake from a Bull or Rat snake, look for the distinctive black and white stripe around its' tail close to the rattles, and also its' diamond shaped head.

## What To Do In Case of a Rattlesnake Bite

1. Assume envenomation has occurred.
2. Identify the species of snake if possible.
3. Keep the victim as calm as possible.
4. Keep yourself and other group members calm as well.
5. Know and be alert for the symptoms of shock. Difficulty breathing and/or kidney failure are frequent symptoms of envenomation.
6. Wash the bite area with a disinfectant such as alcohol or hydrogen peroxide if possible.
7. Remove jewelry and tight fitting clothes before the onset of swelling.
8. Reduce or prevent movement of a bitten extremity, using a splint if possible. Also, position the extremity below the level of the heart.
9. Get the victim to a medical facility ASAP. Anti venom treatment is most effective within the first 4 hours of envenomation and is ineffective after 8-10 hours.

Palo Pinto General Hospital 940 325-7891

Graham Regional Medical Center 940 549-3400

Both facilities have anti venom available for rattlesnake bites in their emergency rooms.

## What **Not** to Do In Case of a Rattlesnake Bite

1. **DO NOT** make incisions over the bite marks. A suction device such as Sawyer Extractor (rei.com or amazon.com) may be used without making any incisions and damaging tissue.
2. Do not use cryotherapy (cold packs, presses, ice, dry ice, etc.)
3. Do not use electroshock therapy.
4. Do not drink alcohol.
5. Do not use aspirin or other pain relievers.
6. Do not use the pressure/immobilization technique which consists of firmly wrapping the entire limb with an elastic bandage.
7. Do not administer antivenom unless properly trained.
8. Don't forget our four-legged family members! Contact your vet ASAP to inquire about the vaccine that can be given bi-annually and might buy you enough time to get them treatment if bitten. Educate yourselves as pet owners and know the emergency measures you should take if this situation occurs.

**Brown-headed Cowbird (by Lynne Aldrich)** You may have been hearing their “gurgling” sounds and seen them foraging on the open ground - new habitat that has been created by the fires we had five years ago. Forests and wooded areas are not to their liking but fields, lawns and pastures are. Cowbirds were originally confined to the open grasslands of the mid-west where they had formed a relationship with the buffalo. The buffalo kicked up insects on the grasslands as they grazed and the Cowbirds grazed on those insects as they followed the buffalo. Because the buffalo were always on the move this symbiotic relationship between the buffalo and the Cowbird required the Cowbird to create a unique nesting pattern. They are one of the few birds in North America with this nesting habit – they do NOT build their own nests but rather the females put their energy into laying their eggs in the nests of other birds. This allowed the Cowbird to continue moving with the buffalo.

The Cowbird can produce up to three dozen eggs a season!!! The parasitism has a huge and negative impact on the birds whose nest they parasitize. There are research studies on the negative effect Cowbirds have had on other songbirds – with Kirtland’s Warblers having been effectively decimated so that they are considered an endangered species. Black-capped Vireos are another species that have been heavily impacted by Cowbirds. The Black-capped Vireo has recently expanded its range and we have had them breeding in The Hills for the past two years. Unfortunately, the appearance of the Cowbird will very likely impact this endangered bird as well. Each and every nesting songbird we have in The Hills will be seeing the impact of the Cowbird.

### **Here’s what it looks like**



**Here’s how it works.** The Cowbird egg hatches much more quickly than their host species eggs do thus giving the Cowbird chick a head start in getting food. They grow faster as well and are well developed by the time the host species chick is hatched. In fact, they are large enough fast enough that the young Cowbird chick can throw out the other eggs and sometimes the new born chicks – or accidentally smother them at the

bottom of the nest. Because it grows faster it also gains more attention and food from the host mother which can also lead to the death of the host chick. They like to parasitize the nests of birds who normally lay smaller eggs than theirs but will lay in anything from Kinglet size to Meadowlark size. So, nearly all of the birds we have nesting in The Hills are in danger – our Bluebirds, our Painted Buntings, our Chipping Sparrows, our Black-capped and White-eyed Vireos, our Titmouse and our wrens. Probably one of the only birds we have in The Hills in the Spring that will be exempt is our Roadrunner. Some birds can recognize the Cowbird egg but most do not.

If you are lucky enough to find the nests of our spring birds you may be able to see the evidence of the Cowbird. First, if you see the eggs in a nest, the Cowbird egg will usually be larger compared to host bird's eggs. If you see an intact egg on the ground under a nest it is likely the egg got dropped there by the female Cowbird when she was laying her own egg in the host nest. If you see birds being fed, look for a slightly larger nestling that is more aggressive and has a bright red gape (the brightly colored edges of the corners of the inside of the mouth)

While Brown-headed Cowbirds forage on the ground and feast on seeds, snails, and small insects; especially in areas where horses or cattle stir the insects up, they are also known to eat the eggs from nesting birds. They do this to acquire the calcium they need for producing as many eggs as they do.

It is important to know that Cowbirds are native to the United States and as a result are a protected bird under the Migratory Bird Act. It is unlawful to kill the bird or remove their eggs from a nest. Texas is one of a few states though where control of the Brown-headed Cowbird can be done through trapping (by permit) in order to protect Texas endangered species like the Golden-cheeked Warbler (we don't have that bird here yet!!) and the Black-capped Vireo (we do have that bird here).

We can help deter Brown-headed Cowbirds by using suet, whole peanuts, or safflower seeds in our song bird feeders, since Cowbirds prefer sunflower seeds, cracked corn, and millet, but be certain to clean up the seed spill on the ground underneath the feeders too.

So, though we are seeing this invasive species more often now, we have options to help deter them and as our bare grounds begin to grow new vegetation, nature itself will help with that as well.



**Preserving The Hills Dark Sky (by Peter Gottschling)** If you recall from the Fall newsletter I spoke about how The Hills is situated in a dark corner between Graham, Mineral Wells and the bright eastern sky polluted by the lights of DFW and Weatherford. Please see the map on page 10 of the Fall newsletter to understand this [http://www.pkhillssassociation.com/uploads/2/9/8/8/29882847/fall\\_winter\\_2016.pdf](http://www.pkhillssassociation.com/uploads/2/9/8/8/29882847/fall_winter_2016.pdf) .

So how can we prevent light pollution from washing out the sky over The Hills? The biggest thing to preserve dark skies is not to have street lights so we are already a step ahead of most communities. However modern society requires outdoor lighting for safety, aesthetics and commerce. The International Dark Sky Association recognizes this but advocates that any required lighting be used wisely. To minimize the harmful effects of light pollution, lighting should

- Only be on when needed
- Only light the area that needs it
- Be no brighter than necessary
- Minimize blue light emissions
- Be fully shielded (pointing downward)

At the end of the article (page 11) are some examples of lighting that is terrible, as well examples of shielded lighting. Unshielded lights waste energy by shining where there is no need and unshielded lights also make it harder for you to see at night because they shine and glare in your eyes and ruin your night vision. Shielded lights shine down where you need to see and also preserve the darkness of the sky so you can enjoy the sight of the Milky Way. If you have a vista from one of our hilltops then also remember that even a normally shielded light can still let light disturb your neighbors in the valley. A little extra side shielding will prevent that and still illuminate what you need to see.

If our community is serious about preventing light pollution then we should incorporate a dark sky policy in our ACC guidelines. As an example, the city of Dripping Springs was the first city in Texas to become a dark sky community <http://www.cityofdrippingsprings.com/default.aspx?name=dsc.home> . You can find all kinds of lighting information on the IDA website <http://darksky.org/lighting/lighting-basics/> . LED lighting brings another challenge. Because LED uses less energy there is a tendency of cities and people to install brighter LED lights than what they replaced. LED is bluish light and is very bad for glare and light pollution. There was an interesting article in the New York Times about the controversy in Rome, Italy brought on by the city installing LED lighting and people complaining that the light created ugly night scenes. [https://www.nytimes.com/2017/03/27/world/europe/rome-streetlights-led-lights.html?\\_r=0](https://www.nytimes.com/2017/03/27/world/europe/rome-streetlights-led-lights.html?_r=0) . It has been proven that bluish lights affect circadian rhythms of both wildlife and people. Some modern LED lights now come in soft white (warmer tones) versions and I highly recommend these if you are moving to LED lighting in your home. A color temperature of 3000°K or below is recommended. Believe it or not, Home

Depot has a dark sky lighting page with IDA approved fixtures.

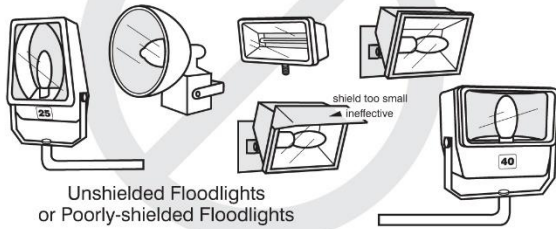
<http://www.homedepot.com/b/Lighting-Ceiling-Fans-Outdoor-Lighting/Dark-Sky/N-5yc1vZc7qvZ1z0u5mk>

I hope you all keep our dark sky in mind when you turn on your outdoor lights. Look at them and see how you can minimize their upward glare and then put some after-market shielding on them.

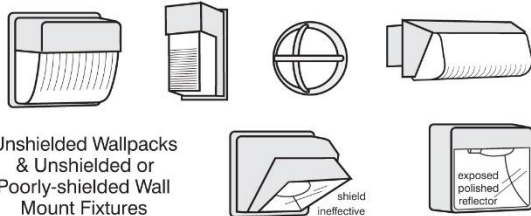
# Examples of Acceptable / Unacceptable Lighting Fixtures

## Unacceptable / Discouraged

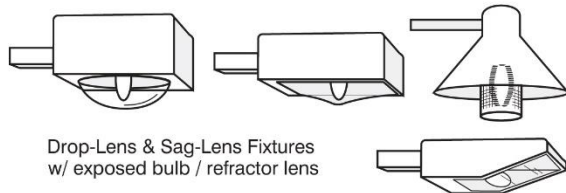
Fixtures that produce glare and light trespass



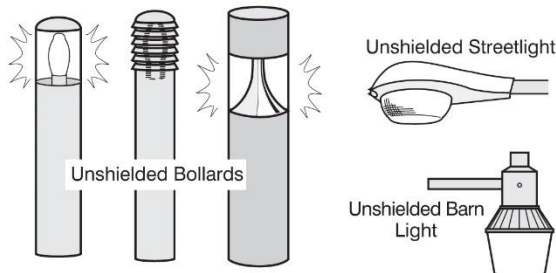
Unshielded Floodlights  
or Poorly-shielded Floodlights



Unshielded Wallpacks  
& Unshielded or  
Poorly-shielded Wall  
Mount Fixtures



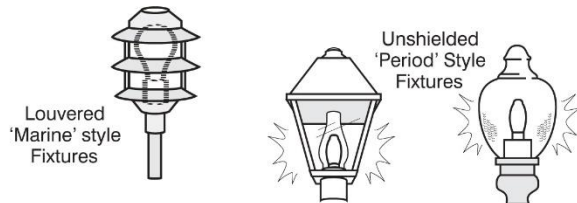
Drop-Lens & Sag-Lens Fixtures  
w/ exposed bulb / refractor lens



Unshielded Bollards

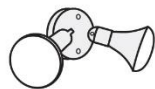
Unshielded Streetlight

Unshielded Barn  
Light

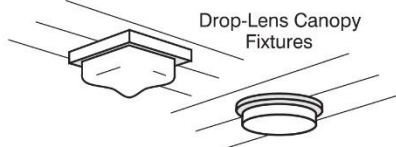


Louvered  
'Marine' style  
Fixtures

Unshielded  
'Period' Style  
Fixtures



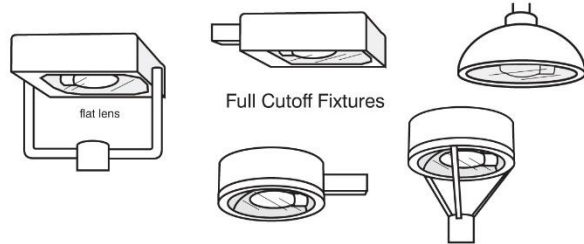
Unshielded PAR  
Floodlights



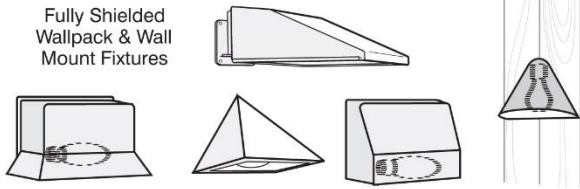
Drop-Lens Canopy  
Fixtures

## Acceptable

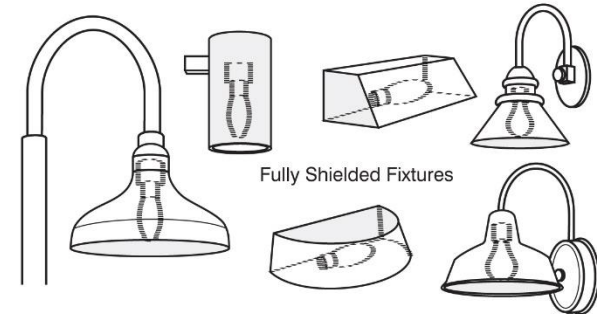
Fixtures that shield the light source to minimize glare and light trespass  
and to facilitate better vision at night



Full Cutoff Fixtures



Fully Shielded  
Wallpack & Wall  
Mount Fixtures



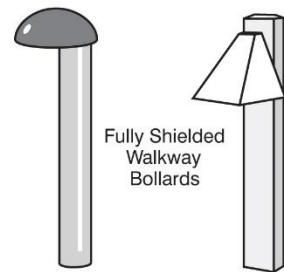
Fully Shielded Fixtures



Full Cutoff Streetlight



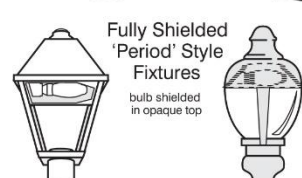
Fully Shielded  
Barn Light



Fully Shielded  
Walkway  
Bollards



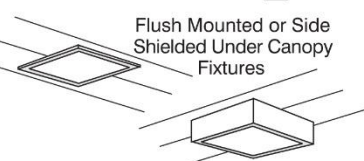
Fully Shielded  
Decorative  
Fixtures



Fully Shielded  
'Period' Style  
Fixtures



Shielded / Properly-aimed  
PAR Floodlights



Flush Mounted or Side  
Shielded Under Canopy  
Fixtures

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