

#### What is a Cache?

Pronounced cash. It is a hiding place/location for items.

# **Geocaching?**

Geocaching is a game that you can participate in to find a hidden box. When found you can exchange an item in the box for your own. Because of the potentially destructive nature of the game, parks and refuges do not allow physical caches on their lands. To solve this problem, Hagerman is allowing virtual cache hunting.

# What is a Virtual Cache?

Virtual caches are more like points of interest. A location that may show a particular event, item, or interesting destination.



Creating a profile is not necessary to engage in this activity. You can use your own *GPS* or *Google Maps* to enter coordinates.

#### **Profile Creation**

For some of our virtual caches we are using waymarking.com. If you would like to log your visits to a particular virtual cache, you can create a profile.



Once you create your profile you can search any area you go to for waymarks. We currently have **4 online waymarks**.

# **Searching for waymarks**

# Logging waymarks on Waymarking.com

- 1) Click "home" tab to go to home page.
- 2) Click "waymark search" tab.
- 3) Type location's coordinate from the guide into the "near" bar.
- 4) Click search. The first result is the location.
- 5) Click on the "log it" icon. Type and submit visit.

# Navigation with Google Maps

- 1) Locate the coordinates on the page.
  - [ex. N 11° 44 W 040° 45]
- 2) Open Google maps.
- 3) Type coordinates in search bar.
- 4) Follow directions to location.

## 1st Location



# N 33° 44.354 W 096° 45.134

This place is great if you like to hike. The refuge has 5 trails ranging from less than half a mile up to 7 miles round trip. It contains 5 habitats: Prairie, Forest, Wetland, Open Water, and Agricultural. This area is home for bluebirds, bobcats, crappie, and many more species. The refuge provides a rest stop for a great diversity of migratory birds. Hagerman was established in 1946 and currently manages 11,320 acres. Why is refuge named Hagerman? It was named after the town that had been established on these lands.

	Viewed bird feeding area
	Found the rusted axe head
	Looked at Birding report
_	atulations on finding your first coordinate! Now you have the ence to prepare you for the rest of the trip.
Why angle	are the windows in the center tinted green and ed?



#### 2<sup>nd</sup> Location



## N 33° 43.258 W 096° 46.735

Meadow Pond trail takes you through several habitats on the refuge. There is plenty of shade along the forested section where you could find songbirds fluttering between the branches. The trail opens up to prairie on another section with a pond on the left. The trail resumes back to cover and leads towards meadow pond where you will find a wide pond with, depending on the season, blooming American Lotus.

The American Lotus begin forming flowers in Spring. By July the Lotus flowers are in bloom and it makes for beautiful scenery. Now that you are near a water source, a new variety of birds appear. Great Egrets and cormorants could be seen settled on branches by the water.

Did you notice that this trail seems to cut through the forested area like a tunnel? That's because the trail you are taking once was a railroad. The tracks are gone but the land reminds us of the chugging trains.

Did you know?

The Great Egret weighs on average only 2 pounds. They are opportunistic consumers and can even eat snakes.

What was the first pond named?



#### 3<sup>rd</sup> Location



#### N 33° 44.134 W 096° 46.565

Hagerman National Wildlife Refuge is an overlay for the Army Corps of Engineers. In the 1930's the Army Corps of Engineers purchased the lands of Hagerman to construct Denison Dam. Pumpjacks remain on the refuge due to the retention of the mineral rights by holders. Pumpjacks being on the refuge has cons but there are some benefits they provide. As you arrive at the waypoint you may have noticed shorebirds scuttling by. A positive impact these pumpjacks provide is nesting areas for many shore birds. We work with rights holders to mitigate possible contamination/spills and other issues that arise. With the erection of the pads out into the lake, it has allowed us to create several wetland habitats between the pumpjack roads to support a variety of migratory birds. There is something new to spot every season.

What bird/birds have you spotted near the waymark?



### 4th Location

## N 33° 44.480 W 096° 45.240



Marker Number: 7380

Marker Text:

In 1904 James Patillo (J. P.) Smith platted streets here in a 10-acre wheat field and established the town of Hagerman. Named for railroad attorney James P. Hagerman, the town consisted of 250 residents, a cotton gin, school, church, post office, railroad depot, and several businesses by 1910. The town prospered and grew to contain three churches and a three-teacher school. However, in the 1920s residents and businesses began to abandon the area when it became known that the creation of Lake Texoma would completely inundate the town. Lake Texoma was created in 1943. Sesquicentennial of Texas Statehood 1845-1995

What is the purpose of these markers?

They provide local history of the area they are located in.

Did you know?

There are over 15,000 historical markers in Texas.

What is the sign next to this marker?



#### 5<sup>th</sup> Location

# N 33° 44.916 W 096° 44.944

Wow! That's a unique tree! This cedar tree is large compared to other nearby trees. It is not a naturally occurring species in the area. It was planted by Mr. John T. Ballard in 1916, a resident of the old town of Hagerman. The cedar has aged to 99, reached a total height of approximately 20 feet, a width of approximately 48 feet, and a trunk girth of approximately 8 feet before it had succumbed to illness and died. Currently younger trees are overtaking the dead cedar. The refuge allows dead trees to remain unaltered as they are a great food source and habitat for animals and decomposers such as worms, woodlice, and mushrooms.

#### Did you know?

The oldest Lebanon Cedar in the United States lived to be 157 years old and grew a trunk with a circumference of approximately 15 feet; it can be found next to George Washington's tomb in Virginia.

Can you identify a tree that is growing out of the dead cedar?



# 6th Location

#### N 33° 45.494 W 096° 47.350

Feel the breeze as it passes over the lake and up the ridge. This location is a popular spot for picnics and fishing. The surrounding areas are forested by elms, honey locusts, and various nut trees. Keep your eye out for the roadrunner family that inhabit this area. As you were arriving to the waypoint you had to travel through prairie habitat. This area is where the Cross Timbers ecoregion mesh with Black Land prairie. Hagerman National Wildlife Refuge manages some of the last remaining fragments of Black Land prairie. To reach the shoreline you must walk to the Northeastern section of the area. You will come across a decline that allows passage to the shore. Along the shore line you may see .

#### Did you know?

Lake Texoma waters contain enough salinity to maintain a self-sustaining striped bass population. Where does this salt come from? In prehistoric times, parts of Texas and Oklahoma used to be submerged in the sea. As time passed, tectonic plates shifted lifting different sections of land masses from the sea and submerging others. The salty water that remained on the uprisen lands had eventually evaporated and left behind salt deposits, which became buried beneath rocks and soils. Now with fresh waters flowing, the salt deposits slowly leached into the waters and built up concentrations in Lake Texoma.

Where are you standing when you reach the coordinate?





