

## **Hagerman National Wildlife Refuge**

### ***Auto Tour Route Script***

**Tract 1.** Howdy! Welcome to Hagerman National Wildlife Refuge! Before we start on your tour, let's cover a couple important things. Please obey all refuge regulations, including posted speed limits, during your visit. Our regulations are available at the Visitor Center and at the kiosk near the intersection of Refuge Road and the Visitor Center's entrance. Thank you for your cooperation and have a safe tour!

**Tract 2.** Now let's get started on an exciting journey through Hagerman National Wildlife Refuge. This unique tract of land is comprised of 11,320 acres situated in the Big Mineral Creek arm of Lake Texoma. The refuge is home to a multitude of species of wildlife, fish, and plants because of the abundant and diverse habitats it provides.

At the intersection of Refuge Road and the Visitor Center entrance you will notice a kiosk. It is full of the latest information about the refuge. Stop and read the notices posted inside and pick up a refuge map and a regulations brochure. It is a smart way to get started on your tour.

Just south of the kiosk is the start of Harris Creek Trail. This handicap-accessible ¼-mile loop is capped with crushed gravel for your comfort. It is one of five maintained paths on the refuge with options for ¼, one, and two-mile walks. We recommend you take this stroll which meanders around ponds and woodlands adjacent to Harris Creek. A photo blind is available to conceal yourself while viewing or photographing wildlife that call the area home.

After leaving the kiosk you should head north on Refuge Road. The first intersection is Wildlife Drive which is aptly named for the opportunities it provides to see an abundance of critters from the comfort of your vehicle. Turn left and head southwest on Wildlife Drive. Pull over for Stop 1 on the right side of Refuge Road. It is marked with a brown sign.

**Tract 3.** Stop 1. The story of Hagerman National Wildlife Refuge begins in 1880 in a spot underneath the lake not far from where you are parked. The great State of Texas was being settled by folks headed west in search of new opportunities to prosper. A town called Steedman, named after Grayson County judge S.D. Steedman, was established in this spot. The budding town had its very own post office. By 1909 the Missouri, Kansas and Texas Railroad set its tracks underneath what is now Wildlife Drive. The railroad brought many people to Steedman. In that same year, the town was renamed Hagerman after railroad attorney James P. Hagerman. The town's population slowly grew and a cotton gin, school, three churches, a railroad depot, and several businesses were developed.

In the 1930s people began learning of the War Department's plan to build Lake Texoma to help reduce flood risk on the lower Red River. The project was authorized by Congress in 1938 and involved the purchase of about 120,000 acres from local land owners to make room for the new impoundment. The effort would be the largest land clearing initiative in America and Denison Dam, which was the largest earthen structure in the world, would contain enough concrete to build a highway 91-miles long. In preparation for the water that would soon fill Lake Texoma the residents and businesses of Hagerman left. Lake Texoma was completed in 1944 by the U.S. Army Corps of Engineers. It has 89,000 surface acres and 580 miles of shoreline making it the 12<sup>th</sup> largest reservoir in the United States.

Even though Lake Texoma eventually inundated the town of Hagerman the future of the site and the surrounding area was bright. The Secretary of the Interior determined the area suitable for refuge and breeding ground purposes for migratory birds and other wildlife. In 1946, Public Land Order 314 reserved and set apart the land for use by the Department of the Interior . Thus, Hagerman National Wildlife Refuge was born.

Please continue on Wildlife Drive to Stop 2. It is about ¼ mile from here on the right side of the road.

As you approach Stop 2 notice the field to the right situated on the peninsula extending into Lake Texoma. During winter this field is used by thousands of migrating snow geese as they stop by to eat crops. The snow geese spend their summers in northern Canada and they winter in the southern United States and northern Mexico. Their annual journey between breeding and wintering grounds takes them over thousands of miles down the central flyway. Many other birds, such as Canada geese, common mergansers, and northern gannet, make this same annual trip.

**Tract 3.** Stop 2. The fields you just passed are part of the refuge's farming program which involves planting crops to provide food for migratory birds. The refuge also supports many native plants that grow here naturally and provide important nutrition. Another attractive food source is found in the abundant prey fish that live in the refuge portions of Lake Texoma. These include threadfin and gizzard shad, silversides, and mosquito fish to name a few.

Speaking of fishing, did you know that Lake Texoma is home to many sport fish that are highly sought by anglers? Several state and even a world record fish have come from its waters. Primary sport fish include catfish, black bass, crappie, and even alligator gar. Lake Texoma is best known as the striped bass capitol of the world. These scrappy fish were introduced from

the Chesapeake Bay in the 1960s. Lake Texoma has the only completely self-sustaining striped bass population in the country and is the most productive fishery for this species in the nation.

Please continue about ½-mile down Wildlife Drive to Tern Road. Take a right and head northwest to Stop 3.

Tern Road is an oil and gas lease road that separates Muleshoe Marsh on your right from Steedman Marsh on your left. You might be wondering what an oil and gas lease is doing in the middle of a national wildlife refuge. The answer lies in the way land was acquired by the War Department for creation of Lake Texoma. You see, when the land under Lake Texoma was purchased the subsurface mineral rights were reserved by the original land owners. This made it possible for future subsurface mineral deposits to be extracted by private operators.

**Tract 4.** Stop 3. The refuge sits atop the Big Mineral Creek field which is rich with oil and gas. That is why you see so many oil and gas wells in the area. These wells can create a disturbance to wildlife and their habitats and they pose a constant visual distraction in the otherwise scenic landscape. Even so, the pads the oil and gas wells sit on, as well as their connecting roadways, also provide unique benefits. For example, portions of the road on which you are driving are seasonally used by endangered interior least terns for nesting and loafing. It also protects the reservoir shoreline from erosion caused by damaging waves. Finally, refuge visitors use the road for fishing access and for wildlife viewing purposes.

Refuge workers and oil and gas producers work cooperatively to keep impacts from oil and gas wells to a minimum. The oil and gas industry mitigates for their impacts by helping the refuge maintain their roads and manage wildlife habitats. They also curtail activities in certain areas and at certain times when their presence would be otherwise detrimental to wildlife.

Another issue that constantly threatens the refuge is invasive wildlife and plants. Feral hogs run rampant here and they disturb the soils in their search of food. Entire farm fields have been damaged by large groups of feral hogs known as a “sounders.” Hogs disturbance also causes increased erosion, damage to refuge roads, and destruction of valuable wildlife habitats.

Non-native plants also create havoc on the refuge by out-competing valuable native plants and overly tasking available water and nutrient resources. Honey locust, bastard cabbage, and musk thistle are prevalent on the refuge and cause these concerns. Honey Locust is a type of tree with long thorny spines. When groups of these grow thick in a certain area it stops wildlife, such as deer, from moving freely through the woodlands. Refuge staff and volunteers work hard to control invasive species and repair the damage they cause so that native plants and wildlife may thrive.

Please continue on Tern Road and take a left on Egret Road. Continue on Egret road to Stop 4 which is just before the viewing platform on the right side of the road.

**Tract 5.** Stop 4. This viewing platform was built to provide visitors a unique opportunity to get up close and personal with wetland wildlife. Walk out on the dock and see if you can catch a glimpse of some of the incredible wildlife that frequents Mineral Marsh. If the time is right, you might see one of many shorebirds and waterfowl that come and go here. You might even be lucky enough to see our national symbol, the bald eagle, soaring overhead or perched on a distant snag. It is a common sight at Hagerman National Wildlife Refuge.

As you see different birds, notice how they use their unique adaptations to forage for food. The great blue heron, a year-round resident of the refuge, has long legs, huge feet, and a sharp beak. These features make them well adapted for stealthily wading in the shallow marsh water while feeding. You might also see the snowy egret whose bright white feathers are easy to spot. Be sure to look for puddle ducks “tipping” their rumps in the air as they dunk their heads in search of food on the bottom. Diving ducks will disappear completely under water to grab deeper plants or catch fish for a delicious snack. Eagles, with their powerful wings and huge talons on their feet, swoop down to the water and catch fish with ease. Each wildlife species you observe has some special trick for getting their fill!

Continue down Egret Road to Wildlife Drive. Turn left then immediately right onto Silliman Road where you will travel east towards Crow Hill Trail. Stop 5 is about ¼ mile down the road.

**Tract 6.** Stop 5. Let’s take a moment to step back in time. Imagine gazing upon a field full of grasses taller than the average person. Interspersed on the prairie are wildflowers adorned with every color in the rainbow. Then, an American bison and her calf stop to graze for a bit before continuing on their journey with the herd. If you were at this spot in the late 1800s this would be typical of what you could have seen from this very spot. Unfortunately, due to various developments and the control of wildfire, the prairie has been fragmented into smaller parcels barely reminiscent of their previous form. Today, less than one percent of blackland and coastal prairies remain from the original 20 million acres that surrounded Hagerman National Wildlife Refuge.

One of the ongoing efforts of refuge staff and volunteers is the restoration of native prairie ecosystems. These efforts include application of prescribed fire, mowing, disking, and planting native grasses and wildflowers. Results may be slow to develop but it is amazing to see how wildlife responds when native plants thrive. The butterfly garden at the Visitor Center is a great example of how this works. We plan to continue our efforts to restore historic prairie tracts in the coming years.

Continue towards the parking lot of Crow Hill Trail then turn around and head back towards Wildlife Drive. Make a left turn on Wildlife Drive and head southwest to the intersection of Wildlife Drive and Bennett Lane. Then make a right turn on Bennett Lane and head northwest to Big Mineral Day Use Area on your right which is Stop 6 - the final stop of your auto tour.

**Tract 7.** Stop 6. The Big Mineral Day Use Area is a great way to spend an afternoon fishing, picnicking, wildlife watching, or soaking up some rays. Just south of here is Meadow Pond Trail. Stretching almost 6 miles, this trail is easy to walk and will take you on a journey past Deaver Pond, more farm fields, and a host of productive flood plain habitats. The surrounding area is full of wildlife so be sure to walk quietly and see what you can see.

If you would like to try a different trail, give Raasch or Haller's Haven trails a try. Your map will guide you to their locations. Each provides a unique opportunity to enjoy the sights, sounds, and smells of Hagerman National Wildlife Refuge.

Would you like to continue your auto tour on your own? Consider heading to Sandy Day Use Area off Sandy Point Road. It is yet another beautiful area overlooking the refuge and scenic Lake Texoma. Or, if you would prefer, head to the Goode Day Use area to enjoy the abundant shade of large trees and get peeks of a secluded Lake Texoma cove through the tall grass. Just make yourself at home and feel free to enjoy fishing, boating, birding, photography, hunting, or one of the many educational programs we offer here at one of the Nation's great national wildlife refuges. All information can be discovered at [www.fws.gov/refuge/hagerman](http://www.fws.gov/refuge/hagerman) or by following our Facebook page called "Friends of Hagerman National Wildlife Refuge." Be sure to consult our regulations for details about how to lawfully enjoy your visit. Also, remember to take only memories and leave only tracks – the wildlife that call the refuge home and the visitors that come after you will appreciate your respect.

**Tract 8** We hope you had a great time at Hagerman National Wildlife Refuge. If you have any questions, or want to get involved, please stop by the Visitor Center or call us at (903) 786-2826. If you borrowed an Audio Device, please bring it back to the Visitor Center Office, we would very much appreciate it. Thank you!