

U.S. Fish & Wildlife Service

Attwater Prairie Chicken

*National Wildlife
Refuge*



The refuge mission is to protect, restore, preserve, enhance, and manage gulf coastal prairie grasslands in support of the Endangered Species Act and the Attwater's Prairie Chicken Recovery Plan while maintaining and perpetuating biodiversity.

Photo by Mike Morrow

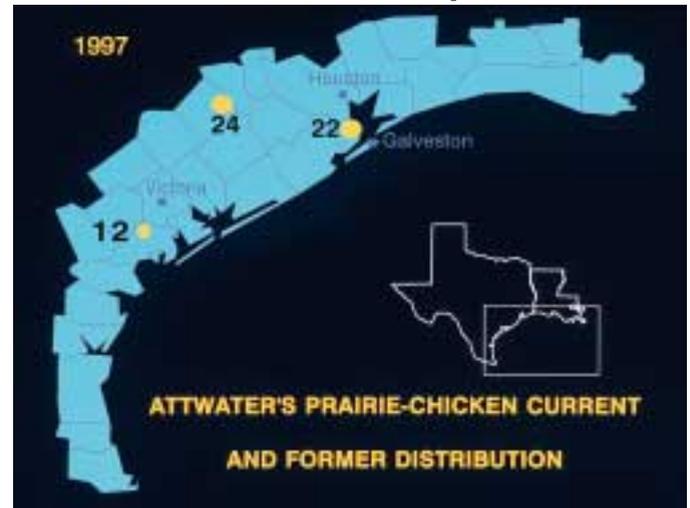
**Welcome:
Sanctuary for
a Rare Bird**

Over a century ago, one million Attwater's prairie-chickens graced the Texas and Louisiana gulf coastal prairie. Each spring, males gathered to perform an elaborate courtship ritual. They inflated their yellow air sacs and emitted a strange, booming sound across a sea of grasses.

Today, less than one percent of coastal prairies remain. With so little of its home left, the Attwater's prairie-chicken has come dangerously close to following the passenger pigeon to extinction. The Attwater Prairie Chicken National Wildlife Refuge offers one of the last hopes for survival of this endangered bird.

You may not see the birds, but they are here, valiantly struggling to keep their species alive, with a lot of help from the U.S. Fish and Wildlife Service and others. Their presence deepens the experience of a visit among breathtaking spring wildflowers, marshes, ponds, and virgin tallgrass prairie.

Attwater's Prairie-Chicken Historic Range



Wildlife: Meet the Attwater's Prairie-Chicken

Check a bird book and you'll find the endangered Attwater's prairie-chicken (*Tympanuchus cupido attwateri*) listed as a slightly smaller, darker form of the greater prairie-chicken that lives farther north in tallgrass prairies.

Both are subspecies of the extinct heath hen. Typically, about half the adults die each year from predation or other natural causes. The average life span ranges from two to a maximum of eight years in the wild.

Courtship Rituals

If you visited a lek, it is hard to imagine why the inconspicuous, grass flat attracts a frenzy of activity each year. A lek, or booming ground, is an area typically used year after year for courtship activity. They may be naturally occurring short grass flats or artificially maintained areas such as roads, airport runways, oil well pads, and drainage ditches.

For males, a lek is their stage. Here, they perform each morning and evening from February through mid-May. Holding their tails erect and wings drooped, they inflate their air sacs, then drop their heads to deflate the sacs with a low sounding "whurru-rrr" while stomping their feet extremely fast. Jumps and charges at other males are interspersed throughout this booming activity. It's energetic work to attract a mate.

Attwater's prairie-chicken. Photo by George Levandoski



Nesting

Once the female chooses and breeds with a male, she leaves the lek to nest in a shallow depression on the open prairie, usually within a mile of the booming ground. If her nest is destroyed early in the season, the hen returns to mate again.

The hen lays a dozen eggs and if she's lucky, they'll hatch about 26 days later. Only some 30 percent of all nests escape predators that include opossums, skunks, raccoons, coyotes, snakes, and domestic dogs and cats. Less than half the chicks make it to adulthood. Heavy rains and early chick-rearing seasons can mean even lower nesting success.

Chicks stay with the hen for at least six weeks, dining mostly on nutritious insects. As the chicks grow older, they join the adults in pecking the leaves, flowers, and seeds of prairie plants in addition to insects.



Switchgrass. Photo by Mike Morrow

A Story of Loss and Hope

Attwater's prairie-chickens once had some 6 million acres of homeland. The prairies they knew extended along the Gulf Coast from Corpus Christi, Texas, north to the Bayou Teche area in Louisiana and inland some 75 miles. Grasses of many species waved in the winds including little bluestem, Indiangrass, and switchgrass.

The Downward Slide

Acre by acre, coastal prairies diminished as cities and towns sprouted up, industries grew and expanded, and farmers plowed up native grasslands for croplands or tame pasture. Suppressing prairie fires also allowed brush species to invade prairies.

Like fish out of water, the Attwater's prairie-chicken had nowhere to go. By 1919, it disappeared from Louisiana. By 1937, only about 8,700 individuals remained in Texas, signaling the end of hunting for a once common game bird. The bird was listed as endangered in 1967, and in 1973 the Endangered Species Act provided immediate protection for this seriously declining bird.

Today, less than one percent of the original prairie once occupied by Attwater's prairie-chickens remains. Habitat fragmentation has left some remaining prairie habitat patches too small to be useful to the birds. This has created favorable conditions for many prairie-chicken predators. In recent years, the decline begun by habitat loss has been compounded by other factors. Periods of harsh weather in the early 1990s resulted in the loss of Attwater prairie-chicken eggs and chicks over several years.

Hope in the Form of a Refuge

When the World Wildlife Fund purchased about 3,500 acres in the mid-1960s, at last, the Attwater's prairie-chicken had at least one

place to call home. The land was transferred to the U.S. Fish and Wildlife Service in 1972 and today's refuge is more than double its original size.

Steps Toward Recovery

The Attwater's Prairie Chicken Recovery Plan outlines tasks to save this species from extinction, and ultimately, to remove it from the endangered species list. To reach a goal of 5,000 birds in three geographically separate, viable populations, recovery efforts focus on five strategies:

1. Habitat management on both public and private lands (involving voluntary cooperators only);
2. Public outreach to help generate support for ongoing recovery efforts;
3. Population management consisting of captive breeding and reintroduction efforts;
4. Coordination between government agencies and private interests;
5. Research to provide information necessary for taking efficient steps toward recovery.

Captive Breeding

So few birds are left that a captive breeding program offers the best hope for saving this species. The first chicks were hatched at Fossil Rim Wildlife Center near Glen Rose, Texas, in 1992. Now, Texas A&M University, the Houston Zoo, and the San Antonio Zoo all take part in raising birds destined to return to the wild.

Attwater's prairie-chicken reintroduction. Photo by Grady Allen



Once chicks become capable of independent survival, they leave the breeding facility for release sites. Here, biologists fit each bird with a radio transmitter, and a veterinarian checks them over to make sure they are healthy. For the next two weeks, the birds live in acclimation pens. They adjust to the prairie their ancestors knew intimately.

Managing Habitat for an Imperiled Bird

It's a tough assignment to recreate a prairie where lightning ignited fires and millions of bison grazed. However, refuge staff are doing everything they can to restore an ideal home for the Attwater's prairie-chicken. Prescribed burns, grazing management, and planting native grasses are slowly turning back the clock to reveal a landscape from an earlier century.

Prescribed Burns

Nature's prescription for a prairie requires an occasional dose of fire. Refuge staff burn an average of 2,000 to 3,000 acres annually in January and February. Burning invigorates grasses by removing dead stems. Fire also gets rid of brush that aggressively invades the grasslands.

Where the Buffalo Roams



Bison. Photo by Nancy Morrissey

You might think the heavy hooves of bison, commonly known as American buffalo, pose an immediate threat to prairie-chickens if they happen to be anywhere close by. Instead, the bison and cattle you may see on the refuge are helping this bird with every mouthful they munch. Their grazing shapes the grassland into clumps with spaces between them that serve as pathways for young chicks.

Beating Back the Brush

Exotic species never seen on the prairies have taken root and pose a challenge for refuge staff. Prescribed fire helps control Macartney rose, Chinese tallow, and other invasive woody plants. Applying herbicide is sometimes necessary to get rid

of them. Not only is the brush unnatural, the thickets serve as hide-outs for skunks, raccoons, and other predators of prairie-chicken nests.

Keeping Predators at Bay

Predators play an important role in ecosystem function. But, with so few birds left, refuge staff must manage mammalian predators during nesting season as long as bird numbers are drastically low. In recent years, few nests have survived to hatch, and predators took many of the captive-reared birds. Managing predators during the release gives a head start to prairie-chickens just getting used to life in the wild.

Planting a Wild Prairie



Prairie Restoration, USFWS Photo

Much of the refuge consists of virgin prairie, never plowed or converted to croplands. However, you'll find formerly cultivated fields on their way to becoming prairie too. The refuge staff first harvests native grass seeds from the virgin prairie in the fall, then distributes them in the old fields. Returning that field to a prairie takes years, but slowly the dedicated effort is paying off.

Growing Crops

Refuge staff plant 50 to 100 acres in small food plots annually to make sure the prairie-chickens have plenty to eat. Soybeans and sunflowers also provide shelter and an abundant source of insects for chicks during the summer months. Other wildlife species benefit from these food plots as well.



Macartney Rose. Photo by Royce Jurries

Wildlife Watching Tips

Dawn and dusk are the best times to see wildlife.

In warmer climates, little is moving on hot summer afternoons or on windy days.

Observe from the sidelines. Leave “abandoned” young animals alone. A parent is probably close by waiting for you to leave. Don’t offer snacks; your lunch could disrupt wild digestive systems.

Cars make good observation blinds. Drive slowly, stopping to scan places wildlife might hide. Use binoculars or a long lens for a closer look.

Try sitting quietly in one good location. Let wildlife get used to your presence. Many animals that have hidden will reappear once they think you are gone. Walk quietly in designated areas, being aware of sounds and smells. Often you will hear more than you will see.

Teach children quiet observation. Other wildlife watchers will appreciate your consideration.

Look for animal signs. Tracks, scat, feathers, and nests left behind often tell interesting stories. Leave the evidence for other nature observers, for it is illegal to collect anything except memories and photographs on the refuge.

*Birds:
From Crested
Caracaras to
Whistling Ducks*

The refuge supports over 250 species of birds besides the Attwater’s prairie-chicken. They may not receive as much attention as the refuge namesake, but your chances of seeing a number of them are much higher. Among the ranks are some impressive birds that you don’t have a chance to spot just every day.

Both fulvous and black-bellied whistling ducks inhabit refuge marshes. A far cry from a typical stubby duck with a familiar quack, these birds sport long legs and necks and yes, they whistle.

White-tailed hawks soar over the prairies. Crested caracaras and vultures keep a sharp lookout for carrion. These scavengers are like the janitors of the grasslands, cleaning up after other wildlife.

During the summer months, scissor-tailed flycatchers and dickcissels grace the grasslands. In the marshes, roseate spoonbills carry the pink glow of a morning sunrise on their wings. You might see anhingas perched on branches with their wings spread wide to dry.

In winter, geese abound in neighboring fields, while the refuge hosts a diversity of ducks, sandhill cranes, Sprague’s pipit, and several types of sparrows.



*Scissor-tailed
Flycatcher. Photo
by Nova Silvy*



*Mammals:
Eyes in the Dark*

The refuge supports about 50 species of mammals, most of which are nocturnal. Night time prowlers include bobcats, coyotes, and the nine-banded armadillos. During the day, you'll have a good chance of seeing bison. Imagine a time when these animals darkened the prairies as far as you can see.

Bison may be charismatic, but remember to watch for small mammals like the 13-lined ground squirrel that also helps keep the prairie ecosystem intact.

*Reptiles and
Amphibians:
Just Trying to
Make a Living*



*Speckled King
Snake, USFWS
Photo*

Reptiles and amphibians often get a bad name because of a few poisonous representatives. Most are harmless, and will try to avoid human contact. In general, they are like other creatures, just trying to survive in the wild. Please respect the following three venomous snakes: Texas coral, western cottonmouth, and southern copperhead.

American alligators share the ponds with smooth and spiny softshell turtles. Bullfrogs and upland chorus frogs fill the night air with their calls.

*Wildflower
Watch*



*Butterfly Milkweed.
Photo by Gary
Montoya*

Each spring and fall, the prairie transforms into a bouquet of wildflowers. Indian paintbrush and bluebonnets are the first to bloom. Soon, they're joined by a colorful montage of blossoms swarming with butterflies and bees. Bring a wildflower and butterfly field guide and you'll be making long lists of species.

The variety is best from March to early summer, but some wildflowers bloom until the first frost. Leave wildflowers on the stem; picking them takes away from other people's enjoyment and lessens the chances of flowers reproducing.

**Things to Do at
the Refuge**



*Spider Web. Photo
by Nancy Morrissey*

Stop in at the visitor center first for a good overview of the refuge. A 5-mile auto tour and two hiking trails offer pathways into the prairie and wetlands. If you have binoculars and a camera, this is the place for both. Early mornings and late evenings are ideal for wildlife viewing and photography of the prairie at its most picturesque. This is the time to capture the delicate pattern of dew-drenched spider webs or a spectacular prairie sunset

Visitor Center



*Sixth graders at
Pintail Marsh.
Photo by Nancy
Morrissey*

Sharpen your birdwatching skills by taking a look at over 100 taxidermy bird mounts at the visitor center. Pick up a wildflower identification guide and watch a video about the endangered Attwater's prairie-chicken. For a short course on the tallgrass prairie, study the native plant display of grasses and wildflowers surrounding the flag pole.

Groups interested in special programs are encouraged to call ahead to make sure staff is available. Individuals with disabilities are encouraged to contact the refuge manager for information on special accommodations.

*Visitor Center
Hours*

The visitor center is open Monday through Friday during business hours.

*Take a
Wildlife Drive*



A 5-mile auto tour loop crosses both prairie and wetlands. Waterfowl watching can be outstanding from the tour loop in fall and winter. Watch for a possible wood stork standing sentinel in shallow ponds, summer through fall.

All motor vehicles must stay on the designated auto tour route. The road is unimproved and adverse weather may force the refuge staff to close the road at certain times. Remember, the road is only open from sunrise to sunset.

Exploring on Foot



Meeting Your Needs

When to Visit?

Two hiking trails—the Pipit Trail (1.5 miles) and the Sycamore Trail (2 miles)—traverse the prairie, pot-holes, and riparian areas. The auto tour loop can also serve as a hiking trail. There's nothing like walking to truly feel the prairie grandeur, complemented by lush wetlands. However, watch for venomous snakes, mosquitoes, alligators, and fire ants as you trek around.

The refuge attracts the highest number of visitors during the spring, peaking in March and April when wildflowers are abundant. The town of Eagle Lake and the refuge host the annual Attwater's Prairie-Chicken Festival in late March/early April. Attwater's prairie-chickens are also most active in spring, but their low numbers limit your chances of actually seeing them.

If possible, visit the refuge in every season to witness wildlife migration, courtship, nesting, and the changing colors of the prairie itself.

Where to Find Food and Lodging



For information on lodging, restaurants, and area events, contact:

Eagle Lake Chamber of Commerce,
409/234-2780

Sealy Chamber of Commerce,
409/885-3222

Columbus Chamber of Commerce,
409/732-8385

Steven F. Austin State Park
(nearest tent and RV camping,
25 miles), 409/885-3613

Refuge Hours

Sunrise to sunset daily.

Help Us Protect the Refuge



Pets



Organized Groups

Picnicking



Collecting



Weapon Possession



To protect this rare and beautiful refuge, we cannot allow fires, camping, hunting, fishing, horseback riding, swimming, and canoeing.

All pets must be on leashes.

All groups are welcomed. Please make advance arrangements for special programs.

You'll find picnic tables outside the visitor center.

Please take memories and photographs. Do not gather or disturb any plants, flowers, insects, wildlife, or artifacts.

The refuge prohibits possession of any weapon or ammunition on the refuge.

Attwater Prairie Chicken NWR Facts

Where is it?

To reach the refuge from Houston, take I-10 west to Sealy, or from San Antonio, take I-10 east to Sealy, go south 1 mile on highway 36, then right on Texas Farm to Market Road (FM) 3013 for 10 miles. From Eagle Lake, take 3013 northeast for 6-1/2 miles.

When was it established?

1972

How big is it?

8,385 acres.

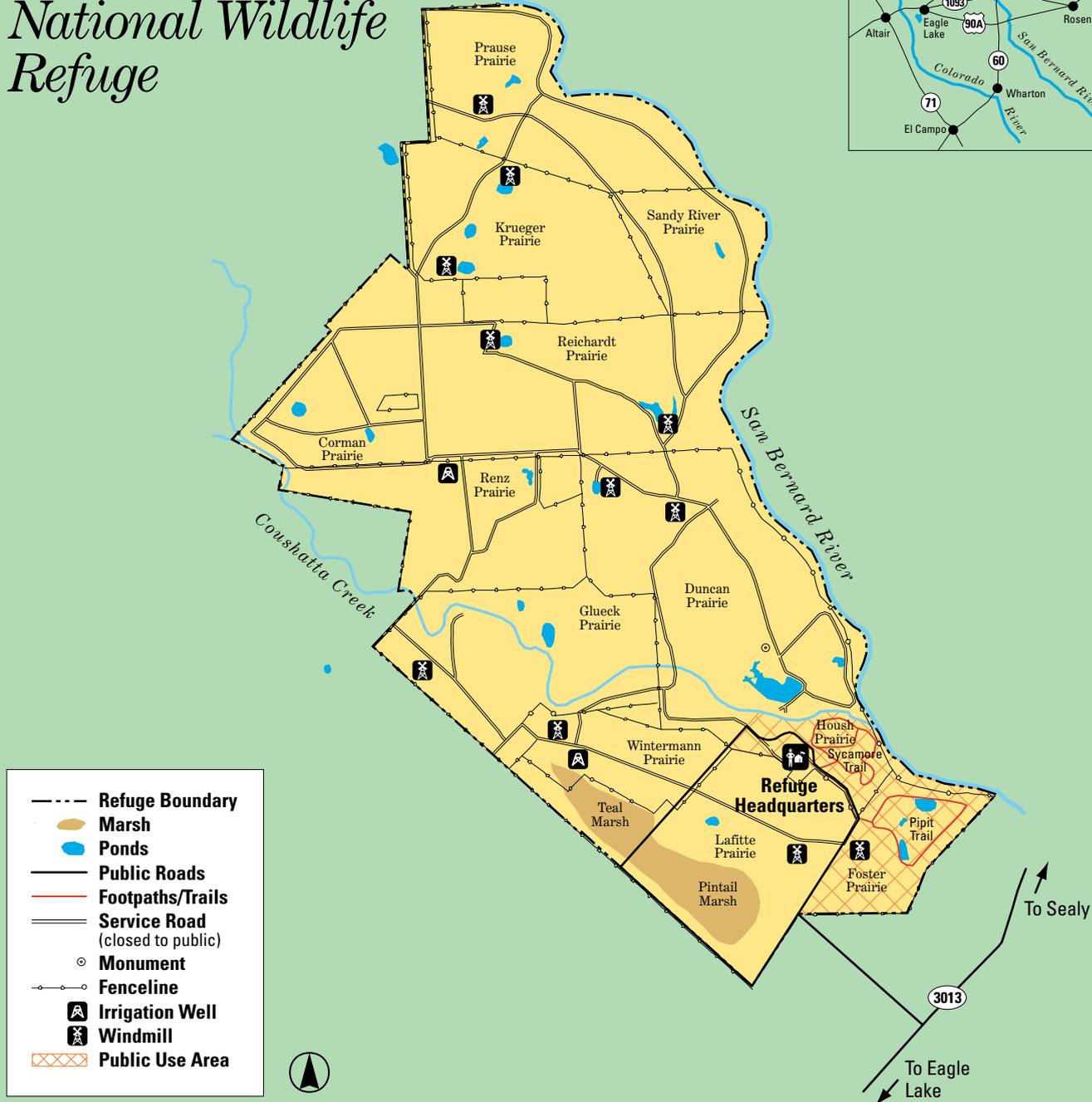
Why is it here?

To preserve and restore coastal prairie habitat for the critically endangered Attwater's prairie-chicken.

Attwater Prairie Chicken

National Wildlife Refuge

Vicinity Map



- Refuge Boundary
- Marsh
- Ponds
- Public Roads
- Footpaths/Trails
- Service Road (closed to public)
- Monument
- Fenceline
- Irrigation Well
- Windmill
- Public Use Area

**Attwater Prairie Chicken
National Wildlife Refuge
P.O. Box 519
Eagle Lake, Texas 77434
409/234-3021
409/234-3278 Fax**

**APC NWR web site:
<http://southwest.fws.gov>**

**Adopt a prairie chicken web site:
<http://www.zooweb.net/apc/adopt>**



**U.S. Fish & Wildlife Service
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**Attwater's Prairie-Chickens.
Photo by George Levandoski**