

**Project Perch's mission is to protect and nurture the Burrowing Owl in SE Florida.
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Project Perch's BuOw Blog 19

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Were The Burrowing Owls Here First?

I work on a lot of owl projects. On several of them, it is older Good Samaritans that are trying to help them and they will talk about how long the owls have been there and in some cases that the owls were there first. At two of the schools we work with the owls have been watched over for more than 25 years and the successive generations of owls create burrows in very close proximity to their original location. These discussions start and those recollections are quickly dismissed and there ensues a debate as to whether that's even possible because South Florida was all wetlands and therefore inhospitable to owls. It is often argued that development has created a more suitable environment to these owls and has actually allowed them to colonize areas in Florida. This is a very good argument for those who work in construction and need to apply for permits to destroy owl burrows. This line of thinking justifies the loss of burrows to development as not that bad because development originally allowed the owls to move in and colonize to begin with.

Chris Reiss Remembers the Burrowing Owls at Orangebrook Golf Course

So we were working on a project at the Orangebrook Golf Course (Orangebrook) and the Good Samaritan was Chris Reiss, who is in his seventies and immigrated to Hollywood, Florida in the 1970s. At a meeting between South Florida Audubon Society's Project Perch and Orangebrook's management that same discussion ensued. Everyone agreed that the owls had been there awhile but no one present had as long a history there as Chris. So Chris wrote this comment in his meeting summary:

"The history of Burrowing Owls (*Athene cunicularia floridana*) at Orangebrook was mentioned to be at least 5 years, but in my recollection at least 25 years, even possibly to before this area became golf courses back in the 1930s."

South Florida Historically Too Wet for Burrowing Owls & Our Development Created Suitable Habitat

He sent the meeting summary off to all interested parties and received an official correction to his comment that read like this:

"We doubt burrowing owls have been in this area for over 25 years. Burrowing owls have expanded their range into south Florida only because these areas have been drained and cleared due to development. Historically, these areas were probably wet lands and therefore not suitable for nesting owls."

Comments like these are supported by the Florida Fish and Wildlife Commission's (FWC) website, <http://myfwc.com/wildlifehabitats/profiles/birds/owls/burrowing-owl/> under the habitat section which reads like this:

“Humans have created new habitat for burrowing owls by clearing forests and draining wetlands. Burrowing owls inhabit open native prairies and cleared areas that offer short groundcover including pastures, agricultural fields, golf courses, airports, and vacant lots in residential areas. Historically, the burrowing owl occupied the prairies of central Florida. Recently, these populations have decreased because of disappearing habitat while populations in south Florida coastal areas have increased due to modification of habitat by humans.”

I had also seen this in a slide presentation by the FWC. The FWC is the entity charged with overseeing the permitting process, where developers and contractors are able to apply for and get a permit to destroy an owl burrow as long as there are no nesting owls in it.

The Bent Life History Series and Burrowing Owls in Southern Florida

I had been doing other research on owls and had already been reading some very early accounts of owls in Florida, so I did some more research and wrote the following back to Chris:

“People often tell me the owls weren't around in Southern Florida prior to the 1950s and expanded their range downward as the area was drained. The Bent life history series would say differently. I also now get a lot of seniors that send me stories and histories of all of the owls that used to be here that they remember from their youth.

I thought this reference from the early 1900s was very interesting as you said Orangebrook has been a golf course for a very long time, you might have said as early as 1928?

"W. P. Owen writes to me that he and H. H. Bailey have noticed "the moving of the burrowing owl from its accustomed habitat, the golf courses, to the dairy pastures", in Dade County."

“Published by the Smithsonian Institution between the 1920s and the 1950s, the Bent Life History Series of monographs provide an often colorful description of the birds of North America. Arthur Cleveland Bent was the lead author for the series. The Bent series is a great resource and often includes quotes from early American Ornithologists, including Audubon, Townsend, Wilson, Sutton and many others.”

The link is as follows:

http://www.birdzilla.com/birds/Burrowing-Owl/bent_life_history.html?Itemid=1044

They also describe the owls nesting in soils that had been very wet. A lot of people tell me the owls always select high dry ground and so couldn't have been here before Florida was urbanized, but again that is not true. They do their best with what is available, and again the Bent Life histories tell otherwise.

So I trust your memory and very much believe the owls were there at the start of the golf course and could have very easily predated the golf course.”

Chris wrote me back this:

“Fascinating stuff from the Bent life history! I really agree. Lack of previous reports and the shorter duration of some commentators' presence in the area explain this. I tend to think things don't change as much as it seems; we look for trends and changes where they often don't exist.”

Debbie Stasiw Remembers Owls in Hollywood Too

So I also wrote to a teacher, Debbie Stasiw, that I have been working with at Driftwood Middle School which is also in Hollywood. She has often told me that the owls have been at the school for at least 30 years and even before that. So I shared with her Chris' recollections and the “correction” that had been sent to his comment and copied her on what I wrote back. She agreed that the owls were here first, even before all of the wetlands were drained for development. She told me about the xeric uplands in Florida and told me to research the Atlantic Coastal Ridge in Florida.

The Uplands in Southern Florida

I found the following description at http://www.floridasnature.com/florida_habitats.html:

“When sea levels were much higher than that of present day, sand ridges formed from deposited sediment washed to the sea from eroding mountains to the north. As the sea level receded these deposits became islands. Plants colonized these islands, later as sea levels dropped further, the Florida peninsula emerged and the islands became the current day Florida Scrub.

Since development has overtaken or fragmented much of the original scrub habitat, many of the plants and animals endemic to it are considered endangered, threatened or rare.

The two largest areas of remaining scrub are found on The Atlantic Coastal Ridge, which runs parallel and in close proximity to the east coast of Florida from northern St. Lucie county south to Miami-Dade and Monroe counties, ranges in height from 10 feet to well over 50 feet above sea level and the Lake Wales Ridge which extends from Lake and Orange counties in the north, south through Highlands county and ranges in height from 70 feet to over 300 feet above sea level at its highest point.”

The Atlantic Coastal Ridge, the Railroad and Hollywood

Debbie told me the owls lived in this xeric upland habitat of Florida, which extended all the way south past Miami. She told me to think about where the current train ran down the east coast of Florida and that it runs right through Hollywood. The Florida East Coast Railway built the Daytona Beach to Miami section on that Atlantic Coastal Ridge and completed that section of the railroad in 1896. See their site at <http://www.american-rails.com/florida-east-coast-railway.html> for more information. So we humans were already displacing the burrowing owls and other wildlife way back then.

A Good Example of that Sand Pine Scrub Habitat - The Highlands Scrub Natural Area

A good nearby example of what we were talking about was the Highlands Scrub Natural Area in Pompano Beach. The area is 34 acres and is considered one of Broward County’s last substantial remaining “sand pine scrub habitat”. She told me to then take a look at where the railroad ran, and it runs down one side of the Highlands Scrub Natural Area. See their site at <http://www.broward.org/Parks/HighlandsScrub/Pages/Default.aspx> for more information.

Old Florida’s Burrowing Owl Colonies

Colonies of 200 to 300 Burrowing owls were described on the Kissimmee Prairie in the 1890s in the Bent Life Histories. Here are some of the first descriptions of the Florida burrowing owls:

Samuel N. Rhodes (1892) found a large colony in soil that had previously been very wet, “a continuous colony, three miles long, of breeding Owls. The retreating waters of the adjoining slough had left a margin of flat, grass-grown sand, of varying width, between the swamp and the saw palmettos, and extending indefinitely in the direction of the stream. This formed the breeding ground of several hundred pairs of Owls.”

At the turn of the century, they were already documenting the effects of habitat destruction and human interference on the Burrowing owl colonies in Florida:

“Probably no such large colonies as that referred to above exist today. W.J. Hoxie wrote to me of visiting a large deserted colony on the St John’s Prairie in 1893, where the remains of the old town were strikingly apparent for miles in groups of from six to twenty on all sides...”

Mr. Pennock says: “On but one occasion did I find a close community: then there were six or eight pairs nesting on a restricted tract not exceeding four or five acres...”

“Most of the burrows that I have seen have been widely separated, single nests; but once, while hunting with Mr. Pennock in Charlotte County, we found five pairs of owls nesting within the space of a few acres. This was on March 5, 1925...”

Conclusion

The Bent Life Series included a section on enemies and it closed with this:

“Mr. Hoxie tells me that it has been quite a common practice for the cowboys to shoot these owls as being detrimental to the cattle business..., but sad to relate, any wild creature that interferes in the slightest degree with man’s interests has to be sacrificed.”

The Bent Life Series showed that Chris was right. The burrowing owls were already here and as we developed Southern Florida we replaced their habitat with cattle pastures and golf courses. Even before Chris moved to Hollywood and joined Orangebrook and as early as the turn of the century the Burrowing owls in Southern Florida were losing their habitat and their lives to man.