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The Burrowing Owls of Marco Island

By Tim Beatley

It is hard to imagine a more charismatic and charming bird than a burrowing owl. Not very large, with big eyes and a fascinating biology (including, most notably, living and raising their young in underground burrows). They are beloved by many in communities lucky enough to have them around. I became familiar with them several years ago when making a film about efforts in Phoenix to install artificial underground burrows; an effort to actively relocate the owls from places (including as a result of highway

projects) where they have been displaced.

A subspecies of the burrowing owl is also endemic to the grasslands of Florida. Over multiple decades, the subspecies has been displaced and is now listed as a threatened species there. Some communities have been the beneficiaries of this displacement and have embraced the owls wholeheartedly; working to make room for their burrows in vacant lots and on the lawns of homes.

Marco Island, a barrier island in the southwest corner of Florida, is one such place and there a community is taking an interesting approach to coexisting with the owls. Conservation efforts have been spearheaded by the Audubon of the Western Everglades (AWE) in partnership with the City of Marco Island. I spoke with Brad Cornell of AWE about the efforts there, and the threats faced by the owls. While Marco Island has an abundance of the owls, currently there are fears that the island's booming growth

and development will leave little room for them. Especially concerning is the prospect of losing so many of the currently vacant lots where most of the owls nest. "What we all recognize is that we're going to lose this population as Marco Island builds out," notes Cornell.

The Burrow Starter Program is a direct response to these fears, hoping that at least some of the nesting pairs can find a home in the front yards of willing homeowners. In Florida, the Burrowing Owls actually dig their own burrows (unlike their western cousins who have mostly relied on prairie dog burrows). But they need a start, and this is where AWE volunteers come in, especially homeowners on the island willing to host owls in their front yards. For interested homeowners, AWE staff will scope out the yard and find the best spot for a burrow, then excavate around eight inches in an angled burrow (a starter burrow!) that hopefully the owls will discover and choose to further excavate and make a nesting site. If the burrow extends to 18 inches and beyond, Florida Fish and Wildlife Conservation Commission considers it a viable, active nesting burrow.

While still in the beginning stages, the program is off to a good start. Around 110 starter burrows were installed in 2020, with about 13 landowners who had recruited owls. So, the majority of these starter burrows end up unoccupied. Those homeowners who are lucky enough to find themselves

with a nesting pair of owls are, Cornell tells me, "elated." And unfortunately, many more are likely disappointed when owls do not arrive.

Several days later I caught up with Jean Hall, a professional wildlife photographer who coordinates the volunteers who work with AWE on behalf of the owls. She, along with field biologist Brittany Piersma, were on that day driving around the island checking on owls and gopher tortoises (another resident species that burrows as well and can also be found on vacant lots). My phone conversation with Jean that day confirmed for me the tolerance and resilience of the owls. As we were talking, there were loud

sounds coming from an adjacent construction site that seem not to bother the burrowing owl that Jean is watching, but the noise is a reminder of the relentless development pressure that the owls and tortoises must contend with.

Volunteers like Jean make the program work on the ground. Each season some 50 or more residents, most retirees, train to become "owl monitors," agreeing to watch the active burrows at least once a week and to record important information along the way (such as the presence and age of chicks). Each pair of monitors is assigned to one of the island's 22 neighborhoods, with responsibility to monitor around 15 sites.



Serving as an owl monitor is so popular there has been a waiting list. I ask Jean what she thinks the volunteers get out of the experience. She says she is not sure but notes the high rate of return of volunteers each year and the considerable learning opportunities and stress-reducing benefits of looking for owl babies.

To encourage homeowners to make room for the owls a special financial incentive was created in 2020. Homeowners with active nesting burrows were entitled to receive \$250 each year as long as the burrow remained active. It is obviously not a lot of money, but as Cornell notes an important step nonetheless: “What it does I think is lend some official public community recognition of the value of having wildlife.” It’s a recognition, he says, that the owls are a community asset.

It is not a large commitment of public funds for the city, about \$5000 a year, but impressive still that the city council is willing to support the effort financially.

Is the subsidy a significant factor in encouraging homeowner participation? It is hard to say. “It’s not the money,” Hall tells me, noting that some homeowners have even returned the funds back to the city. It is something else that primarily motivates people, she thinks: a love of the owls. But the funds are a small yet important signal about the importance of the owls and official encouragement to reimagine what a front yard could be (i.e. a habitat/home for burrowing owls and tortoises).

It would be ideal if cities could shift the financial incentives in ways that nudge and educate. Already many cities in the US west have put in place some form of “cash for grass” rebate, providing subsidies for homeowners who replace water-thirsty lawns with native plants and xeriscaping. Why not go further still, building on the inspiration of Marco Island, and assess one’s local property tax bill with biodiversity and ecosystems services in mind: the more species finding homes there, the more trees and native plants, the greater the ecosystem benefits provided by one’s yard the lower the tax burden. In a way similar to the installation of solar panels on one’s roof, where the electrical meter spins backwards, perhaps in some cases a property owner would receive a check from the city rather than having to pay taxes.

Another important part of what makes this initiative work is the safe harbor agreement between the city, the Florida Fish and Wildlife Conservation Commission, and participating homeowners. Because the owls are on the state list of endangered species, the presence of an owl or an active burrow could prevent a homeowner or landowner from developing or using their land in a particular way. Modelled after a similar provision at the federal level, the agreement assures landowners that the presence of the owls will not prevent them from developing or using their property in the future. The agreement does stipulate certain obligations on

the part of landowners, including a requirement to maintain the height of vegetation close to the burrows, avoiding the use of pesticides, and keeping the entrance to starter burrows clear of debris.

Especially interesting are the stories of hope where schools have interacted with the owls. Cornell tells me about one case in nearby Naples where a pair of owls established a nest just below the goalposts of a middle school’s football field. The proposed solution was to set up four starter burrows in other nearby locations in an effort to persuade the owls to shift to a less disruptive site; the owls did indeed move the next week and ended up fledging 5 chicks. What a wonderful opportunity to engage the students at a relatively young age with birds and urban wildlife and to provide a tangible demonstration of what coexistence looks like.

As creative as the starter burrow program is, it is likely not enough to ensure the survival of the owls (or the tortoises). Some effort to protect and set aside potentially developable vacant lots has also got to be part of the answer. And there have already been efforts to secure parcels through Collier Conservation, a voluntary land acquisition program that dates to the early 2000’s and has led to the purchase and protection of some 4,300 acres of habitat in the county. In fall of 2020, voters resoundingly voted (77% in favor) to restart this initiative and impose again an addition of \$250,000 to property taxes for an additional ten years.

Individual homeowners are also jumping in to help. Brittany Piersma mentioned one landowner she encountered in the field who ended up so enthralled with tortoises that he purchased the empty adjacent lot to be set aside permanently as a conservation lot. A few days later, she reports being contacted by another nearby neighbor interested in hosting a starter burrow, suggesting the potential value of neighborhood-based forms of conservation. “No matter how small or large, every small effort can truly make a difference,” she writes in an essay in the Coastal Breeze News titled “The Hope We All Needed.”

Is it possible to love the owls to death? There is quite a lot of owl-connected tourism I am told. People come to Marco Island to see the owls and the sight of small buses stopping to watch them is now common. It is another argument for defending and making room for the owls, and as Hall notes, local businesses are thrilled to see the tourist interest. These economic arguments, while not primary, are nevertheless helpful. The larger City of Cape Coral, to the north, has even more burrowing owls within its borders than Marco and their owl-tourism is booming, punctuated each year with a popular Burrowing Owl Festival that features bus tours and extensive education about the owls, as well as raising considerable funds for habitat acquisition.

What the longer future holds for these charismatic owls is unclear, and whether it will be possible

to secure a permanent place in this growing coastal city. The way they are beloved by residents and visitors alike, and the extent of volunteer engagement, as well the creative tools and strategies employed, are cause for optimism.

So far, the numbers of nesting owls is encouraging: the 2020 nesting season was quite successful, Brad Cornell tells me, with 255 nesting pairs on the island, producing 586 chicks fledged. Compared to the mid-1990’s this is a dramatic increase. The number of homeowners wanting starter burrows is another encouraging metric.

There is no doubt that Marco Island is a more interesting place because of the owls, as well as the tortoises and the other co-inhabitants of this barrier island, and the city a more caring and compassionate place for its efforts to make room for them.

Resources

Audubon of the Western Everglades (AWE). <https://audubonwe.org>.

Burrowing Owls: Building Habitat in Phoenix, Arizona [video]. <https://www.biophiliccities.org/burrowing-owls-film>.

