



## Least Tern Rooftop Monitoring Toolkit

Due to loss of traditional nesting sites along Florida's sandy beaches, the diminutive Least Tern (*Sterna antillarum*) is considered a Threatened Species in Florida. Remarkably, these birds began nesting on flat gravel rooftops in the late 1950s and today nearly 80% of Florida's Least Terns rely on this manmade habitat for their breeding success. While they're less likely to be disturbed on a roof than on a beach, being an urban dweller presents a new set of challenges. Least Tern chicks leave the scrape (shallow nest) 3-4 days after hatching but will not fledge (fly) for 3 weeks. A chick straying to the edge of the beach in a natural colony simply gets its toes wet in the surf; on a rooftop, chicks may fall to the ground, where traffic, fire ants, cats and other hazards await them, and are unable to return to the rooftop unassisted. Similarly, chicks may be washed down gutter downspouts during storms or be scared off the edge when unknowing building owners access the roof for repairs or air conditioner maintenance.



Some species of seabirds, like these Least Terns, nest on gravel rooftops in Florida for lack of undisturbed beaches. © D. Roach

### How You Can Help

While natural beaches would be preferable, rooftops are now important for maintaining Least Tern populations in Florida. Audubon Chapters around the state have begun to organize volunteers to monitor colonies, educate the public and rescue chicks that have fallen or been washed from rooftops. If your chapter would like to start one of these programs, there is a tremendous amount of information and resources available.

**Plan ahead for next breeding season by following these basic steps.**

#### ① Evaluate your area and volunteer interest.

Do you have rooftop-nesting colonies in your area? Are you or one of your team knowledgeable about birds? Can you rally a handful of volunteers? Check the Florida Fish and Wildlife Conservation Commission's [Breeding Bird Atlas map](#) to find the historical nesting sites in Florida. You can also learn where previously existing beach nesting bird sites (on rooftops and otherwise) are in your area on the FWC's [Beach Nesting Birds Website](#). If your knowledge of bird identification is limited, that's ok! Just make sure one person in your core group has strong ID skills. Volunteers can be found many places but your Audubon chapter is a great place to begin.

#### ② Learn from other Audubon Chapters.

You're not alone! Other chapters have done what you are now undertaking, so check with them to learn about the different ways they have addressed the same challenges. St. Petersburg Audubon pioneered the volunteer model of rooftop monitoring, but many other chapters have implemented programs of their own. Audubon Chapter Coordinator [Jacqui Sulek](#) (850/251-1297) can help you find the right point people to poll.

### ③ Find an FWC partner who can help give you guidance in your region.

The Florida Fish and Wildlife Conservation Commission (FWC) is the state's wildlife agency, and while their staff is limited, they are eager to partner with volunteers on colony monitoring. They can provide guidance and support, and **you will need their permission to handle chicks in order to return them to the rooftops**. The data you collect will also help them better protect Least Tern populations statewide. You can find the nearest regional [FWC office online](#) (ask for their "HSC biologist"). They may also direct you to contact a local wildlife rehabilitator, under whose permit you can legally return grounded chicks to the rooftops from which they fell.

### ④ Plan ahead and set up a timeline.

Adult Least Terns begin returning to nesting sites from their South American wintering grounds in mid-April. Egg laying is likely to occur after April 25 and can last through August 6. If for some reason a nest is unsuccessful, tern pairs may try again. In this event, re-nesting can carry the season into September. See the [sample calendar](#) to help plan your group's activities.



Normally, Least Terns would nest on sandy beaches. They do not build nests but lay their camouflaged eggs in "scrapes." Gravel rooftops mimic these beach habitats. © C. Farrell

### ⑤ Train your volunteers.

Tern identification review classes, counting techniques, wildlife rescue and available resources are all important topics to cover. Make sure that trainings include time in the field, not just in the classroom, to make training more effective and fun!

### ⑥ Make assignments and survey the colonies.

There is a job for everyone, suited to their individual talents. Some of these jobs include:

**OUTREACH** to the building owners or occupants where birds have been found. Sometimes these folks feel rooftop colonies are a nuisance. Birds leave droppings on cars in the parking lot below, or make their rooftop off-limits to maintenance for the duration of the breeding season. Build a relationship with these building owners. Praise them for being good stewards of this important resource and provide them with information on the birds and what you are doing. Let them know how important their cooperation is and how you can help them resolve complaints.

**MONITOR** the sites where you have found birds, to get an estimate of the number of pairs, to see which species are using the colony, to keep track of the breeding season's progression, as well as to watch for any preventable problems such as human disturbance. This should be done as often as possible—weekly or daily, depending on the size and availability of your volunteer corps.

**CHICK CHECK.** Once the chicks hatch, you will want volunteers to make regular stops to check for fallen little ones around the base of the building. **Make sure you have the proper permission to handle chicks.** Stow a [Chick-a-boom](#) onsite for convenience with landowner permission, if possible. Long-handled dip nets can be helpful for catching older chicks, that move faster on foot than you might expect!

**CONTACT THE MEDIA.** Invite a reporter to join you and get as much coverage as possible for the birds, the site owners and your volunteers. Thanks and recognition in the local paper can go a long way towards creating good will for the birds and visibility for your chapter.

### ⑦ Recognize Your Volunteers!

At the season's end, give your volunteers a review of all they've accomplished. Give them a chance to share their successes, and make recommendations how the process can be improved in the coming year. Most importantly, take the time to recognize them for making a very real contribution to the conservation of one of Florida's most imperiled birds!

## Additional Resources

- Florida Fish and Wildlife Conservation Commission . . . . . [www.myfwc.com](http://www.myfwc.com)  
 St Petersburg Audubon Society . . . . . [www.stpeteaudubon.org](http://www.stpeteaudubon.org).  
 St. Johns County Audubon Society . . . . . [www.stjohnsaudubon.org](http://www.stjohnsaudubon.org)  
 Audubon of Florida . . . . . [www.audubonofflorida.org](http://www.audubonofflorida.org).  
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## Sample Calendar

This is an example of how Clearwater and St. Petersburg Audubons schedule their volunteers for the nesting season.

Month	Date	Activity
April	19	Volunteer training for beach nesting surveys (Bird ID practice, beach etiquette, instruction on how to fill datasheet, instruction on how to fill FWC online form).
Apr 21 thru May 3		Volunteer visits to all historical Least Tern (LETE) rooftop nesting sites
April	30	First survey of all beaches
May	3	Volunteer training session for rooftop nesting (distribution of badge, instruction on how to fill datasheet, instruction on how to complete FWC online form, instructions on chick rescue)
May	11-15	Check rooftops for terns and do disturbance count if possible
Mid-May thru June		Chick-checking patrols will pay regular visits and rescue chicks at problem roof sites
May	20	Second survey of all beaches
June	1-6	Check rooftops for terns and do disturbance count if possible
June	22-26	Check rooftops for terns and do disturbance count if possible
July	4	Post bird stewards by beach-nesting colonies to help protect colonies from disturbance by holiday celebrations
July	14	Check rooftops for terns and do disturbance count if possible
July	16	Third survey of all beaches, including count of juvenile Least Terns at their pre-migration assembly locations
July	27	End of nesting season volunteer recognition event

## Chick-a-booms

The Chick-a-boom is a tool made from inexpensive household materials created by St. Petersburg Audubon volunteers to return grounded chicks to their rooftops, with minimal disturbance to the colony. They are easy to make and use, but do require some practice, so be sure to schedule onsite training for chick checkers to master their Chick-a-boom skills!

For a schematic of how to build a Chick-a-boom and contact information from chapters who can give advice on use and training, contact [Jacqui Sulek](mailto:jsulek@audubon.org) at 850/251-1297. These handy tools make chick checking a quick and efficient exercise for you and your volunteers!

A volunteer with Clearwater Audubon returns a Least Tern chick to its rooftop colony with the help of a Chickaboom. © A. Kelsey ➤



## Acknowledgments

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