

MANUAL FOR CONSTRUCTING SEABIRD NESTING RAFTS

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Least terns produced chicks on floating nesting platforms at Fort Desoto Bird Sanctuary, Florida.

Two nesting rafts for Least Terns were constructed at Fort Desoto Bird Sanctuary using recycled materials. This manual describes the process, materials, and considerations for building floating nesting platforms for seabirds. Project photos are included at the end of the manual as visual aids.

The first raft, *Le Bateau de Laridae*, was built and launched before the 2010 breeding season. Two salvaged 15' x 12' aluminum dock sections were bolted together, and foam-filled, tubular floats were attached underneath.

A slightly smaller (12' x 7') raft, *Love Boat II*, was launched before the 2011 season. Parts salvaged from Fort Desoto Park and the FWC Lake Toho land platform that failed to attract Least Terns were turned into this floating nesting habitat. It was made from four sections of frame work lumber that framed aluminum screening. Each section was placed over foam-filled, black plastic dock floats which sit lower than the aluminum dock floats used on *Le Bateau de Laridae*.

On both rafts, a wooden border was built to contain a bed of pea gravel (1-2" deep) placed on a landscaping cloth barrier (gravel works better than sand, which weighs down the raft). A 6" high hardware cloth fence was then installed around the raft's perimeter to prevent chicks from falling off the raft. In the center of each raft, a chick shelter was constructed for chicks to escape the heat and predators. The shelter is 3' x 3' square, stands 6" high, and all four sides have a 4" x 8" entrance that allows the chicks to easily access the shelter.

Decoys are critical for attracting Least Terns to your raft, so placing decoys is the final step before launching the raft. Decoys must be placed in natural-looking positions to simulate incubating pairs, so that terns flying overhead can recognize the raft as nesting habitat. For a small raft, no more than four decoys (two pairs) are needed.

The rafts must be securely anchored, preferably by expert boating/diving volunteers. Placement of the rafts has special logistical, habitat, and permitting considerations, so we strongly advise working with local government, land managers

and/or wildlife agencies for guidance. The rafts should be sited in a location that is conducive to monitoring, particularly when the chicks begin to fledge. Optimal habitat for the rafts is somewhat shallow water in a protected lagoon or estuary, far enough away from shore to discourage mammalian predation, but close enough so that fledging chicks can wade to shore if they fall into the water while learning to fly.

For those who cannot find a scrounging network for materials, you may want to look into the materials or ideas in the following web link to develop a cheaper flotation model plan: <http://rollingbarge.com/floating-docks>.

If you have any questions, feel free to contact me at donlocomm@aol.com or (727) 525-6627.



Fort Desoto Park chicks on the rafts



Tropical storms: Why anchoring and structural integrity are a must!

Below are some project photos for building *Le Bateau de Laridae*:



1. Joining the floating aluminum docks.



4. Laying landscaping cloth before pea gravel application.



2. You do need some strong folks on your team!



5. Raking in the pea gravel.



3. Installing the chick shelter.



6. Placing decoys before launch.