



3075 Sanibel-Captiva Road ▪ Sanibel, Florida 33957 ▪ 239.395.2233 ▪ www.shellmuseum.org

These tips are brought to you by The Bailey Matthews Shell Museum, a non-profit Museum featuring more than 30 exhibits of mollusks from around the world. Exhibits are devoted to shells in art and history, shell habitats, rare specimens, fossil shells, and common Southwest Florida shells. The learning lab features a hands-on play area for children, displays, games, and a tank with indigenous mollusks. A half-hour video, Mollusks in Action, is shown on the hour, and a children's video is shown continuously. The Museum Store offers a wide selection of shell books, pottery, jewelry, toys and other shell and sea life related gifts. The Museum is open daily from 10 a.m. to 5 p.m. Admission \$7 for adults, \$4 for youth, and children 4 and under are free. Please call or check our web site for a list of weekly workshops and monthly special events for adults and children, or to access a guide for Southwest Florida shells.

Finding Shells

- Best time of the day to find shells is the first low tide of the day. There is a window of opportunity from one hour before low tide to one hour after low tide. Remember, **collecting live shells in Lee County is prohibited.**
- Best days of the month are during the new moon and the full moon.
- Storms create a haven of treasures, especially when the winds are out of the North or Northwest.
- Many shells are found right below the surface of the sand. Telltale bubbles indicate that a creature waits below.
- Tidal pools are a haven for marine life. Check under rocks, logs, driftwood, and in "clumps" of seaweed. Be sure to return the habitat to the state in which you found it. Intertidal sand and mud flats are great for burrowing mollusks and sea snails.
- As a mollusk moves, a trail may be left behind. Look for "tracks" in the sand.
- Snorkeling during low tide is a great way to collect shells that are in good condition. Explore pilings of bridges or wharfs.
- Wade out into the water during the low tide. Shuffle your feet. "Feel" for shells with your toes.
- Look along the tide line characterized by "shell grit." Use a sieve to identify treasures.
- In mangrove areas check around the tree roots.
- Check out large piles of shells at the high tide line. Don't assume they've already been "picked over."
- Shallow water right at the tide line is great for finding small shells. A sieve can be used to separate the "grit" from great finds.
- If you don't find shells on one beach try another area of the island.
- Useful tools of the trade: mesh collection bag, small shovel, magnifying glass, snorkeling gear, metal sieve, "shell scooper" net, small rake, pocket knife, field notebook, waterproof pen, small plastic bags, and a lightweight backpack.

Cleaning Shells

- Remove loose debris and sand.
- If there is a dead critter inside pull it out with tweezers, a dental pick or a coat hanger bent to form a hook.
- Eliminate odors and bacteria by mixing equal parts of household liquid chlorine bleach and water and completely covering the shells with the solution.
- Soaking time is dictated by the type of shell, the quantity of shells being cleaned and how heavy the periostracum coating is. The periostracum is a thin organic coating that serves as the outermost layer of the shell.
- Bleach should not be used on tulip shells, king's crowns, and shiny shells like olives and cowries.
- When working with the bleach solution or removing animals, a mask, goggles and old clothes should be worn.
- Scrub both the outside and the inside of the shell with a toothbrush, nail brush or wire brush. A steel dental pick can be used to remove barnacles or other small shells attached to the outside of the shell. This tool is especially helpful with cleaning the ridges in cockle shells and scallops.
- Spiral shaped shells may be cleaned inside by using a small curved wire brush on a twisted wire stem, like a brush used to clean baby bottles.
- If you use bleach on sand dollars leave them in the solution for about 20 – 30 minutes. Sand dollars can be left to dry for the winter and they will whiten by themselves.
- If you leave sand dollars in the sun for extended periods of time they become very brittle and crumble easily.
- Coat sand dollars, sea urchins, and other fragile shells with a solution of 50% water and 50% Elmer's glue. Mix and apply solution to one side with a paint brush, dry and then flip over and do the other side. Apply three coats.

Safely Transporting Shells

- Sturdy shells can just be packed in small plastic bags. The techniques below can be used for delicate shells.
- Fill plastic bottles with sand to cushion the shells. Small shells can be placed in plastic medicine containers.
- To protect hinged bivalves, stuff them with cotton and use scotch tape to secure them in a closed position. Be sure to remove the tape when you return home or it will adhere permanently to the shell.
- Save coffee cans and plastic peanut butter or mayonnaise containers. Wrap your shells in toilet paper or bubble wrap. Buy rice or wheat puffs which serve as a protective filler in metal /plastic containers or zip-lock bags. Coffee cans can be placed in checked luggage but shouldn't be packed in carry-on bags or mailed in corrugated boxes.
- Styrofoam peanuts or sawdust work well as a filler for packing larger shells.
- For sand dollars or other delicate, specimens buy a loaf of bread. Put each specimen in between two pieces of bread and re-pack.
- To mail packages use heavy corrugated boxes, reinforce boxes on the corners and line with corrugated material. Reinforce the sides with crisscrossed pieces. Place box inside another box, with crumpled up newspaper serving as a shock absorber between the two boxes.