Mini Manatee Habitat Bottle

Program: Mesmerizing Marine Mammals

After reading *Buddy Manatee* by Tim Thomas, participants will create a fun sensory bottle with a miniature manatee and foliage-like foil sequins. The bottles promote calm and focus as makers use non-toxic glue to "slow down" the water in the bottle so the mini manatee can be observed "swimming" with green and blue pieces that mimic the leaves and water reflections of Florida's rivers and springs that they call home.

Objectives:

- Educate participants about the environment where manatees can be found (rivers and springs).
- Discuss the history of manatee conservation and safety practices.
- Emphasize the importance of observing these creatures from a safe distance so they can live and thrive in harmony with Floridians and visitors to our state.

Materials Needed:

- Clear plastic bottle with cap and label removed
- Non-toxic, clear liquid glue
- Water, warm
- Foil sequins or "table scatter" in blue and green, in the shapes of leaves and twigs if possible
- A plastic miniature manatee figurine

- Food coloring, blue (optional)
- Super glue can be used with the help of an adult to secure the bottles closed
- Funnel
- Trays with raised edges, to catch any water spills

Alternative/Pre-activity:

Manatee coloring sheets and fact booklet.

Activity Plan

Set up a station with a bottle, manatee, sequins, and glue on a plastic tray. An adult should handle the warm water and food coloring and supervise the pouring of materials into the bottle.

With the help of an adult, fill the bottle up about 3/4 with warm water using the funnel. Then, add a drop or two of blue food coloring if desired. Next, add between two to three ounces of glue to the water in the bottle. Replace the cap and gently mix the bottle to dissolve the glue into the water. (If making multiple bottles, it can be helpful to mix the glue and warm water in a pitcher beforehand and then pour into each bottle).

Once the glue has dissolved, uncap the bottle and carefully add some of the blue and green sequins to the bottle (using the funnel to minimize spillage). Then add the mini manatee into its new home. Carefully fill the rest of the bottle up to the cap. Ideally, you should let the water cool completely before permanently gluing the cap down to keep the bottle from getting bent out of shape.

You can screw the cap back on tightly and check that the manatee is having fun in its new home by rolling and turning the bottle. Glue the cap shut with superglue once the water is room temperature. Enjoy these small serene sirens in your recycled bottle!

Historical Research/Works Cited

- Manatees can be found as far north as Massachusetts or as west as the Texas shoreline as they migrate during the summer months. In the winter, they call Florida home. They are slow-moving grazers of aquatic plants (so slow their tails can grow barnacles).¹
- Manatee mothers typically only have one calf at a time every two to five years. These calves stay with the
 mother for two years. Blue Spring saw the birth of twins by manatee mom Phyllis in 1991.²
- Manatees are protected by federal and state laws dating back to the 1970s. Over a dozen Florida counties have programs in place to educate boaters and visitors about manatees in their habitats and how to protect them.³
- Manatees have "marching molars" that replace themselves as they wear down from the constant grinding of seagrasses with bits of sand.⁴
- Because manatees swim so slowly, they are often covered in algae or barnacles. The barnacles fall off as the
 manatees return to fresh water after their travels in the ocean. Algae can occur in saltwater or fresh water
 environments.⁵
- Manatees have no natural predators once fully grown. They can be 1,000 pounds in weight and need to eat 10% of their body weight in sea grasses each day to stay healthy and full.⁶

¹ https://www.savethemanatee.org/manatees/facts/

² https://www.savethemanatee.org/manatees/facts/

³ https://www.savethemanatee.org/manatees/facts/

⁴ https://www.savethemanatee.org/manatees/manatee-faq/

⁵ "Habitat," <https://www.savethemanatee.org/manatees/manatee-faq/>

⁶ Interview with Ally Greco from the Save the Manatee Club, July 8, 2021, Tallahassee, Florida.