

School Success Stories



Riverview High School's invertebrate touch tank is a truly hands-on experience for students.

Riverview High School — Sarasota County

The [Stars to Starfish Program](#) was started in 2011 and was funded by the Florida Department of Agriculture and Consumer Services, Florida Aquaculture Review Council and the State Farm Youth Advisory Board. Katrin Rudge, program director, began the program to provide students with hands-on learning opportunities in aquaculture and marine science and continues to direct and grow the program today.

Current Projects

- **Clownfish and Coral Propagation** — Marine science students maintain a clownfish breeding and larval rearing program involving all aspects of aquarium management and marine fish husbandry and reproduction. Marine tanks housing corals are also maintained by marine science students for coral fragging and propagation. Larval clownfish and coral fragments are sold to offset some of the costs of the program.
- **Snook Research** — In coordination with Mote Marine's study to tag and release snook in Phillippi Creek, Riverview's marine science students tag snook and release them into the creek on the school's back property. As one of the 10 project monitoring stations, Riverview collects data on snook habitat preference for Mote Marine scientists.
- **Redfish Aquaculture** — Redfish fry, provided by Mote Marine, are grown to 2 pounds in a recirculating system. Students manage daily care and feeding of the redfish to maximize their growth rates.
- **Pizza Garden** — Students grow all the vegetables you would find on a veggie pizza (tomatoes, onions, green peppers, spices, etc.) in an aquaponic system that utilizes snook waste as fertilizer for the plants.
- **Marine Club** — Students participating in Marine Club engage in various after-school community activities including beach and Phillippi Creek cleanups via kayak, shoreline restoration projects, invasive plant removal, mangrove planting, seagrass ground surveys, and scallop and clam population restoration in Sarasota Bay.

Program Goals

- Teach students the concepts of sustainability and how to aquaculture fish and coral both for the aquarium trade and as a source of food. Students learn about aquaculture's role in taking pressure off of natural marine ecosystems, while also learning the importance of environmental stewardship through hands-on training, field trips and beach cleanup projects.

- Engage students in all aspects of aquarium maintenance, including water quality chemistry, food web dynamics, engineering and math — a true STEM program! Students also develop a strong work ethic and a sense of responsibility for their designated aquariums.
- Stars to Starfish field trip for students in kindergarten through eighth grade. High school students in their second year of marine science courses teach over 4,000 elementary and middle school students from their Sarasota school district annually in a field trip experience that engages all the learning senses. Field trip participants begin each tour at Riverview’s planetarium where visitors watch a 20-minute, Riverview-created planetarium show titled “Stars to Starfish.” Following the planetarium tour, student interns accompany each group to the “Aquadome,” Riverview High School’s 32-by-72-foot aquaculture facility, where students are led through a wide variety of exhibits, including a visiting snook and shark tank, a touch tank with saltwater invertebrates, a clownfish reproduction system, a coral propagation tank and a productive aquaponic system. Each exhibit emphasizes environmental sustainability while also covering content pertinent to Next Generation Science Standards. The field trip is an enriching experience for both guests and student tour guides, who passionately discuss their projects and promote aquaculture and marine conservation to younger students.
- Strong partnerships with Mote Marine, New College of Florida and the University of Florida’s Tropical Aquaculture Lab provide opportunities for advanced students to get involved with real research projects.