



## **BABYSIT A SCALLOP!**

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# SITUATION

Recreational scalloping is a popular summertime activity and economic driver along Florida's Gulf Coast, including Hernando County. Unfortunately, in recent years, annual scallop abundance surveys and stakeholder input indicated local scallop populations were declining. Bay scallops are filterfeeding bivalve mollusks that only survive one to two years and are sensitive to environmental factors like salinity and red tide. They reproduce via broadcast spawning after the recreational harvest season closes. Research shows that caging scallops increases the chance of successful fertilization and is much cheaper than investing in hatchery-reared spat.

### RESPONSE

#### Organization and Training

- Marine Agent secured predator exclusion cages, monitoring supplies, and permits.
- Database created and managed by Marine Agent.
- Training workshops held (n=3) to teach volunteers how to conduct underwater surveys, care for wild-caught scallops, and properly submit data.

#### <u>Objective</u>

To increase depleted scallop populations in identified location (Fig. 1).



**Figure 1.** Adventure Coast Scallop Sitters work in state waters off Citrus, Hernando, and Pasco counties.



**Figure 2.** Marine Agent and volunteers work to fill predator exclusion cages with wild-caught scallops.

### Field Work

- Volunteers conducted underwater surveys before and after the recreational bay scallop harvest season in Hernando and Pasco counties.
- Volunteers collected wild bay scallops from state waters off Hernando and Pasco counties (Fig. 2).
  - Scallops secured in predator exclusion cages and anchored near seagrass beds.
  - Wonthly the volunteers maintained the cages and scallops.
  - Salinity, scallop condition, scallop size, hours volunteered, and site coordinates recorded during each cage visit.

#### **Engagement**

- Online group was created for volunteers to post pictures, share updates, and interact with other scallop sitter volunteers (Fig. 3).
- T-shirts provided to trained volunteers to unify team and promote the project within community.

### **RESULTS AND CONCLUSION**

Pre and post-tests showed volunteers gained 88% relative knowledge after completing the training workshops.

- Volunteers collected over 1,400 wild-caught bay scallops.
- On a monthly basis, 41 volunteers maintained 30 predator exclusion cages and properly submitted data collected.
- Pover 70 underwater surveys were completed before and after the recreational bay scallop harvest season in 2020 and 2021.
- Program-generated data was adopted by state agency that manages the fishery.
- The 2021 surveys indicated that Hernando County had the highest bay scallop abundance recorded in nine years.
- Volunteers dedicated 520 hours towards the Adventure Coast Scallop Sitter project (\$12,501 value).
- Additional \$2,000 of in-kind contributions supported this project.

Thanks to the continued support of the community and fishery biologists, this program is proceeding into its third year!

#### Acknowledgements

This project would not have been possible without the support and assistance Florida Fish and Wildlife Conservation Commission, Bayside AutoWorks, Hernando Environmental Land Protectors, and numerous volunteers.



Checked my cages today with first mate Bob! Salinity 27 water temperature 58. All are doing well and look ready to Spawn. Still lost a few more to predators. Cute little hitchhiker on one of the cages. Beautiful day to be on the water!



**Figure 3.** Volunteers share updates with each other

All activities were conducted under SAL-20-2217 and SAL-21-2217.

during project.