

Reducing Juvenile Sea Turtle Bycatch: Developing Reduced Bar Spacing in TEDs

Results Fact Sheet

Selected in the 2019 Open Ocean Restoration Plan, the **Reducing Juvenile Sea Turtle Bycatch through Development of Reduced Bar Spacing in Turtle Excluder Devices project** started in 2021. NRDA restoration projects are designed for voluntary participation to achieve restoration from DWH natural resource damages and are not designed for regulatory purposes.

Project Objectives

- Develop and evaluate reduced bar spacing Turtle Excluder Devices (TEDs) designed to exclude small sea turtles in the shrimp otter trawl fishery.
- Test small bar spacing TED prototypes through the NOAA Fisheries small turtle testing protocol.
- Conduct independent and dependent bycatch reduction and target-catch retention testing and corresponding restoration potential for sea turtles for each TED design produced.
- Determine number of participants interested in incentivized voluntary use of 2.5 inch bar spacing TEDs.

Results

Of the 7 TED designs tested, 3 were **successful** at small turtle exclusion and **shrimp retention**. For more information on these 3 TEDs see the next page.







Want to Provide Feedback?

- Talk in person at local industry outreach meetings
- Email restoration managers directly
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Next Steps

- Commercial testing will be finished on remaining TED design and results will be analyzed
- Project team is sharing results at various locations throughout the Gulf in Spring Summer 2024
- Discuss options and potential interest from shrimpers to carry reduced bar spacing TEDs on their vessels
- Phase 2 project currently under evaluation by the Open Ocean Trustee Implementation Group









Top 3 TED Designs

Results shown below are compared to catch rates of the industry standard 4" bar spacing TED

	Top Opening Super Shooter,
	Double Cover
TED angle	55°
Bar spacing	2.5"
Shrimp catch on NOAA R/V Caretta	- 3.3% shrimp
Shrimp catch on commercial vessel	+3.3% shrimp
Bycatch on NOAA R/V Caretta	+0.6% bycatch
Bycatch on commercial vessel	-12.6 % bycatch



	Top Opening Straight Bar Rectangular, Double Cover
TED angle	55°
Bar spacing	2.5"
Shrimp catch on NOAA R/V Caretta	+1.1% shrimp
Shrimp catch on commercial vessel	Not yet tested
Bycatch on NOAA R/V Caretta	+2.9% bycatch
Bycatch on commercial vessel	Not yet tested



	Bottom Opening Super Shooter, Double Cover
TED angle	45°
Bar spacing	2.5"
Shrimp catch on NOAA R/V Caretta	+0.5% shrimp
Shrimp catch on commercial vessel	+7.8% shrimp
Bycatch on NOAA R/V Caretta	-5.5% bycatch
Bycatch on commercial vessel	-2.9% bycatch









