

Chasing Shadows: Smalltooth Sawfish (*Pristis pectinata*) Unusual Mortality Event Field Response and Observations

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Photo credit: Kayleen Castelli



American Elasmobranch Society Annual Meeting – New Orleans, LA – 11 July 2026



- **Hotline Reports**
 - **Behavior**
 - **Response Efforts**
 - **Field Observations**
 - **Case Studies**



2024 and 2025

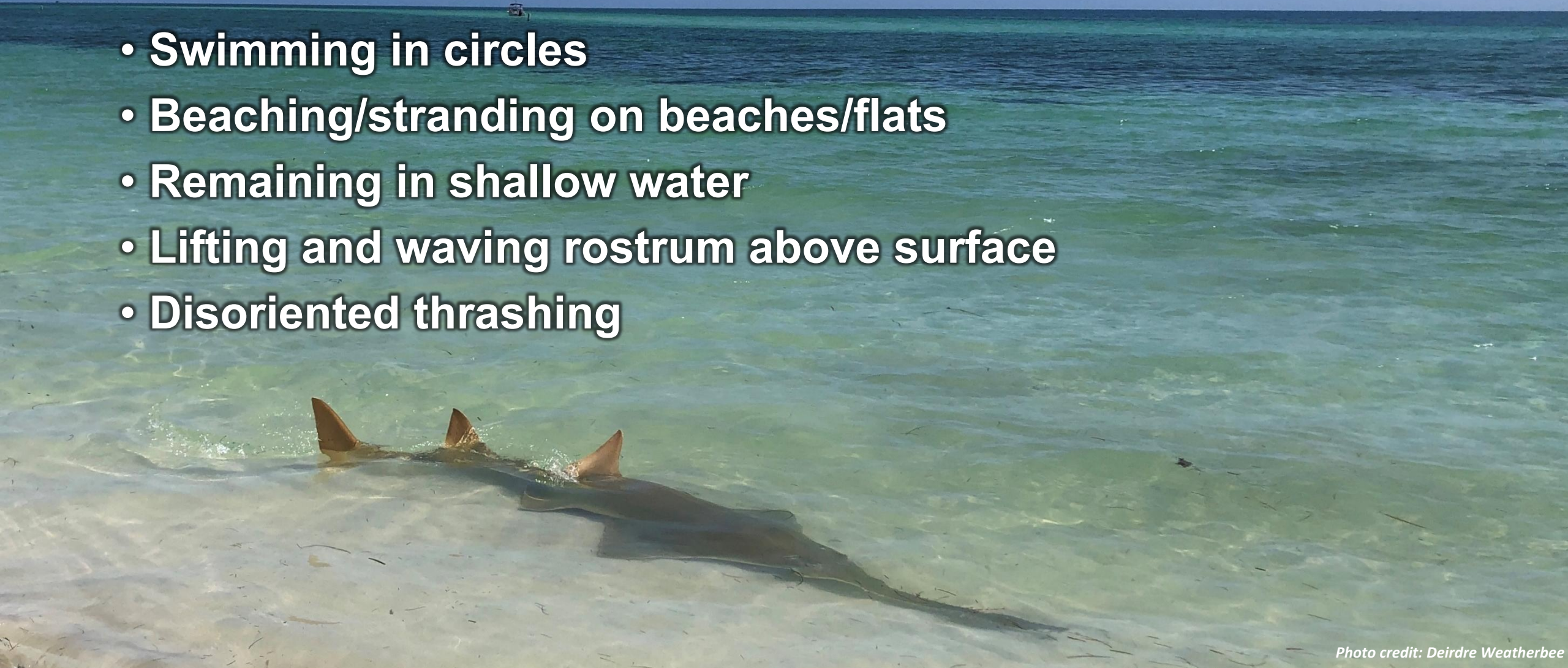
297 reports

65 confirmed mortalities

134 responses

Unusual Behavior

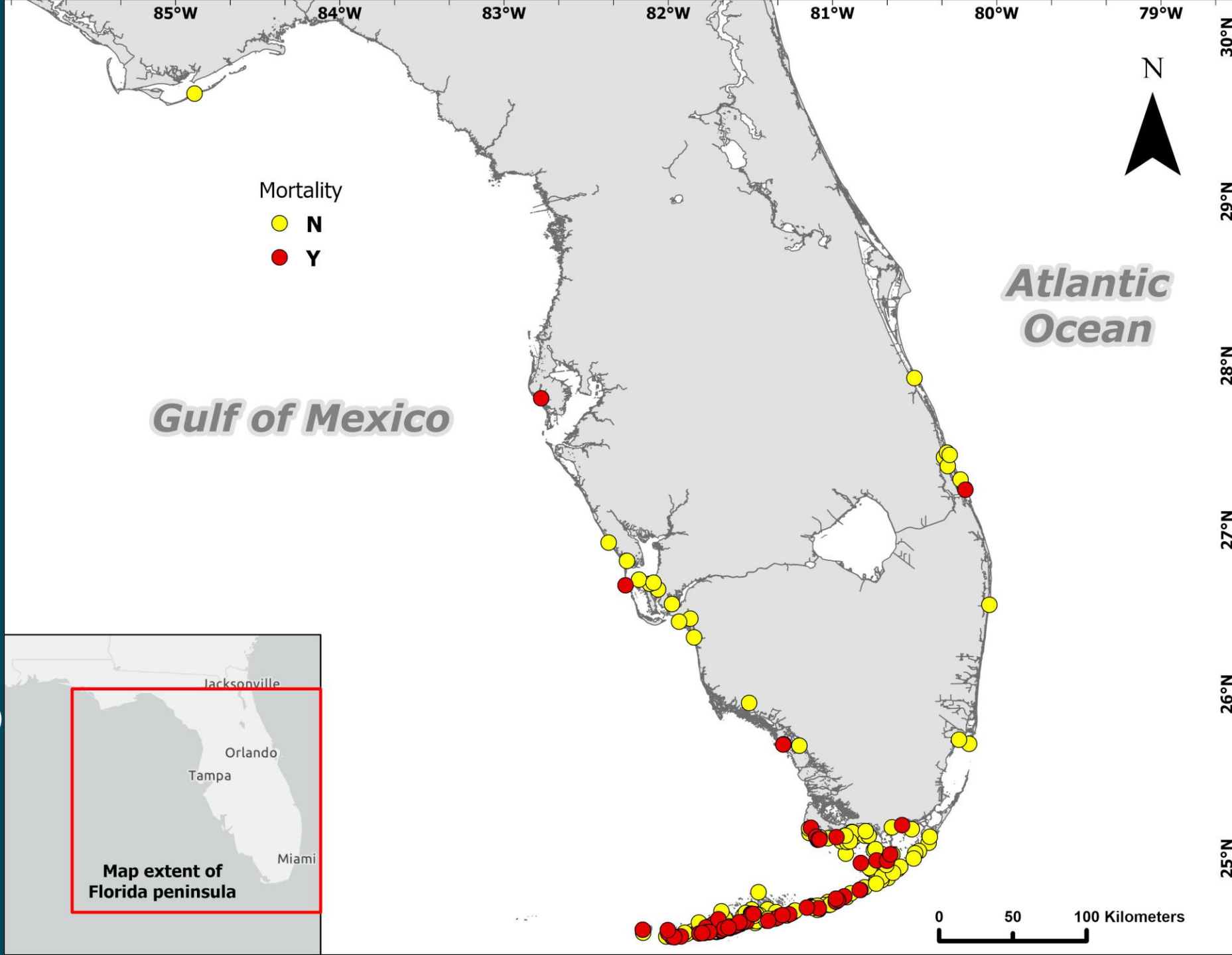
- Swimming in circles
- Beaching/stranding on beaches/flats
- Remaining in shallow water
- Lifting and waving rostrum above surface
- Disoriented thrashing



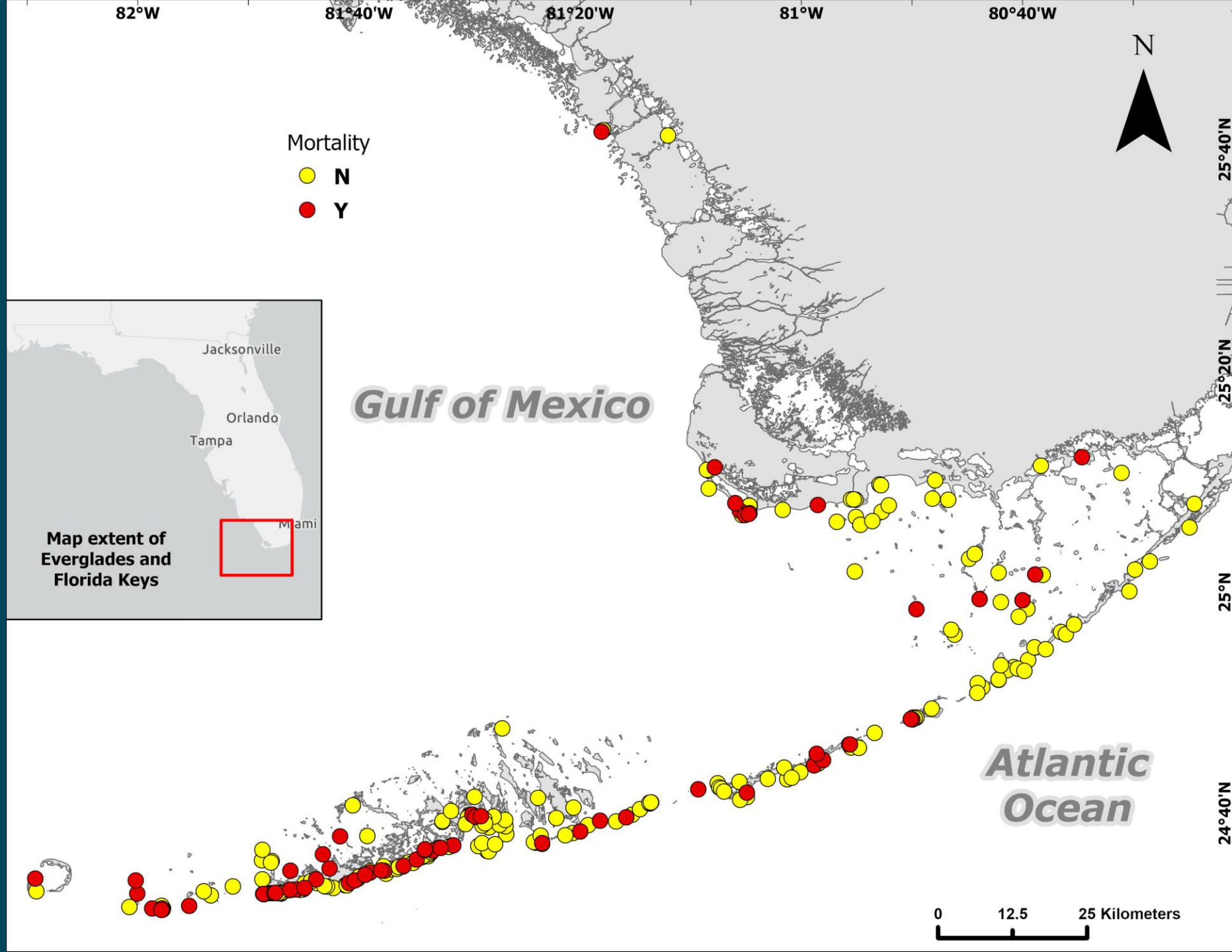
All 2024 & 2025

297 reports

(65 mortalities)



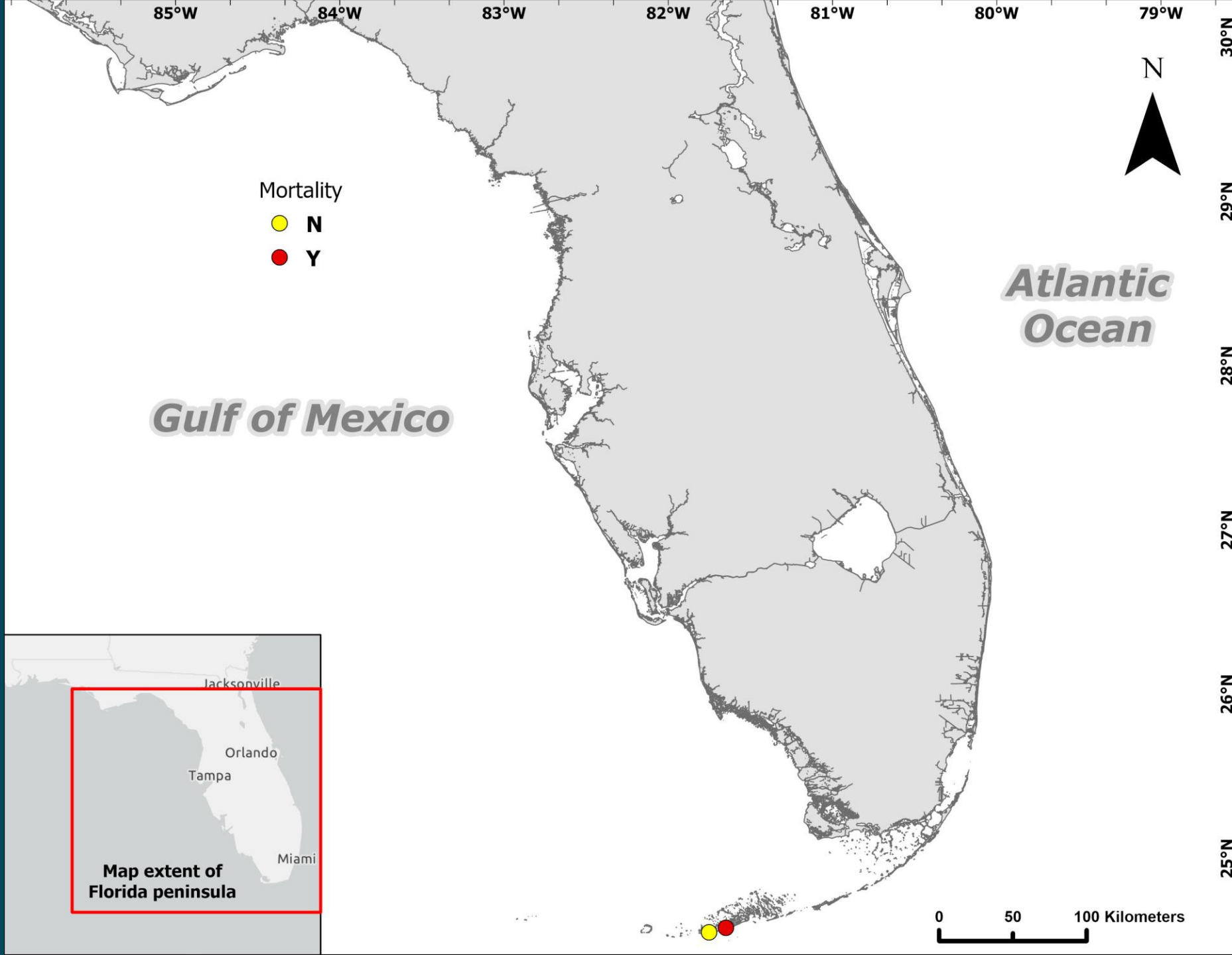
All 2024 & 2025



Jan.
2024

2 reports

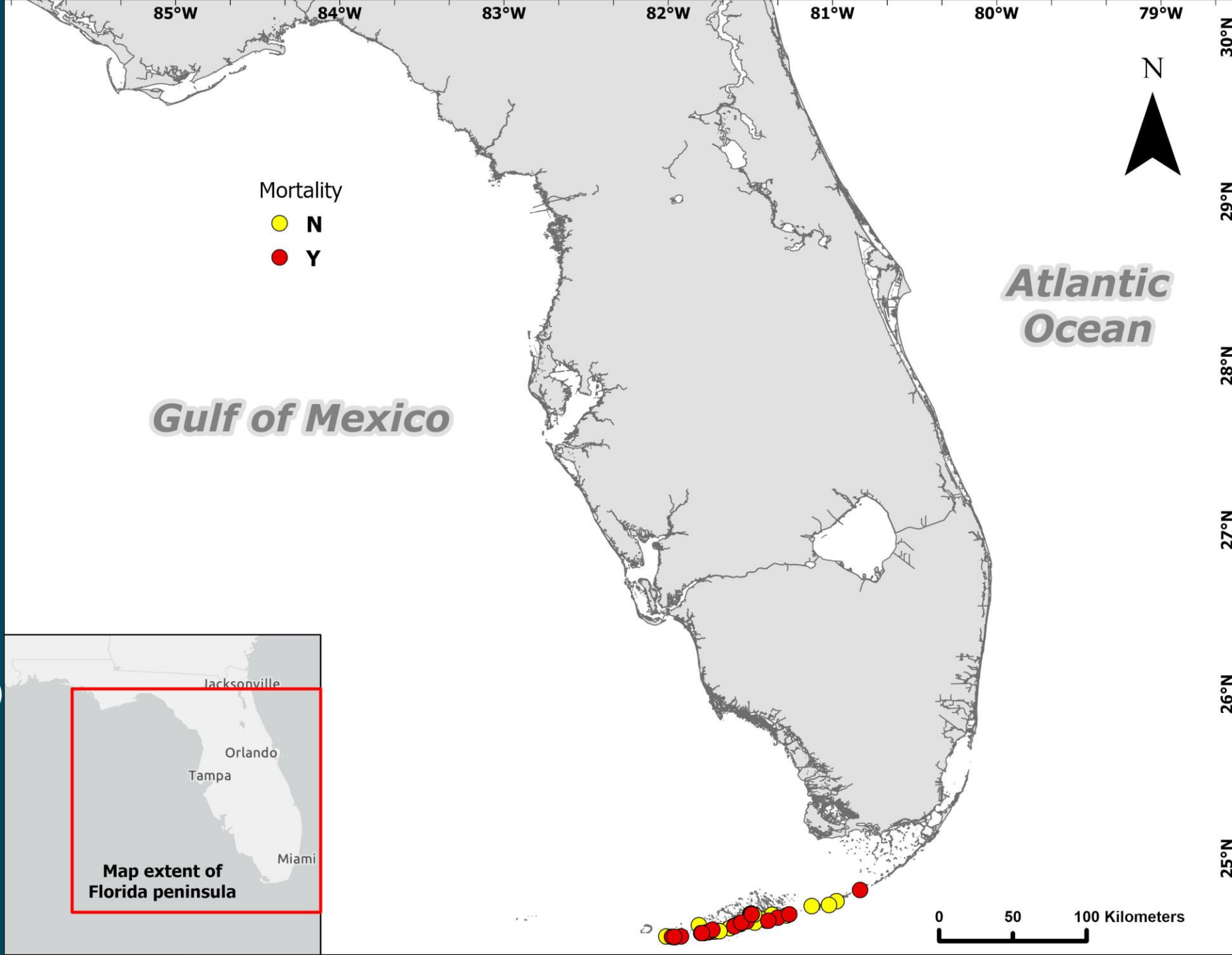
(1 mortality)



Feb.
2024

49 reports

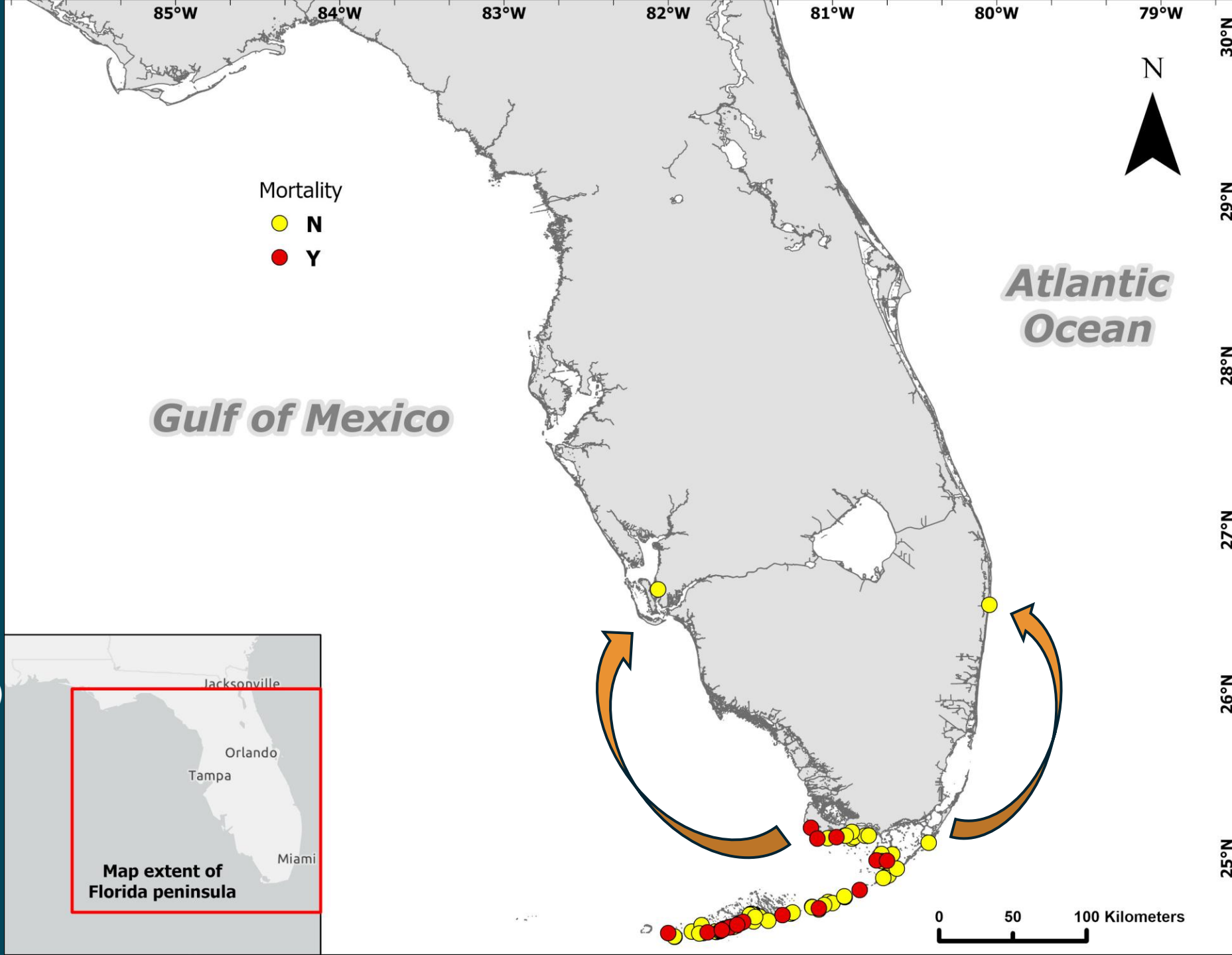
(16 mortalities)



Mar.
2024

78 reports

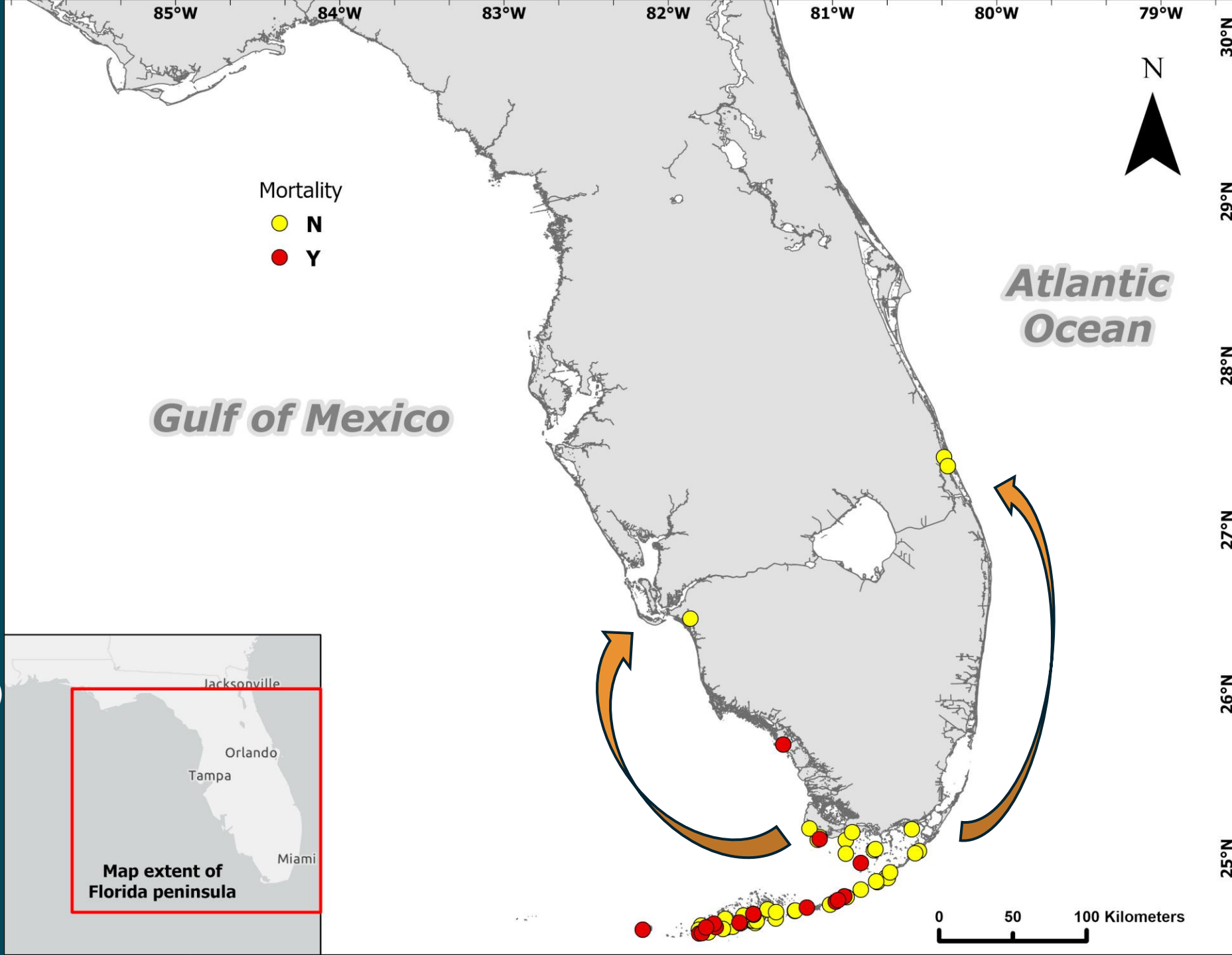
(15 mortalities)



Apr.
2024

64 reports

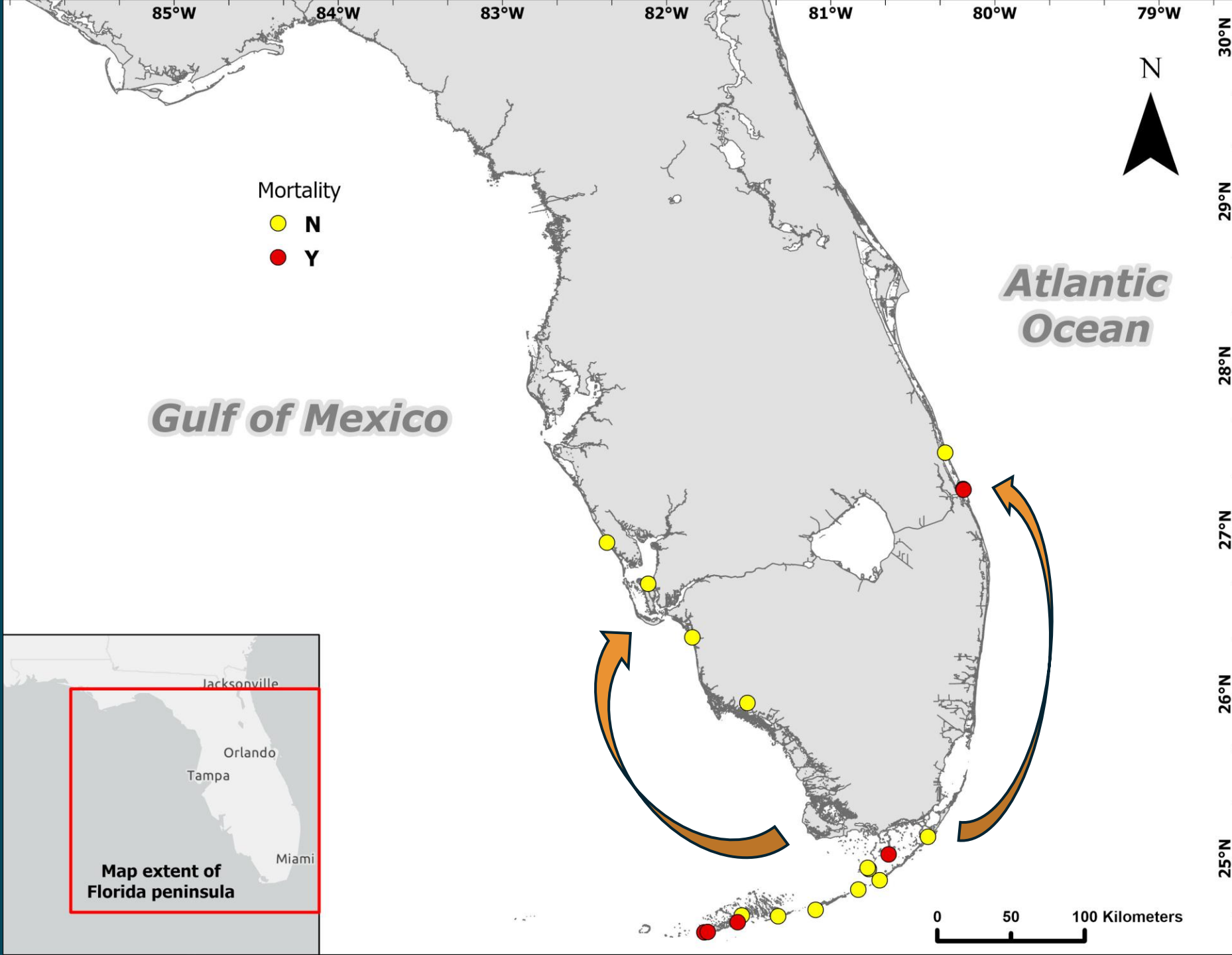
(15 mortalities)



May
2024

19 reports

(5 mortalities)



June 2024

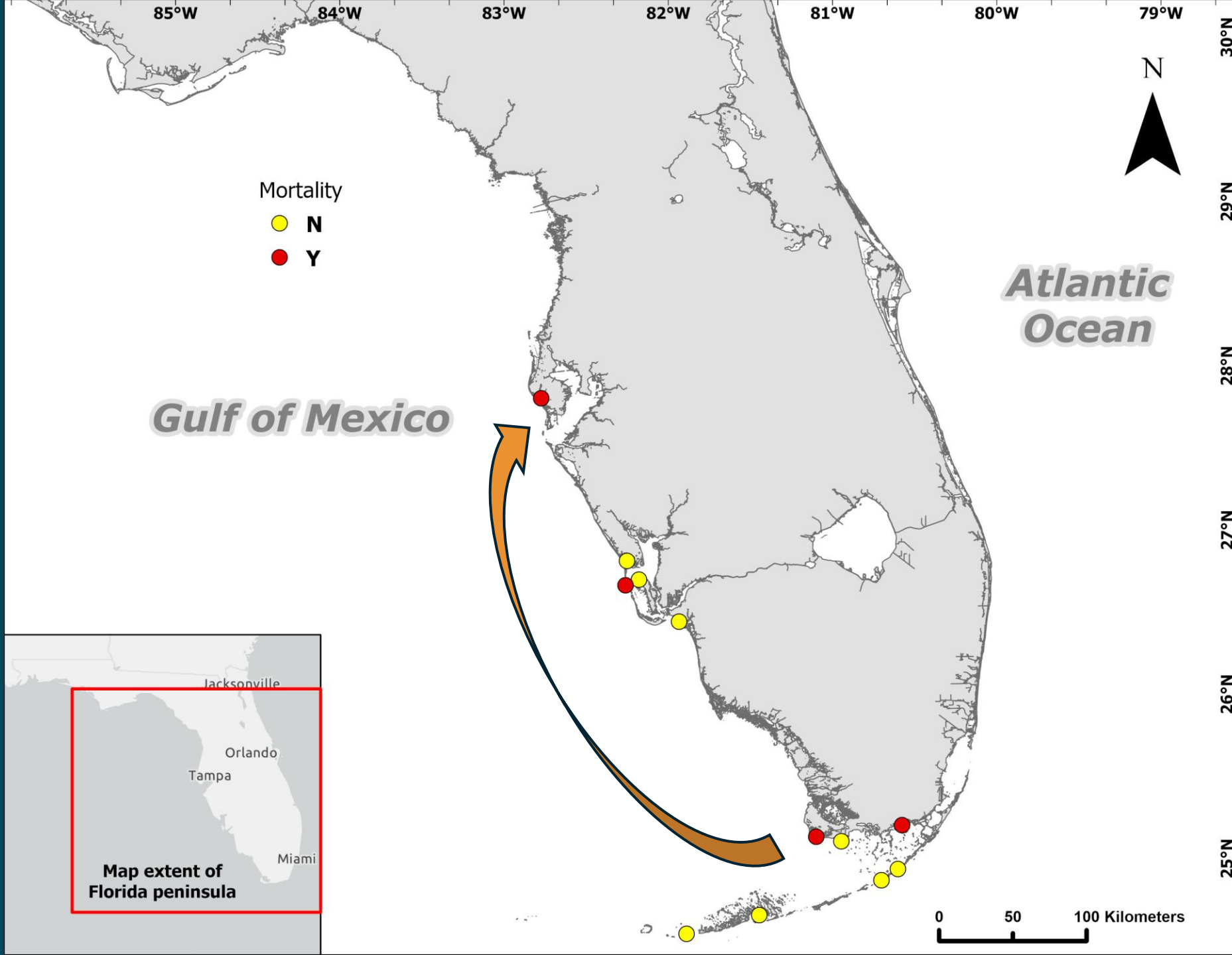
12 reports
(4 mortalities)

June 2024

12 reports
(4 mortalities)

June 2024

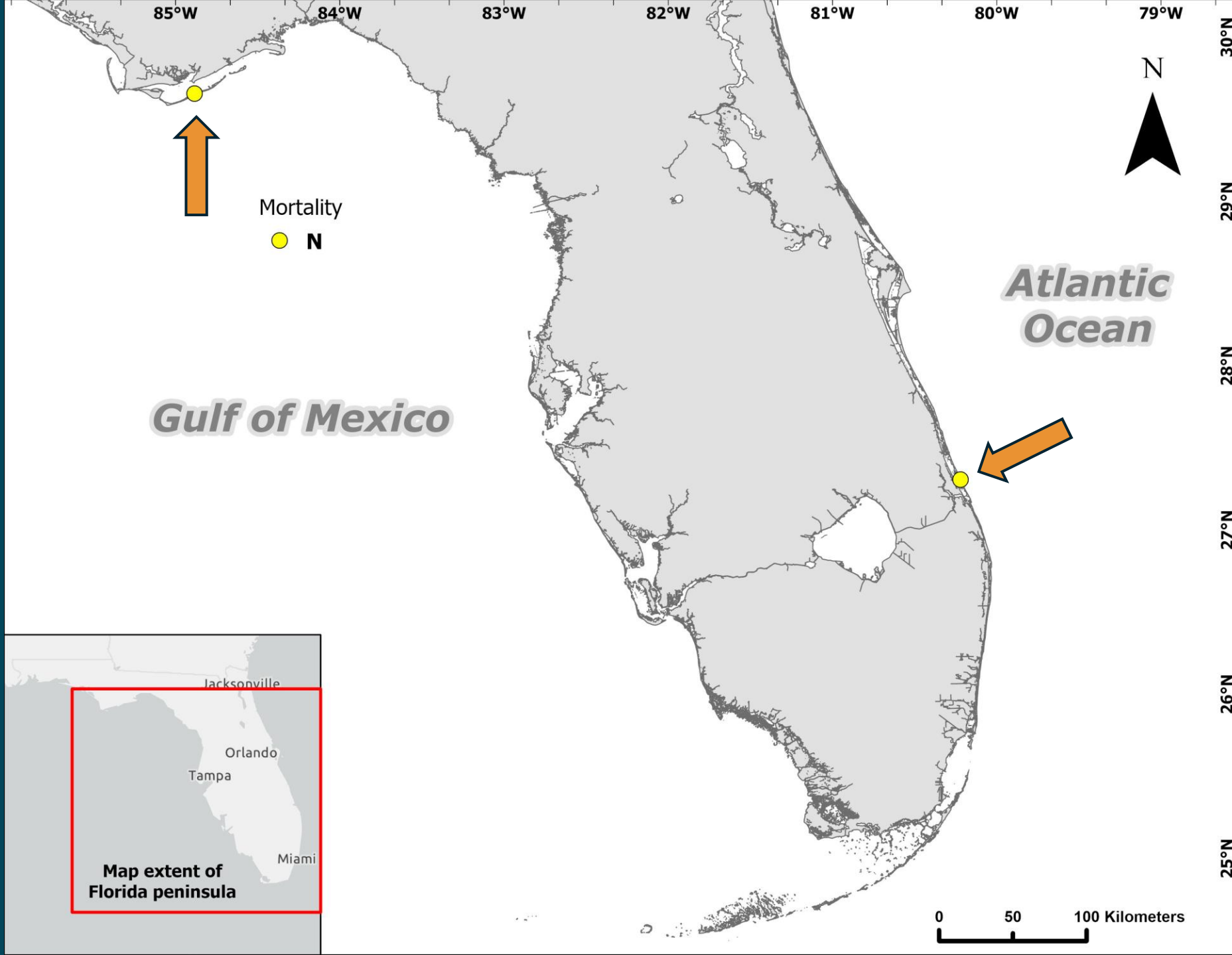
12 reports
(4 mortalities)



July
2024

2 reports

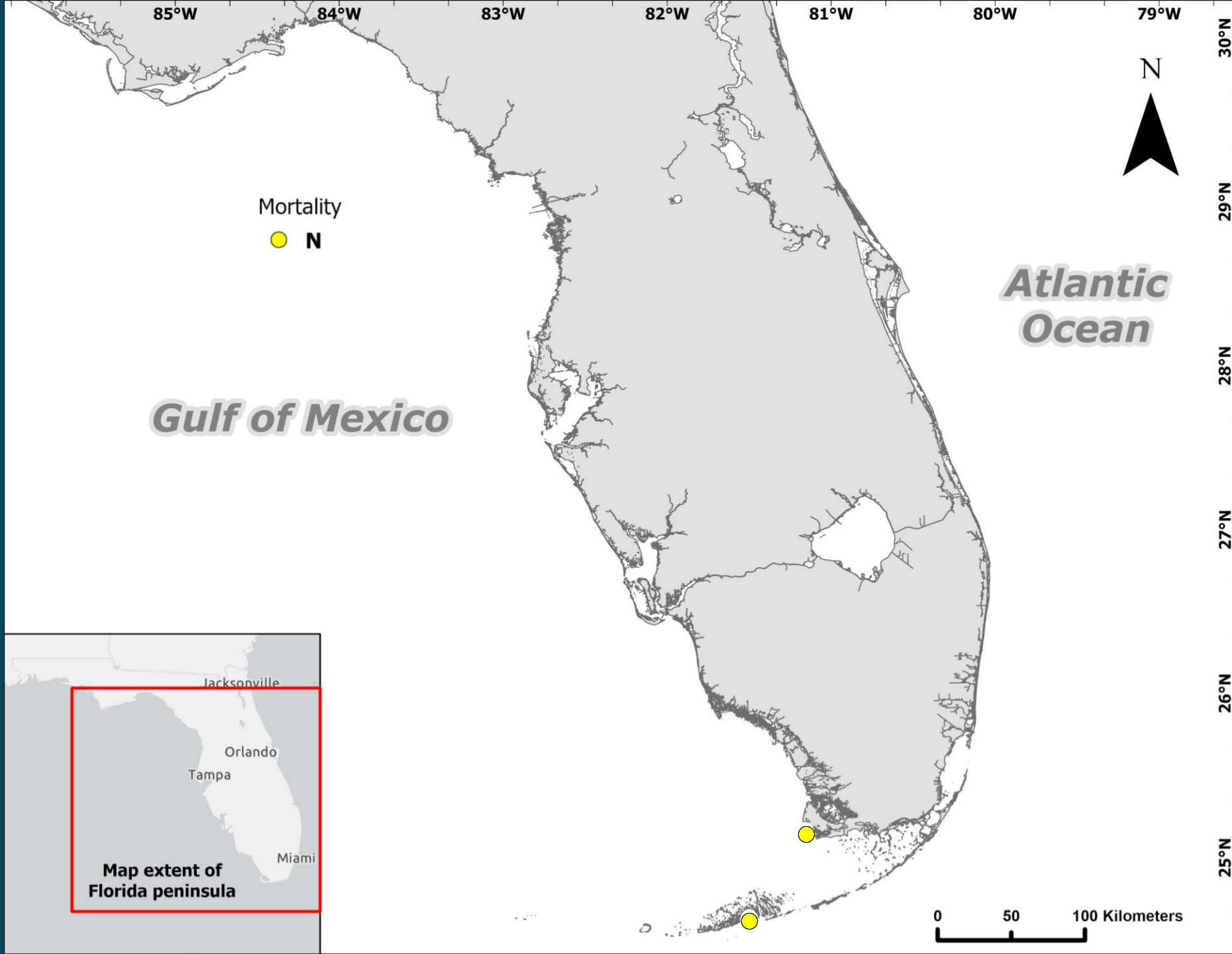
(0 mortalities)



Aug.
2024

2 reports

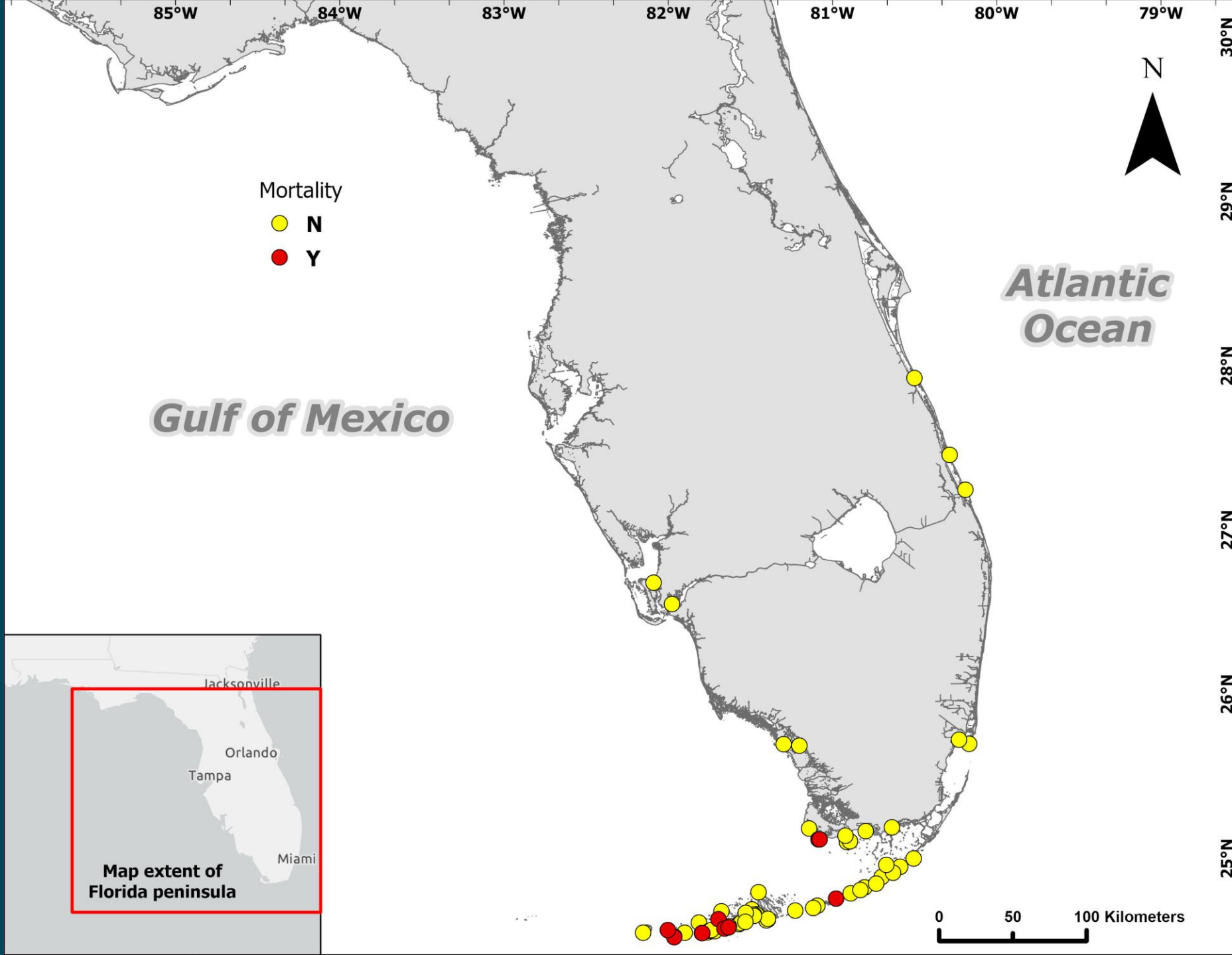
(0 mortalities)



**All
2025**

69 reports

(9 mortalities)





Video credit: Cody M.



Video credit: Michelle



Video credit: Jackie



Video credit: Jacob



Video credit: Chris



Video credit: FWC



Tenacity for survival

Weather Pattern Correlations with Reports

- Peaks in reports following cold fronts



Bystander intervention





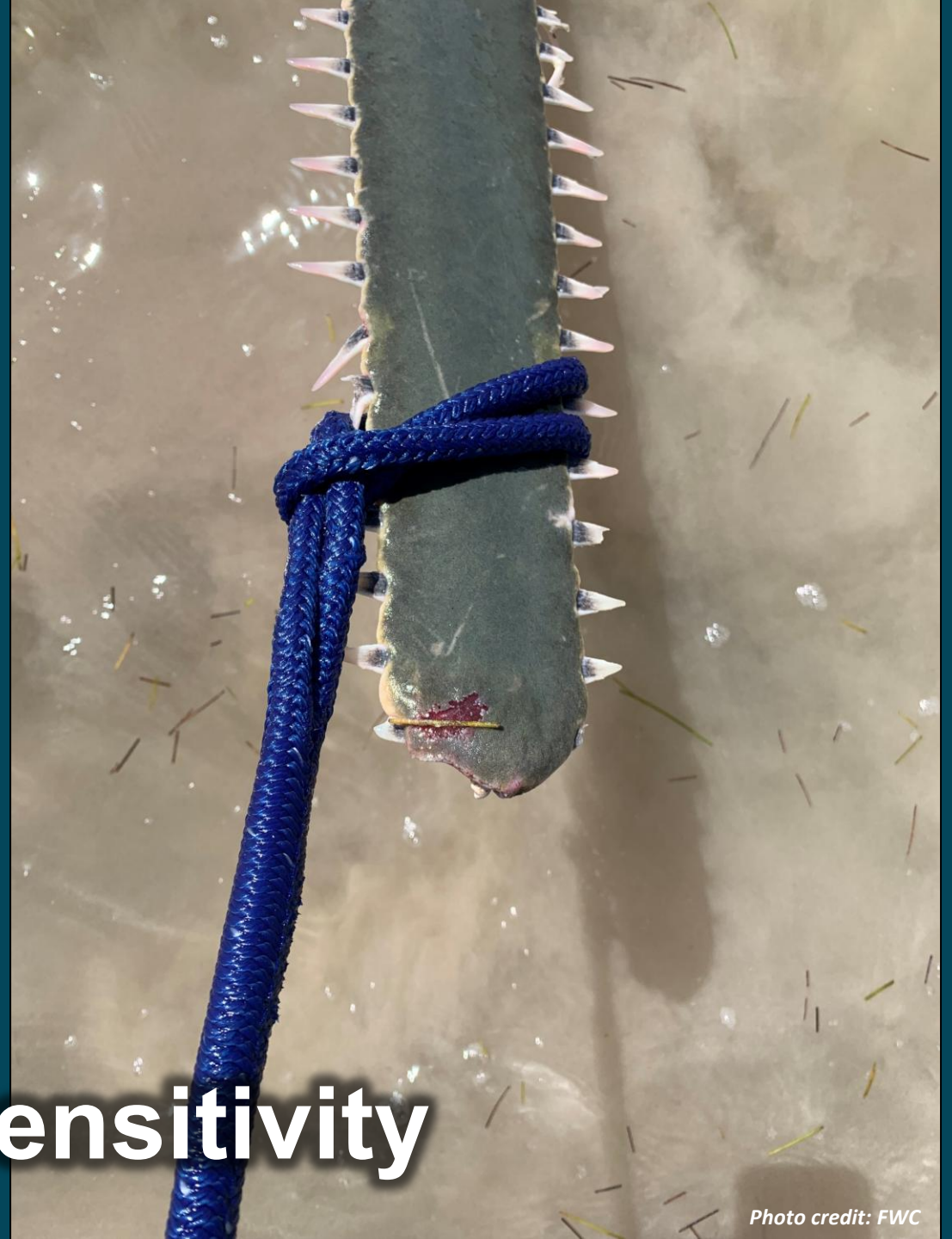
Video credit: John M.



Video credit: Greg D.



Video credit: Mike H.



Rostrum sensitivity

Photo credit: FWC

Photo credit: FWC



Photo credit: FWC

Logistics of response

- Few “experienced” staff
- At peak, getting 9 reports a day
- Response in the Keys
- Necropsies in Port Charlotte



**Vessel assistance from law
enforcement, FWC Marathon lab,
charter captains**

Photo credit: Susie Shimamoto



Remote and difficult to access

- Often multiple mortalities in one day
- Divide and conquer to respond to multiple reports at once
- Often unable to reach fish in time

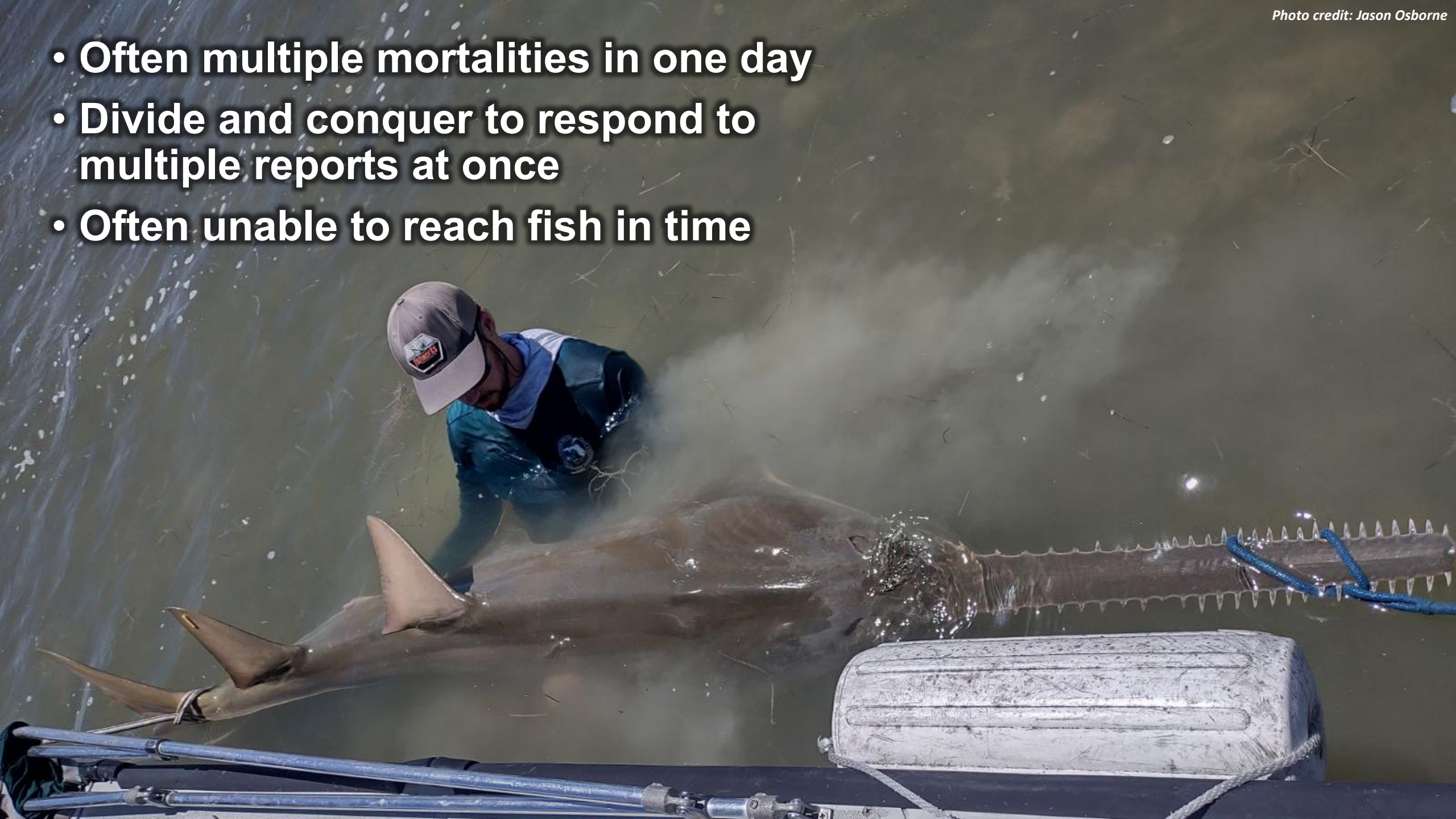




Photo credit: FWC



Photo credit: Whitney Greene

Cudjoe Bay

- 3.9 m male
- First reported alive on Feb. 25, 2024
- Reported alive again on Mar. 2 and died that day



Picnic Island

- 3.4 m female
- Found stranded off Big Pine Key on Apr. 12, 2025
- Tagged and released offshore in deeper water
- Found next day at end of canal on Ramrod Key back ~5 km inshore swimming in circles



Photo credit: Alvin Barron

Field necropsies

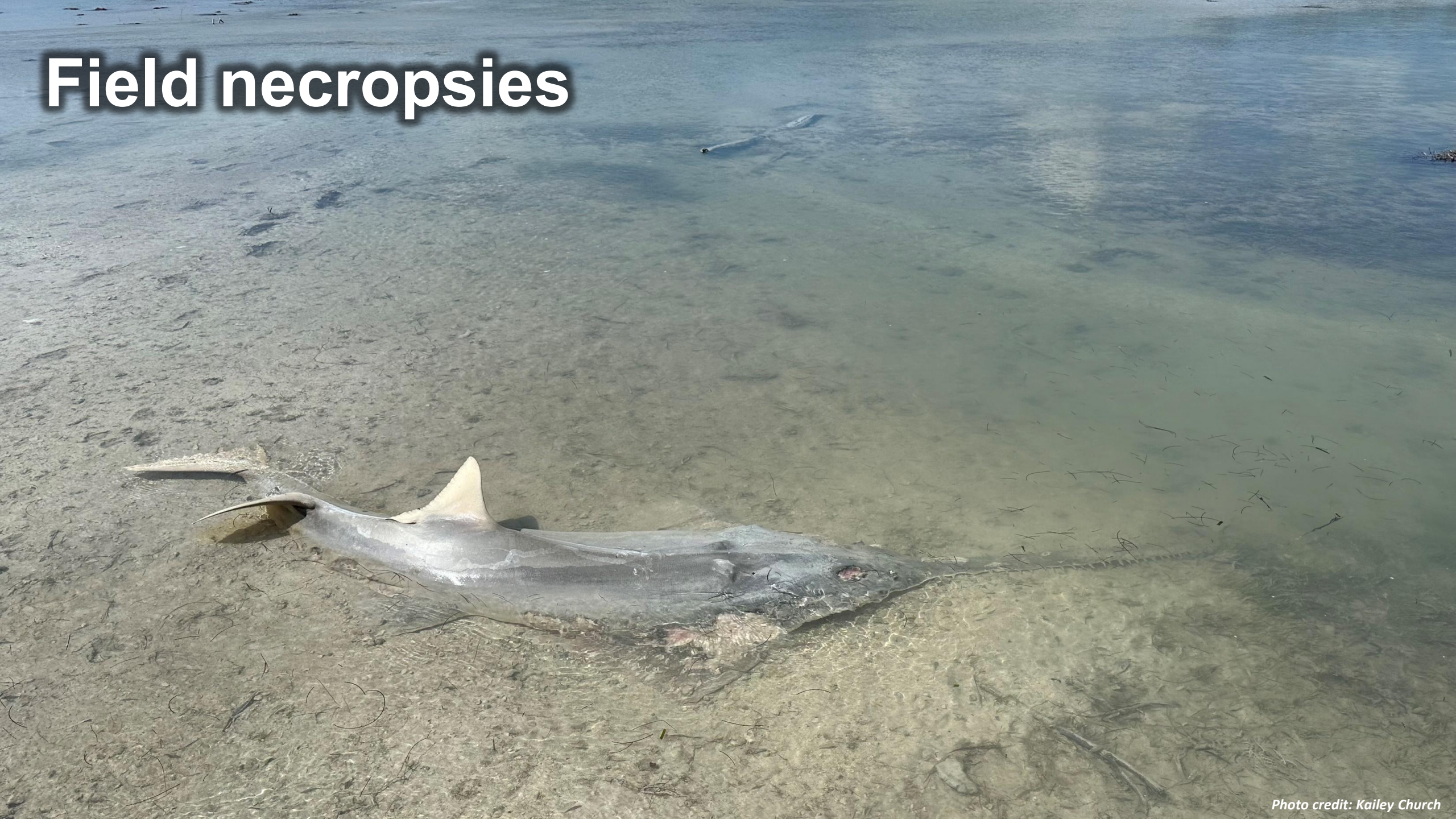


Photo credit: Kailey Church



Photo credit: Troy Zinzer



Photo credit: FWC

Transport



Photo credit: FWC



Photo credit: FWC



Photo credit: FWC



Damaged eyes

Photo credit: FWC





Ventral wounds

Photo credit: FWC

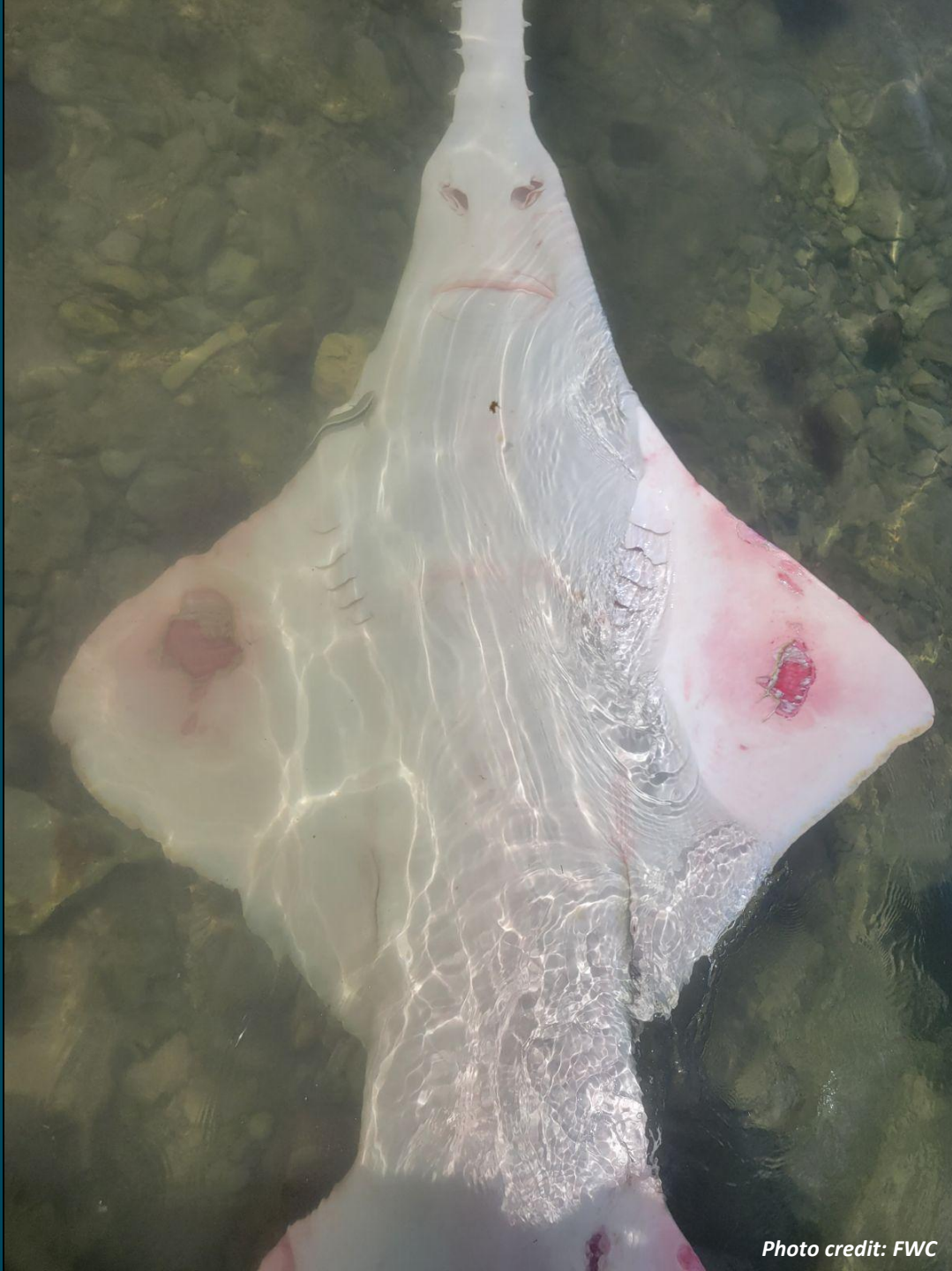


Photo credit: FWC



Photo credit: FWC



Damaged claspers

Photo credit: FWC



Blistering



Photo credit: FWC



Ecchymosis in fins

Photo credit: BBFS

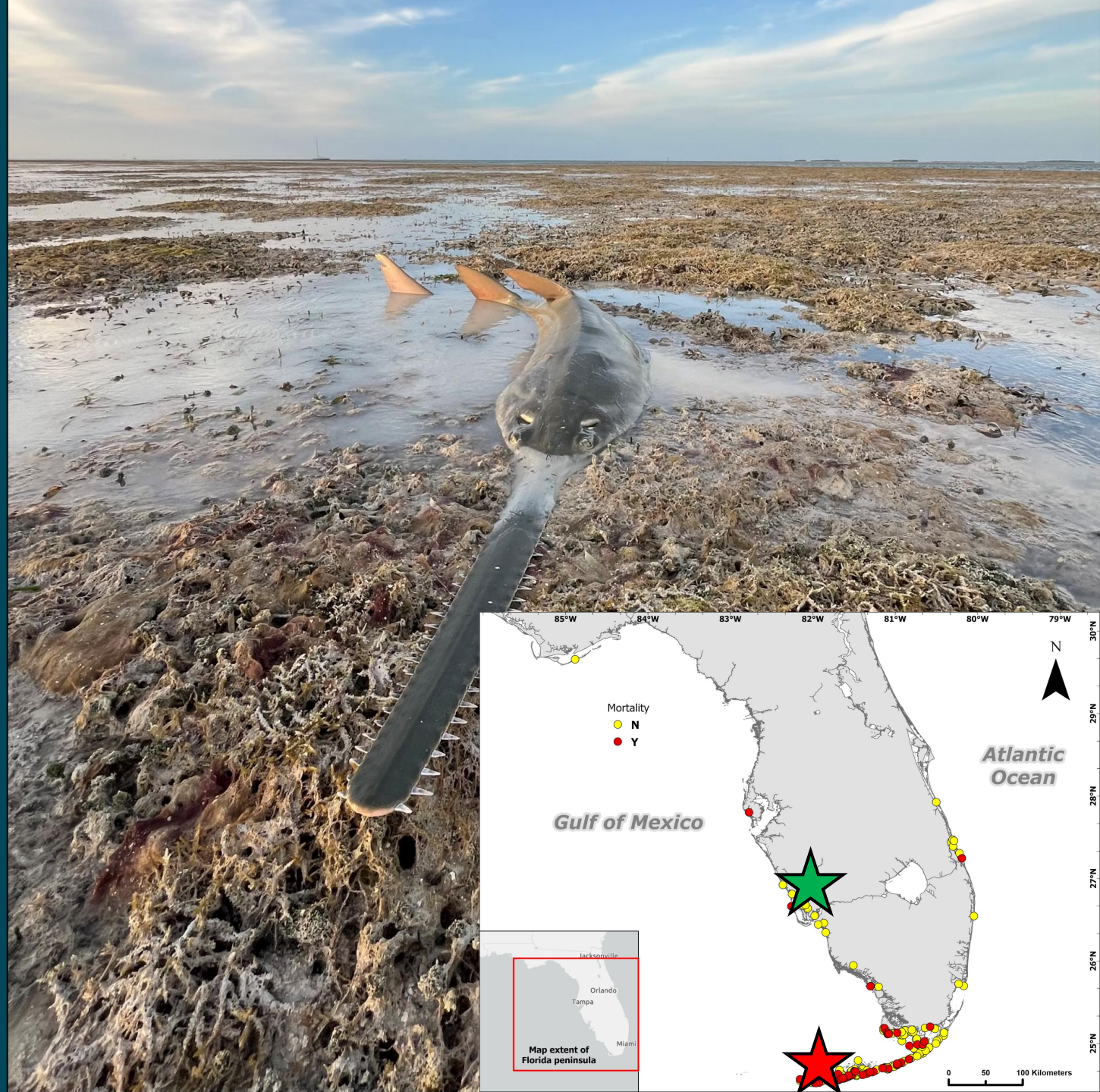


Photo credit: FWC

FWC 326 recap

- 4.2 m female
- Found stranded off Key West in Feb. 2024
- Tagged and released
- Originally tagged July 2015 in Peace River at 1.0 m

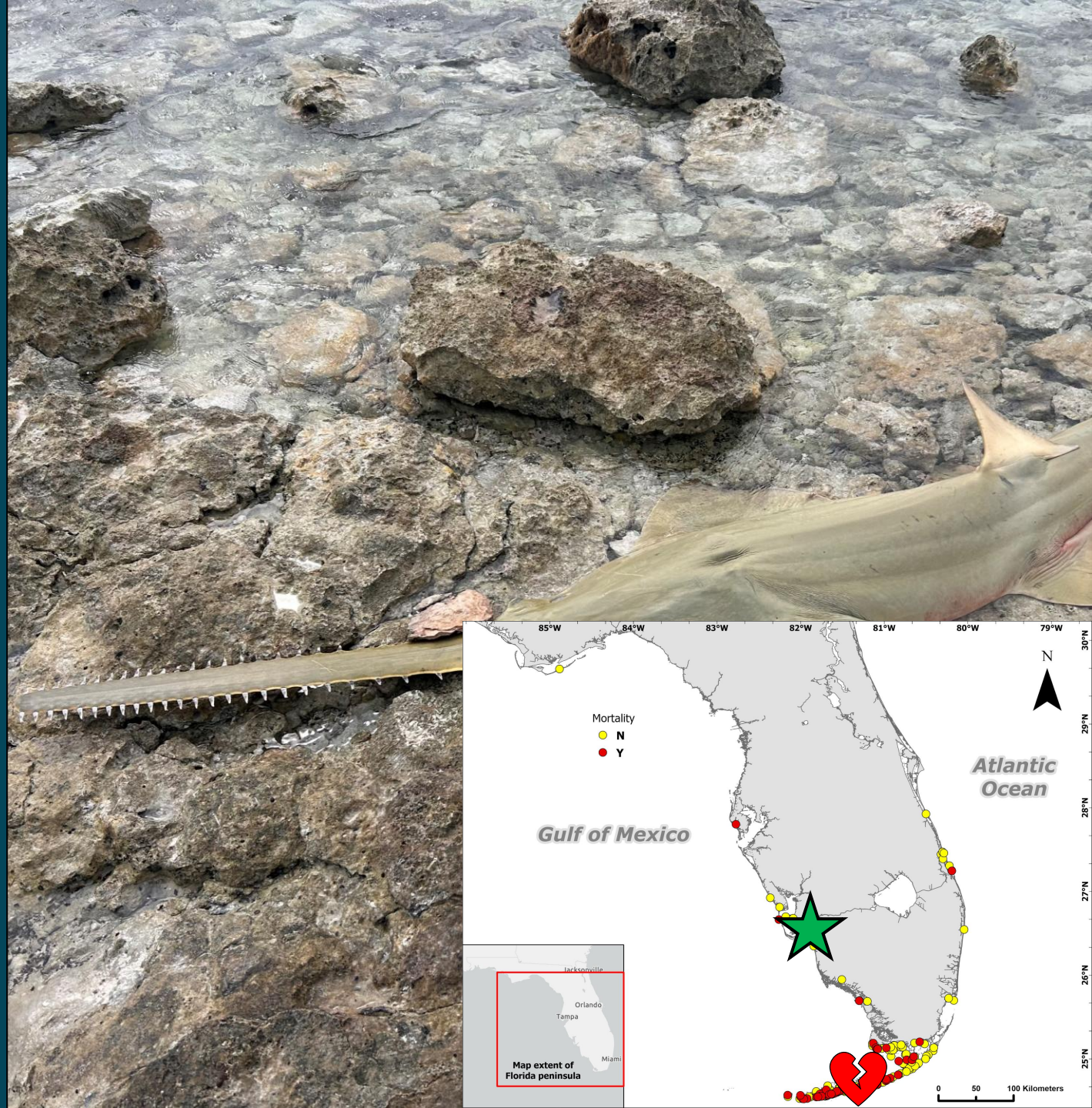
Photo credit: FWC



FWC 625 recap

- 3.1 m male
- Found dead in Feb. 2025 off Marathon
- Originally tagged in Caloosahatchee River in May 2021 at 1.4 m
- Based on acoustic data, first time it left estuary

Photo credit: Jimmy Chandler

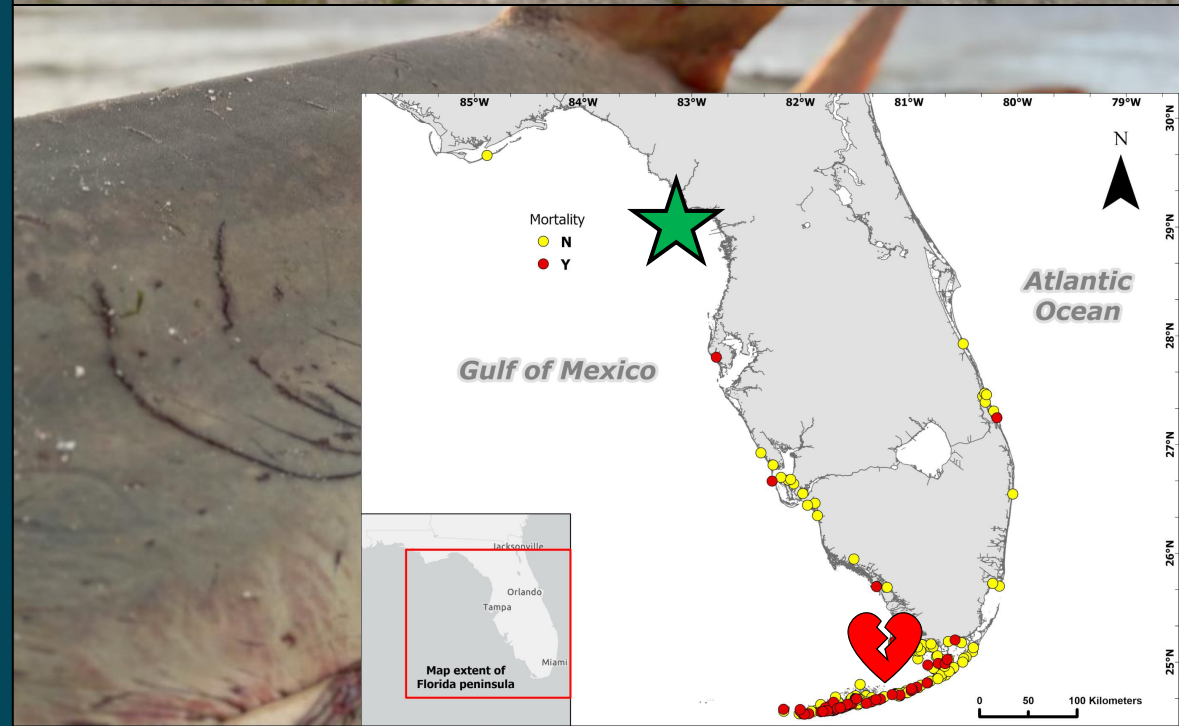


FSU recap

- 4.2 m female
- Found dead in Feb. 2025 in Everglades
- Originally tagged off Cedar Key in June 2023 at 4.0 m



Photo credit: Kayleen Castelli



Response Collaborations

- **Smalltooth Sawfish Recovery Implementation Team**
- **Havenworth Coastal Conservation**
- **FWRI Marathon Lab**
- **FWC Law Enforcement**
- **Monroe County Sheriff's Office**
- **Dr. Jeff Carrier and Seacamp staff**
- **NOAA Office of Law Enforcement**
- **Navy Military Police**
- **Key West Police Department**
- **US Coast Guard**
- **Bahia Honda State Park**
- **Everglades National Park staff**
- **Florida State University**
- **Bimini Biological Field Station**
- **FWC Fisheries Dependent Monitoring**
- **Boca Chica Naval Air Station**
- **Mote Marine Laboratory**
- **Dr. Doug Mader**
- **Dr. Gerry Dietholm - Mader**
- **USFWS volunteers**
- **Lower Keys Guides Association**
- **Bonefish Tarpon Trust**
- **FWC Marine Mammal SWFL**



**Some cool stories thanks
to this collaboration!**



Photo credit: FWC



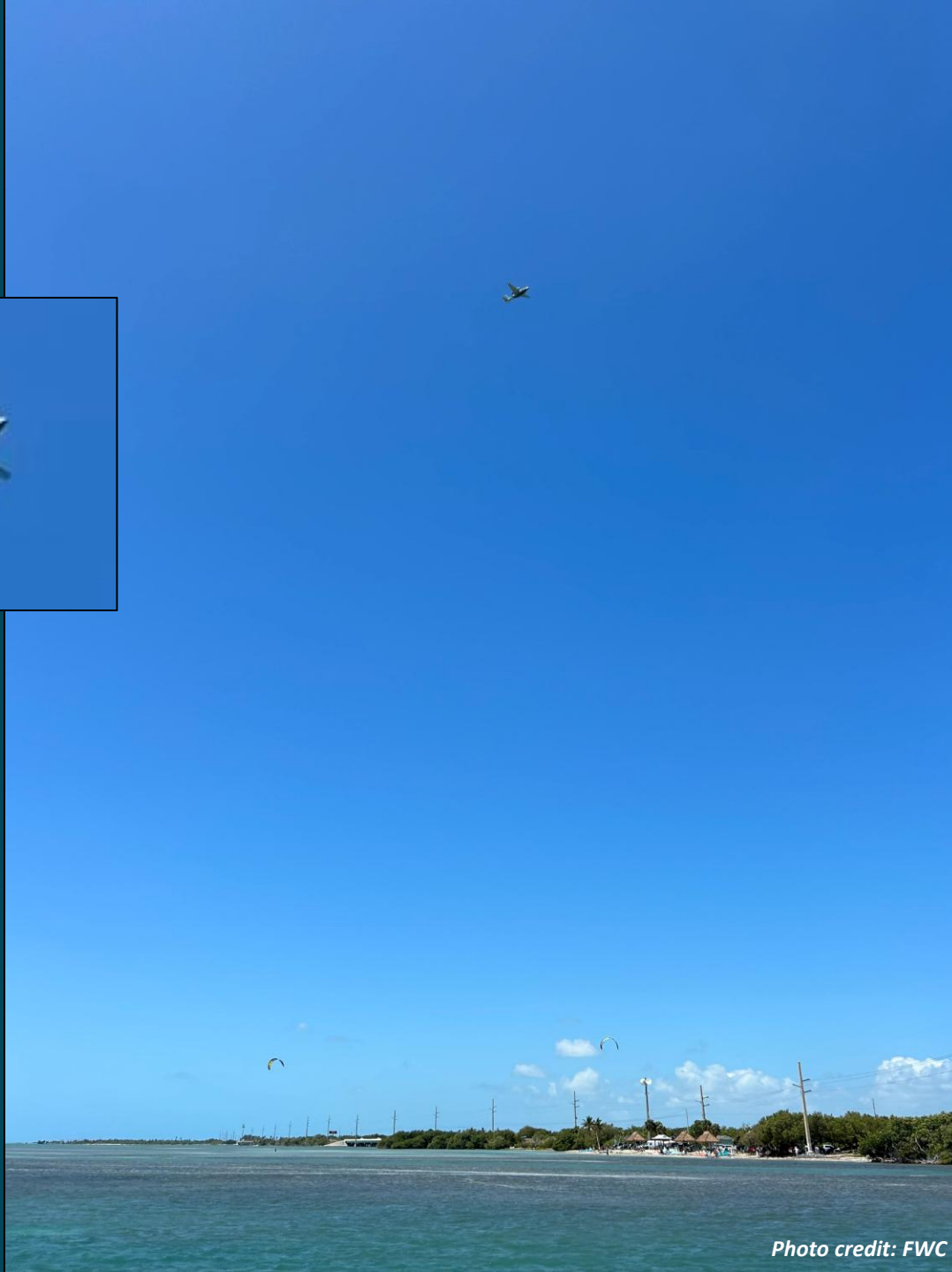
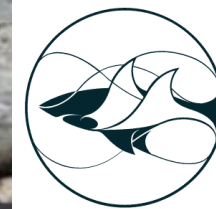


Photo credit: FWC



Acknowledgements

- NMFS/NOAA
- ESA Section 6
- Shark Conservation Fund
- Smalltooth Sawfish Recovery Implementation Team
- Symposium sponsors
- Citizens reporting sawfish encounters



**Shark
Conservation
Fund**



Photo credit: Wendy Wheatley

Thank You Symposium Sponsors!



save our seas
foundation



All activities performed under
authorization and guidance of
NOAA Fisheries Emergency
Section 7 Consultation
#SERO-2024-00402

and

ESA Section 10 permits
to Gregg Poulakis,
Tonya Wiley, John Carlson, and
Colin Simpendorfer

Questions?



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Photo credit: FWC