Honoring the Past, Exploring the Future: Human Dimensions of the Caribbean Spiny Lobster Fishery

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Timeline

The commercial lobster fishery has a rich history and has been resilient through many changes and challenges. Images from Florida Memory, State Library and Archives of Florida.

1800s

Gill nets, seines, grabs, and grains were used in the Lower Keys to catch lobsters primarily for bait in the finfish industry

1908

landings totaled about 53,000 pounds Overseas Railroad was completed and opened

The lobster industry was valued at \$3,600 and

the market to northern restaurants and hotels

1920s Bullynetting accounted for about half of the landings

A closed season established between March 1-June 1

1950s

Boats increased from 102 to 254 Traps increased from 17,000 to 52,000

1960s

Expansion of fishing grounds due to improved boat engines, navigation, and trap-pullers

Minimum legal size reduced to 3 inches carapace length, opening Florida Bay to fishing

1967

Organized Fishermen of Florida was established by fishers

1972

1975

John Pennekamp Coral Reef State Park established

Bahamian fishing grounds closed to foreigners &

"Special Two-Day Sport Season" introduced

1982

Implementation of the Original Spiny Lobster Fishery Management Plan

1986

Everglades National Park closed to commercial fishing 1990

Florida Keys National Marine Sanctuary was established

1991

Widespread and persistent blooms of cyanobacteria decimated sponge communities in Florida Bay

1992

Lobster Trap Certificate Program was implemented which reduced the number of traps allowed in the fishery; Hurricane Andrew

1993 (

Lobsters are designated a restricted species & the practice of treating (dipping) traps in oil products is banned

1994

Gill net ban

2002

The sale of imported lobster tails during Florida's closed season is allowed

2004

Commercial dive endorsement created

2005

One of the biggest trap loss years for the fishery, hit back to back with Hurricanes

2010

Live export market to China expands rapidly

2014

2017

Live lobster prices peak

Commercial bullynet endorsement created

2023

Marine heatwave caused widespread sponge mortality and juvenile lobster habitat degradation

Today

Volatile market, tariffs and problems finding crew

Interview Study

We conducted 40 interviews with commercial fishers, fish house operators, scientists, and managers (April 2024 thru May 2025) to better understand the goals, perceptions, and interests of stakeholders in the Caribbean spiny lobster industry. Key themes included concern over loss of usable working waterfront, difficulty finding crew, lack of market diversity, and declining water quality. Fishers said their ideal fishery would have a local market and improved environmental conditions. All quotes are verbatim with minor edits for clarity.

Generational fishing

"Honestly, I wish [my son] would go get a job somewhere because I don't see the lobster fishing being sustainable for his life. I don't think he'll have the years out of it that I got. I don't think it'd be justifiable. Your expenses are crazy. I don't know that he can survive it."

"Believe it or not, the fishermen really did care because they wanted the industry to last. They knew this is our livelihood. We don't want to destroy this, and a lot of them want their kids or their grandkids to work. So you are thinking generational down the line, and you do care about what happens."

"You know, grandfathers did it, fathers did it, sons did it. That's kind of not so much anymore. the culture, the heritage of it is pretty diluted."

Shift of economic base of the Keys

"At one time there were a dozen fish houses in Key West, and now most of them have been converted into condos, transient rentals, apartments, whatever. The property just becomes too expensive to justify commercial fishing. Our days are numbered here."

"The problem is the working waterfront. How could you ever bring it back? Unless you save what we have right now?"

"Late 50s, early 60s. Whatever happened with the fishery, if there was a big run of lobster, boy, the guy from the Key West citizen was here, it was front page. Happy days are here again. That kind of stuff, you know. So it really affected all of Key West.'

"The commercial fishing is, just like slowly, slowly being Shoo Shoo'd."



Love and concern for the environment

"The weather's more and more crazy every year. Like I said, we're having all of these problems with water quality and man-made problems along with, you know, Mother Nature's more wild year-by-year on top of it— like makes you question if the risk is worth the reward."

"The fishermen do truly care about the environment and the sea floor and what it's like down there. I also, I feel like it needs to be preserved because it's just, you know, it's a reason why people visit the Keys."



Pride and desire to feed locals

"When you say you're a fisherman, people look at you like, you know, you're the heart of America, you're the farmer. You're the one that feeds us. And it's kind of a feel good ... it's just a solid good thing to be a part of."

"It should be local seafood. It should be from here, sold to the restaurants, and the restaurants should sell our seafood."







