

Putting a Dent in Derelict Blue Crab Traps

The blue crab (*Callinectes sapidus*) supports one of Florida's top commercial fisheries in terms of pounds harvested and dockside value. Florida's blue crab fishery operates almost exclusively in state waters and crabs are predominantly harvested using wire crab traps or pots. For decades Florida's fishermen have annually harvested millions of pounds of the popular crustacean and in recent years have netted, on average, \$8.5 million each year (1). While blue crabs are also harvested by recreational fishermen, managers do not have estimates of recreational landings although it is suspected to be substantial (2).



Despite management efforts in recent years by the Florida Fish and Wildlife Conservation Commission (FWC) to limit the number of commercial crab traps per endorsement holder, derelict traps, or traps that are no longer being actively fished, continue to occur in Florida's waters and cause problems.

Why are derelict crab traps a problem?

Derelict traps can have several negative environmental and economic impacts. One of the more prominent environmental impacts is "ghost fishing" or fishing that continues despite the traps not being actively fished. Blue crab traps are typically made of vinyl-coated wire mesh that can have a life expectancy of several years depending on the surrounding conditions and thickness of wire gauge used. Traps will continue ghost fishing until they break down enough for bycatch to escape. These events can result in high mortality



rates of trapped crabs and lost revenue for fishermen.

While traps are effective at capturing crabs, they do not discriminate against different sized crabs that enter them. Therefore, traps in Florida are required to have at least three unobstructed escape rings installed in them to allow sublegal crabs to escape.

However, ghost fishing does not only affect crabs. Several recreationally and commercially important species such as red and black drum, sea trout, flounder, and a variety of invertebrates have been found in crab traps (3). Drowning in derelict crab traps has also been shown to be a major threat to diamondback terrapin populations. In addition, traps and accompanying line can serve as hazards to dolphins, manatees, and sea turtles through entanglement, and damage sensitive seagrass and coral reef communities.

Location of traps also plays a factor in ghost fishing rates. Derelict traps can move around a lot and can cause damage to unintended benthic habitats. Most crab traps are placed in estuarine waters near productive habitats such as seagrasses, oyster beds, and mangroves which harbor a high diversity of species. Ghost fishing is more likely to occur in these areas than in more barren areas when left for long periods of time (3).

Besides the environmental damage they can cause, derelict traps are unsightly and can pose as navigation hazards to both commercial and recreational vessels. Traps and buoy lines can damage propeller shafts and fishing gear resulting in costly repairs, and lost fishing opportunities. Derelict traps may also escalate conflicts between different user groups such as crabbers and shrimpers or recreational fishermen due to the damage they can incur (3).

How do traps become derelict?

There are numerous reasons why traps may become derelict. Often hundreds of commercial traps are deployed at a time and the gear is left unattended. Visitors and seasonal residents may also put out traps during their stay, but forget to pull them before they leave. As a result, the gear is more prone to loss and

abandonment. In addition, traps may be inappropriately disposed of or intentionally abandoned by both commercial and recreational crabbers. Traps may also be displaced by storms, tides, and currents, and struck by boat propellers or vandalized. By remaining vigilant, boaters can help reduce the number of trap lines that are run over and cut, thus adding to Florida's derelict crab trap problem.

Who can remove derelict traps?

Legally, the state of Florida has very specific definitions of what constitutes a derelict crab trap to protect them

from being improperly removed. Crab traps are protected by law, and it is a third degree felony to tamper with someone else's



Image credit: Lisa Krimsky

traps (or their content), lines, or buoys. Perpetrators can also face fines up to \$5,000 and have their fishing privileges revoked. According to [State Rule 68B-55.001](#) a derelict trap is:

- 1) Any trap present during the closed season for that species
- 2) A fishable trap in the open fishing season that lacks more than two of the following items: buoy, buoy line, current FWC-issued trap tag (commercial) or identification (recreational), and current license.

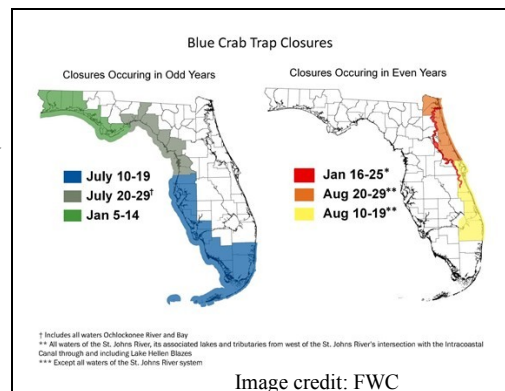
Only individuals participating in an organized trap removal program and who have an authorized permit from FWC may handle and remove derelict traps even if it is apparent the traps are not being actively fished. FWC routinely contracts with commercial fishermen to remove blue crab, stone crab, and lobster traps left in the water during the corresponding closed season as part of a State-lead trap retrieval program.

Blue Crab Trap Closures

To help facilitate efforts to identify and retrieve lost and abandoned blue crab traps in Florida, FWC established regional closed seasons in 2009 for the blue crab fishery. The regional closures last up to 10 days,

extend out to three miles offshore and apply to both commercial and recreational free standing

traps (*blue crab traps attached to private property such as docks are excluded from the closure*). All commercial and recreational traps left in state waters during the closures are subject to removal by authorized personal. Since 2010 the regional closures alternate every year with closures on Florida's east coast occurring during the even numbered years and closures on the west coast, including Broward and Miami-Dade counties, occurring on the odd years (4).



How can you help?

If you suspect a trap is derelict or witness illegal tampering of traps, contact FWC law enforcement at: 1-888-404-FWCC (3922). Please provide the location (*GPS coordinates if possible*) and condition of the trap to authorities.

References:

1. Florida's Commercial Blue Crab Fishery-Managing Harvest with Output Controls: http://fw.oregonstate.edu/pdfs/FL_BlueCrabFishery_Sempsrott.pdf
2. FWC-Fish and Wildlife Research Institute. A Stock Assessment for Blue Crab, *Callinectes sapidus*, in Florida Waters; <http://www.fwc.state.fl.us/media/316334/StockAssessment2007.pdf>
3. Gulf States Marine Fisheries Commission: The Blue Crab Fishery of Gulf of Mexico: <http://www.gsmfc.org/publications/GSMFC%20Number%20096.pdf>
4. Florida Fish and Wildlife Conservation Commission: Commercial Regulations for blue crab: <http://myfwc.com/fishing/saltwater/commercial/bluecrab/>



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