

**DERELICT BLUE CRAB TRAP REMOVAL
MANUAL FOR FLORIDA**

**Prepared by
Ocean Conservancy
Based on Document Developed by
Gulf States Marine Fisheries Commission Derelict Trap Task Force**

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PREFACE AND ACKNOWLEDGEMENTS

The Gulf States Marine Fishery Commission (GSMFC) published “Guidelines for Developing Derelict Crab Trap Cleanups in the Gulf of Mexico” (available at <http://www.gsmfc.org/publications/GSMFC%20Number%20154.pdf>) in March 2008. The information covered in the GSMFC Guidelines is applicable to programs across the region, and include guidelines for cleanups in individual states, and different crab trap types. Ocean Conservancy has expanded on the GSMFC Guidelines to specifically apply to blue crab trap removal efforts in Florida to facilitate these types of cleanups in state waters.

The Derelict Blue Crab Trap Removal Manual for Florida (Florida Manual) was created to be a stand-alone document, but can also serve as a supplement to the GSMFC Guidelines. It was created specifically to provide guidance to public and private organizations other than the Florida Fish and Wildlife Conservation Commission (FWC) to remove derelict traps and trap debris from the waters and shorelines of the state, albeit only with prior FWC authorization. This document is intended to be used by organizations interested in participating in or coordinating retrieval efforts. Information is presented sequentially for organizers coordinating an event. While this manual was being developed, the FWC developed additional information which may also be helpful to organizations and individuals planning a derelict trap cleanup event.

The Florida Manual was prepared with funding by National Oceanic and Atmospheric Association, Community-based Marine Debris Prevention and Removal Projects Grants. The information and methods presented in the Florida Manual draw upon the experience of numerous organizations and individuals who have conducted derelict blue crab trap cleanups in Florida, either within National Wildlife Refuges, or with FWC authorization: Nicole Adimey, USFWS; Kent Smith, FWC; Juli Dodson, FWC; Gus Muench, Commercial Crabber; Peter Clark, Tampa Bay Watch; Wendy Valle Anastasiou, Tampa Electric Company; Serra Morrison Herndon, Tampa Bay Watch; Nanette Holland O’Hara, Tampa Bay Estuary Program; Kyle Miller, FWC.

INTRODUCTION AND BACKGROUND

Blue Crab Trap Fishery and Derelict Traps

Blue crabs (*Callinectes sapidus*) are harvested year round in shallow water (1 – 5 m) by both commercial and recreational fishers, using six-sided square metal/wire traps (Figure 1). Traps are usually marked with a nylon or polypropylene line attached to a Styrofoam buoy, which floats at the surface. Blue crab traps were introduced in Louisiana and Texas, as early as 1948, and were widely accepted throughout the Gulf of Mexico by the middle 1950's. Although adoption of the crab trap had a positive impact on fishing efficiency and harvest, proliferation of traps has resulted in user group conflicts and an increase in problems associated with lost or discarded (derelict) traps.



Figure 1. Blue Crab Trap

Derelict traps are no longer being actively fished. Blue crab traps become derelict when abandoned, either accidentally or sometimes intentionally. Owners may no longer be able to locate their traps if the buoy becomes separated from the trap, or if the trap itself moves (by storm events or other human activities). Once the buoy and/or trap line have been lost, crab traps are difficult to see from the water's surface. Because of the coated metal material used in some trap construction, as well as fouling that often occurs, once lost a blue crab trap can remain in the environment for several years. Bycatch resulting from abandoned blue crab traps can include blue crabs, stone crabs, commercial and recreationally important fin-fish, diamond back terrapin (brackish water turtle) and even raccoons. In addition, other marine wildlife (manatees, sea turtles, dolphins) can become entangled in the trap line and incur injury or death. The Gulf States Marine Fisheries Commission estimates that 250,000 derelict crab traps are added to the Gulf of Mexico waters each year (Guillory, V., McMillen-Jackson, A., Hartman, L., Perry, H., Floyd, T., Wagner, T., and Graham, G. May 2001. Blue Crab Derelict Traps and Trap Removal Programs. GSMFC. Ocean Springs, MS).

In Florida, over 800,000 blue crab traps are permitted annually, but it is likely that significantly fewer are being actively fished. However, hundreds of thousands traps are fished state-wide and year round. Of most concern is that an estimated 30-50% of blue crab traps are lost annually (Anne McMillen-Jackson, FWC, personal communication).

Traps Retrieval Efforts

Gulf-wide, from 2002 to 2007, thousands of volunteers have participated in the removal of

almost 60,000 derelict blue crab traps from Gulf of Mexico marine waters. Texas leads in the number of years of trap cleanups and in number of traps collected; Mississippi and Louisiana ranked second and third, respectively (Table 1).

Table 1. Total number of derelict blue crab traps collected in Gulf of Mexico estuarine and marine waters (Reprinted from GSMFC Guidelines).

	Florida	Alabama	Mississippi	Louisiana	Texas	Total
2002	NP	438	2,400	NP	8,070	10,908
2003	NP	1,084	1,818	NP	3,858	6,750
2004	138	418	856	6,894	3,571	11,877
2005	288	NP	NP	4,623	2,475	7,386
2006	879	346	NP	2,935	1,922	6,072
2007	NA	154	11,150	1,498	2,816	15,618
Total	1,305	2,440	16,224	15,950	22,712	58,611

NP = no program, NA = not available

Initial trap retrieval efforts in Florida were state-led efforts focused not on blue crab traps, but on the retrieval of lost or abandoned stone crab and spiny lobster traps during the closed seasons for those fisheries. Efforts began in the mid 1990’s through the Florida Department of Environmental Protection (DEP) focusing on the Florida Keys, and included partners such as Organized Fisherman of Florida (OFF), Monroe County Commercial Fisherman (MCCF) and Florida Keys National Marine Sanctuary (FKNMS). These efforts grew into an annual program coordinated by the Florida Fish and Wildlife Conservation Commission (FWC) that focused on the retrieval of stone crab and spiny lobster traps during those fisheries’ closed seasons state-wide.

Historically, identifying and removing lost or discarded blue crab traps among actively fished traps has been problematic because of the absence of a closed season (a two-week closure occurs annually along the Gulf coast between 3-9 nautical miles offshore; however, the majority of the fishery operates in near-shore or inshore waters). The retrieval of blue crab traps differs from the retrieval of stone crab or spiny lobster traps due to the different areas fished – blue crab traps generally are fished in shallow inshore waters, whereas stone crab and lobster traps are fished in deeper offshore waters and often require mechanical retrieval equipment. This makes the physical retrieval of blue crab traps logistically easier, and retrieval programs more amenable to volunteer-based retrieval efforts. But without a closed season, extreme caution must be taken to ensure active traps are not inadvertently removed during retrieval efforts.

Tampering with crab traps (including unauthorized removal of derelict gear) is a third degree felony in Florida and can result in hefty fines and revocation of fishing privileges.

Regulations addressing trap retrievals *outside* of a closed season were put into effect July 1, 2003 (Rule 68B-55, Florida Administrative Code (F.A.C.); see “Trap Retrieval Rules” below). The trap retrieval and trap debris removal regulations allow public and private organizations other than FWC to remove derelict blue crab traps and trap debris from Florida’s waters and shorelines with prior FWC authorization. An important part of these regulations is the definition of a

derelict trap. This is especially important for the retrieval of derelict blue crab traps during the open season – because a derelict trap must be carefully identified to avoid accidentally retrieving or molesting an actively fished trap.

Prior to the implementation of Rule 68B-55, F.A.C., the only blue crab trap clean ups conducted in state waters were the occasional cleanups of traps and trap debris within federal boundaries (e.g., in national wildlife refuges or parks) by governmental and environmental agencies involved in reducing marine mammal entanglements, or by FWC law enforcement personnel.

The implementation of Rule 68B-55, F.A.C., has resulted in numerous community-based derelict blue crab trap clean-up efforts at discrete sites throughout Florida (Table 2). Whereas thousands of derelict traps have been removed from these cleanups, they represent a fraction of the number of derelict traps estimated to be in Florida's waters. However, the results from these efforts suggest that with increased effort, many more derelict traps may be removed.

Effective July 1, 2009, changes to Rule 68B-45.0045 FAC (“Closed Seasons”) establish 10-day closed seasons about Florida at various times of year (INSERT). With this new rule, it will be easier to remove derelict and abandoned traps without strict adherence to the definitions, however, during open season clean up efforts; the definition must be closely followed.

Table 2. Summary of Community-based Blue Crab Trap Cleanups in Florida

Date	Location	Number of Derelict Traps Removed
5&6-Jun-01	Merritt Island NWR	50
21-Jun-02	Merritt Island NWR (aborted)	7
20-Feb-03	Merritt Island NWR	32
19-Mar-04	Merritt Island NWR	16
5-May-04	Alafia/Pendola Point	25
20-Nov-04	Alafia/Pendola Point	78
18-Dec-04	Homosassa	35
10-Jan-05	Alafia River	57
11-Jan-05	Alafia River	67
5-Feb-05	W. Biscayne Bay	44
5-Mar-05	Crystal River	74
2-May-05	Apalachicola Bay	11
19-Jul-05	John Pennecamp Park	13
25-Jun-05	Indian Key	7
11-Aug-05	Shell Key	16
10-Sep-05	Shell Key	9
13-Jan-06	Apalachicola Bay	289
21-Jan-06	Crystal River	88
27-Feb-06	Upper Tampa Bay	116
10-Mar-06	Alafia River	72
10-Apr-06	Peace River	162
19-Jun-06	Mosquito Lagoon	76
9-Jul-06	Naples City Pier	3
20-Dec-06	Terra Ceia Bay	10
18-Jan-07	Apalachicola Bay	297
22-Mar-07	Upper Tampa Bay	22
2-Feb-08	Upper Tampa Bay	83
7-Feb-08	Matlacha Pass	95
8-Feb-08	Caladesi Island	19
19-Mar-08	Ten Thousand Islands	22

(Data provided by DEP, FWC, FWS, Ocean Conservancy, Tampa Bay Watch, and Volusia County)

TRAP RETRIEVAL RULES

Removal of blue crab traps from Florida waters are regulated by Rule 68B-55, F.A.C., and more recently, Rule 68B-45.0045 (Figure 2A and 2B). Rule 68B-55 distinguishes between *trap debris* and *derelict traps*. Trap debris is best described as the “pieces and parts” of a trap that do not constitute a *fishable trap*. Derelict traps are more specifically defined. Rule 68B-45.0045 The FWC has prepared Guidelines for Removal of Traps and/or Debris (Figure 3) and presented in a format that is perhaps more “user friendly”. In addition to these guidelines, the FWC also requires the following be part of any community-based clean up effort:

- Cleanup event organizers receive prior “on-the-job training” during a retrieval event
- A cleanup plan must be submitted to FWC requesting FWC approval prior to an event
- A float plan is filed with FWC’s Division of Law Enforcement (LE) 24 hours in advance
- Cleanup event participants evaluate each trap prior to removal
- Data are collected for each trap retrieved
- Proper disposal of traps and trap debris is arranged prior to the event
- A final report must be submitted to the FWC after the event is completed.

FWC approval is essential for legal reasons: it is a criminal offense to disturb or molest traps that belong to someone else; FWC approval insulated cleanup participants from this crime.

Figure 2A. Rule 68B-55, Florida Administrative Code

CHAPTER 68B-55 TRAP RETRIEVAL AND TRAP DEBRIS REMOVAL

68B-55.001 Definitions.

68B-55.002 Retrieval of Trap Debris.

68B-55.003 Trap Retrieval Program Funded Pursuant to Section 370.143, Florida Statutes.

68B-55.004 Retrieval of Derelict Traps.

68B-55.005 Recovery of Traps in Area of Major Natural Disaster.

68B-55.001 Definitions.

As used in this chapter:

(1) “Closed season” means that specified period of time during which harvest is prohibited.

(2) “Trap debris” means any piece of a trap, or any combination of such pieces not constituting a fishable trap.

(3) “Derelict trap” means any trap during any closed season for the species, or any fishable trap during the open season that lacks more than two of the following elements:

(a) Buoy.

(b) Line.

(c) Current Commission-issued trap tag (if required).

(d) Identification.

(4) “Fishable trap” means a trap that has 6 intact sides and at least two of the following elements:

(a) Buoy.

(b) Line.

(c) Current trap tag (if required).

(d) Identification.

(5) “Fishery Participant Organization” means a group of commercial fishermen all of whom possess a current saltwater products license and a blue crab, stone crab or spiny lobster endorsement. For the purpose of participation in the retrieval of derelict traps this means participants who receive and possess written permission from each other to bring their traps into land or move them back into line, who work under law enforcement supervision to retrieve traps, or who prepare a plan for Commission authorization pursuant to this rule.

(6) “Trap” means legal harvesting gear as authorized in Rule 68B-4.020, F.A.C.

Specific Authority Art. IV, Sec. 9, Fla. Const. Law Implemented Art. IV, Sec. 9, Fla. Const. History—New 7-1-03,

Amended 3-1-05, 10-15-07.

68B-55.002 Retrieval of Trap Debris.

(1) Local, state, or federal governmental entities, nonprofit nongovernmental organizations, fishery participant organizations, or other community or citizens groups are hereby authorized to remove trap debris from shoreline areas landward of mean low water, and from mangroves or other shoreline vegetation when they organize, promote, and participate in coastal cleanup events for the purpose of removing marine debris.

(2) Except as provided in subsection (3), other coastal cleanup events for the purpose of removing trap debris from all other areas of state waters shall only be undertaken with prior authorization from the Commission, to assure that such removal is adequately supervised.

(3) Local, state, or federal government personnel may remove trap debris located in areas that are permanently closed to trapping without prior authorization from the Commission.

Specific Authority Art. IV, Sec. 9, Fla. Const. Law Implemented Art. IV, Sec. 9, Fla. Const. History—New 7-1-03, Amended 10-15-07.

68B-55.003 Trap Retrieval Program Funded Pursuant to Section 370.143, Florida Statutes.

(1) Traps shall be retrieved by Commission personnel or by a contractor under direct oversight of such personnel, by any approved persons through either a cooperative agreement with federal, state, or local governments, or with fishery participant organizations acting in conjunction with the Commission.

(2) For each trap retrieved pursuant to this section, the following information shall be documented:

(a) The intended species targeted by the trap.

(b) Owner identification/endorsement number.

(c) Presence or absence of a required tag.

(d) Commercial or recreational trap.

(e) Location of trap.

(f) Buoy colors.

(3) The Commission's Division of Law Enforcement office, in the area most appropriate to the cleanup, shall be notified by the Commission program administrator, no less than 24 hours prior to commencement of trap retrieval under this program, and on each day thereafter until cleanup ceases.

(4) Trap owners affected by a disaster, pursuant to Chapter 370.143(4), Florida Statutes, will be allowed ten calendar days after notification to claim traps from a Commission authorized storage area. Unclaimed traps will be properly disabled and disposed of as trap debris.

Specific Authority Art. IV, Sec. 9, Fla. Const. Law Implemented Art. IV, Sec. 9, Fla. Const. History—New 7-1-03.

68B-55.004 Retrieval of Derelict Traps.

(1) During the closed season for the harvest of any species for which traps are allowable gear, and after any authorized trap retrieval period together with any extensions, traps are considered to be derelict and may be retrieved as part of coastal cleanup events conducted by local, state, or federal government entities, nonprofit nongovernmental organizations, fishery participant organizations, or other community or citizens groups. Except as provided in subsection (3), such events shall only be undertaken with prior authorization from the Commission, to assure that such removal is adequately supervised but without the mandatory reporting required in Rule 68B-55.003, F.A.C.

(2) During the open season for harvest of any species for which traps are allowable gears, retrieval of derelict traps may occur at any time deemed appropriate by the Commission. Commission employees, local, state, or federal personnel or members of a fishery participant organization may retrieve derelict traps. Except as provided in subsection (3), retrieval other than by Commission personnel shall only be pursuant to a Commission approved plan. The plan shall include the operational area and time period proposed, authorized personnel, the number of vessels, methods of disposition, and number and qualifications of supervisory personnel. An approved plan shall also include notification of the Commission's Division of Law Enforcement no less than 24 hours prior to commencement of retrieval under this program with final float plan information including contact information, vessel registration numbers, trip times, and number of days.

(3) Local, state, or federal government personnel may retrieve traps located in areas that are permanently closed to trapping without prior authorization from the Commission.

Specific Authority Art. IV, Sec. 9, Fla. Const. Law Implemented Art. IV, Sec. 9, Fla. Const. History—New 7-1-03, Amended 10-15-07.

68B-55.005 Recovery of Traps in Area of Major Natural Disaster.

(1) In the event of an executive order issued by the Governor of the State of Florida declaring an emergency resulting from a major natural disaster such as a hurricane, tropical storm, or similar weather occurrence, upon a finding that the disaster has caused massive trap losses in any fishery regulated by the Commission, the Executive Director of the Fish and Wildlife Conservation Commission will issue an order declaring a trap emergency in the affected area or in a specified part thereof. Such order shall serve to activate the following provisions of this rule.

(2) The trap emergency will be in the area and during the period specified in the activation order.

(3) Each harvester in the affected trap fishery may designate persons authorized to recover and possess traps of the harvester. Such designation shall be on an Emergency Trap Recovery Designation Affidavit (FWC Form DMF- SL5500), which form is hereby incorporated by reference. The original of the affidavit shall be retained by the harvester. A copy of the affidavit will be filed with the nearest office of the Commission's Division of Law Enforcement and also provided to each person authorized to recover and possess traps of the harvester. The affidavit shall be valid from the date the notarized form is received by the Commission's Division of Law Enforcement until the end of that license year.

(4) Persons authorized to recover and possess traps of a harvester will be allowed to do so only in the area and during the period specified in the activation order. Each such person shall possess and maintain available for inspection a copy of the affidavit while the person is engaged in recovering or possessing the harvester's traps.

Specific Authority Art. IV, Sec. 9, Fla. Const. Law Implemented Art. IV, Sec. 9, Fla. Const. History—New 10-15-07.

Figure 2A. Rule 68B-45.0045, Florida Administrative Code

68B-45.0045 Closed Seasons.

(1) In order to facilitate the identification and removal of lost and abandoned traps the following restrictions shall apply.

(a) The use of traps to harvest blue crabs is prohibited for a period of up to ten days annually in the following regions:

1. All waters of the St. Johns River, its associated lakes and tributaries from west of the St. Johns River's intersection with the Intracoastal Canal through and including Lake Hellen Blazes from January 16 through January 25;

2. All waters of Nassau, Duval, Clay, St. Johns, Putnam, Flagler, and Volusia counties from August 20 through August 29, however, not including waters listed in subparagraph (1)(a)1. of this paragraph;

3. All waters of Brevard, Indian River, St. Lucie, Martin, and Palm Beach counties from August 10 through August 19, however, not including waters listed in subparagraph (1)(a)1. of this paragraph;

4. All waters of Broward, Miami-Dade, Monroe, Collier, Lee, Charlotte, DeSoto, Sarasota, Manatee, Hillsborough, Pinellas, and Pasco counties from July 10 through July 19;

5. All waters of Wakulla, Jefferson, Taylor, Dixie, Levy, Citrus, and Hernando counties and including all waters of the Ochlockonee River and Ochlockonee Bay from July 20 through July 29;

6. All waters of Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, and Franklin counties from January 5 through January 14, however, excluding all waters of the Ochlockonee River and Ochlockonee Bay.

(b) All traps must be removed from the water before 12:01 a.m. local time on the first day of each regional closure. Traps found in state waters during the closures are declared to be a public nuisance and shall be disposed of in the manner approved by the Commission. Traps may be returned to the water after 12:01 a.m. local time on the day following each regional closure.

(c) Closures listed in subparagraphs (1)(a)2., 3., 4., 5., and 6. extend to three nautical miles offshore.

(d) Closures listed in paragraph (1)(a) may be reduced in duration if it is determined by the Executive Director of the Commission that the number of lost and abandoned traps in the region will take less time to remove than the time listed in paragraph (1)(a).

(e) Closures do not apply to traps secured to private property, such as a dock, or to authorized gear listed in paragraphs 68B-45.004(1)(b)-(g), F.A.C.

(2) In the Gulf Seasonal Closure Region, no blue crab trap, including any trap used to harvest peeler crabs, may be placed in the water, fished, or soaked during the period beginning September 20 and continuing through October 4 each year.

(3) In the 2009/2010 fishing season, no trap retrieval fees will be assessed for blue crab traps collected through the Commission's Trap Retrieval Program.

Specific Authority Art. IV, Sec. 9, Fla. Const. Law Implemented Art. IV, Sec. 9, Fla. Const. History—New 7-1-09.

Figure 3. Guidelines for removal of traps and/or debris

Fishable traps may NOT be retrieved unless they are defined as Derelict

Fishable Trap -has 6 intact sides and 2 of the following:

1. Buoy
2. Line
3. Current Commission issued Trap Tag (if required).
4. Identification

Derelict Trap - any fishable trap during the open season that lacks 3 of the following may be retrieved

1. Buoy
2. Line
3. Current Commission issued Trap Tag (if required).

Or

- Identification (Name address/V#)
4. Current Commercial Saltwater Products license

OR

Derelict Trap - any trap remaining in the water during closed season is a derelict trap and may be retrieved

- Closed Season for Blue Crab trapping = September 20 thru October 4, all State waters of the Gulf of Mexico seaward of 3 nautical miles from shore
- Closed Season for Stone Crab trapping = May 16 thru October 14, all waters
- Closed Season for Crawfish trapping = April 1 thru August 5, all waters

Any trap debris found during open or closed season may be retrieved.

Trap Debris - any piece of a trap or any combination of pieces that do not make up a fishable trap

PLANNING A DERELICT BLUE CRAB TRAP CLEANUP

Suggestions for planning a derelict blue crab trap clean up effort are presented below in chronological sequence. However, each cleanup is different, and sequence may vary due to local circumstances. The timeline for planning a trap clean up will vary depending on the size of the event, when and where it is to be held, and whether it is a first time effort for the event coordinator or the region. For new initiatives, allow ample time to adequately plan. A sample timeline is included (Appendix A). The most important details to work out are the same, regardless of exact sequence: who, where, how, when.

Site Identification

The first step for a retrieval effort is to identify an area with numerous suspected derelict traps. Possible “suspected derelict traps” would include crushed, decomposing, or heavily fouled traps visible on low tide or through clear water, with or without attached buoy lines; traps that are located landward of mean low water; or buoys that are heavily fouled and/or decomposing and have been in the same location for a period of many months.

Often the decision to conduct a derelict trap clean up effort is made because local community organizations or individuals identify an area of concentrated “suspected derelict traps” and want to have them removed. In these cases, site selection is simple. In other instances, there is a broad area known or reported to have derelict traps and a more specific target area for retrieval must be identified.

To better identify a target area for a retrieval effort, it is recommended to engage as many eyes on the water as possible -- make inquiries with local fishing guides, recreational boaters, and area canoe/kayakers. Also coordinate with local law enforcement agencies with marine units. Ask them if they are aware of any areas where they see traps, and request that they note locations (either record GPS coordinates or mark trap locations on map) over set time period (weeks or months). Follow-up with these agencies after a set time period to collect their findings.

Aerial surveys may be conducted during periods of extreme low tides. High wing aircraft or helicopters are useful in identifying trap locations. Some organizations such as LightHawk (www.lighthawk.org) offer volunteer flights. Other local flying clubs may perform these surveys for free or reduced cost.

It is also important to consider proximity to areas suitable to serve as staging areas: locations to assemble work crews the day of the event, launch vessels, off-load and dispose of collected traps. Boat ramps serve as excellent staging areas, however consideration must be made for other users.

Consider whether cleanup activities will require access to any restricted areas, wildlife refuges, or private property (for cleanup and/or disposal/removal/transport activities), and seek approval from appropriate entities.

Contact FWC Liaison

As noted in “Trap Retrieval Rules” above, a cleanup plan must be submitted to the FWC and approved prior to any trap retrieval event. The FWC’s Division of Marine Fisheries Management in Tallahassee must approve all derelict blue crab trap clean up efforts. This office should be contacted early in the planning process – the FWC can then notify the cleanup organizer of other efforts in the area, suggest possible local partners, alert the organizer to any upcoming changes in regulations, etc. At the end of the cleanup, a final report must be submitted to the FWC within 45-90 days (as specified case-by-case). The trap retrieval and debris removal program coordinator may be contacted at 850-487-0554.

Appropriate Vessels

Across Florida, various vessels or platforms have been used to conduct derelict blue crab trap cleanups. In many shallow, tidally influenced areas, the use of airboats has been extremely successful. In other areas jon boats are sufficient. In backwater areas, canoes and kayaks have been the platform of choice. The decision of what vessel or platform to use depends on the nature of the cleanup location and available resources.

A combination of airboats and other support vessels has proven to be the vessel platform for many retrieval efforts. After general locations with concentrations of presumed derelict traps have been identified, airboats can traverse the shallows and flats during low tide. The higher seating of airboats provides a better vantage for peering down into the water, and teams on airboats can pull traps from areas inaccessible to other vessels and work in concert with support vessels to transport derelict traps for disposal. Support vessels are typically larger vessels (24’ – 30’ in length) with ample deck space to carry a larger load of traps and stay in the deeper channels. As airboat teams collect traps, they periodically run out to the deeper water channel to rendezvous with the support vessels to transfer traps. The support boats typically can hold many more traps than the airboats, and can return easily to the shoreline disposal site to offload traps on shore.

Many airboat owners/operators are willing to volunteer for these sorts of efforts. Potential sources include: Airboat Association of Florida; Florida Airboat Association; Florida Sportsman Conservation Association; Florida Guide’s Association; local airboat associations (many counties or regions have local airboat organizations – Airboating Magazine has a list in the back of the magazine); Mosquito Control Agencies; Aquatic Plant Management Agencies; Water Management Districts; DEP Parks Department; FWC Law Enforcement; Local (City/County) Marine Law Enforcement Units; USFWS National Wildlife Refuges; FWC Wildlife Management Areas.

If airboats are not available or are not appropriate, jon boats or other shallow draft vessels can be used for shallow water trap retrieval efforts, but these vessels do not offer the same high vantage point for looking down into the water, as do airboats.

In backwater areas, creeks, or parks/preserves where airboats may not be appropriate, canoes and kayaks may be most suitable, and again may be used in conjunction with a jon boat that could serve as a support vessel for offloading traps if necessary. Volunteers in canoes or kayaks should have reasonable paddling and maneuvering skills, and be comfortable in an otherwise unstable

platform. Local canoe/kayak outfitters may be willing to provide boats, and local clubs may be interested in participating.

Once the most appropriate type(s) of vessel(s) have been selected, secure partners willing to provide and operate those vessels for cleanup effort. Also identify and secure appropriate permissions launch site and trap off-load site (may be single staging area). This task may have already been completing during the Site Identification, described above.

Identify/Contact Local Partner Organizations

Each cleanup is required to have at least one individual on-site with previous experience participating in a FWC-approved blue crab trap cleanup. During first time efforts for new event coordinators, they need to partner with an experienced participant. Another option is for a new event coordinator is to participate in an existing cleanup being conducted by an experienced organization or individual. A list of organizations with experienced individuals is included in Appendix B.

In addition to an experienced partner, other local partner organizations are integral to a successful retrieval effort. Many event coordinators often have local groups or individuals in mind to recruit as participants in a derelict blue crab trap cleanup. Consider the following as a supplement to existing local partners (as applicable):

- Airboats (see above list)
- Canoe/Kayak Outfitters and/or Clubs
- Coastal Cleanup Zone Captain/Keep America Beautiful County Affiliates
- County Natural Resources/Environmental Management
- County Parks and Recreation
- DEP Florida Parks and Recreation and/or Aquatic Preserves
- Division of Marine Fisheries Management
- Fish and Wildlife Research Institute
- Florida Entanglement Working Group
- Law enforcement agencies (local sheriff/marine unit; FWC Law Enforcement)
- Local Conservation groups and other NGO's (Ocean Conservancy, Tampa Bay Watch, Estuary Programs, etc.)
- Local Governments
- Local FWC office/field station staff
- NOAA Restoration Center and/or NOAA Protected Resources staff
- Solid Waste Management Companies
- UF Sea Grant Extension Service agents
- US Coast Guard
- US Fish and Wildlife Service Refuges
- Water Management Districts

Coordinators may also wish to form a planning committee, especially for the first time a cleanup is being conducted in a given area. Committee members may help identify other partners and resources, and will also serve to keep all of the key players informed and engaged as the event

planning progresses.

Budget, Funding, and Sponsorship

With strong partnerships and dedicated volunteers, community-based derelict trap clean up efforts can be conducted on relatively limited budget. Do not be discouraged from undertaking a local cleanup because of costs and do not underestimate the contributions that partners can provide. Generally, one salaried (non-volunteer) individual is necessary to coordinate and oversee the event. Besides salary, there will also be expenses associated with travel, supplies, etc. The most expensive items for these efforts would be vessels (and fuel), which may be provided by partner organizations. Other costs include dumpsters for disposal (may be donated), cleanup supplies (may be donated by partner organizations, or borrowed), and food for volunteers (often donated). If funding is available, it can be used for volunteer incentives (t-shirts), additional supplies (gloves, wire cutters, etc), additional food for volunteers, and/or fuel-reimbursement for the volunteer vessels. See the section on “Assemble Cleanup Kits” for list of recommended supplies. For projects funded by grants, track costs (mileage, supplies, travel, staff time) and in-kind donations (volunteer time, food, dumpsters, partner vessels, etc)

Larger-scale, multi-day cleanups, such as the FWC-coordinated stone crab and lobster trap retrieval programs, which involve numerous locations and participants, and require more specialized vessels and equipment will have much higher costs than one-day, local blue crab trap retrieval efforts. A program employing commercial crabbers would have higher costs associated with it, although volunteer efforts with commercial crabbers would be an excellent option.

Select Event Date

Timing for clean up event also involves local considerations. Bear in mind tides and prevailing weather conditions for certain times of year. Tides are lowest in the winter but higher winds may be problematic if using airboats. Select a cleanup date as well as backup date so effort can be postponed if weather is not suitable. Also consider hunting season in area of clean up.

As of June 2009, short-term (10 day) closures of the blue crab fishery will greatly expand the feasibility of derelict traps cleanups. The time periods and regions proposed are as follows:

- January 5–14: all waters of Franklin through Escambia Counties (to the Florida/Alabama state line)
- January 16-25: waters of the St. Johns River system,
- July 10-19: all waters of Broward County through Pasco County
- July 20-29: all waters of Hernando County through Wakulla County
- August 10-19: all waters of Brevard County through Palm Beach County
- August 20-29: all waters of Nassau through Volusia Counties (from the Florida/Georgia state line through Volusia County)

Cleanup efforts should be conducted during these closure periods to maximize efficiency but may also be conducted throughout the year with Commission-approved plan should the need arise.

Volunteers: Recruit, Schedule, Train

Derelict crab trap cleanups are generally popular with boaters, fisherman, environmental organizations, and the public at large, and volunteers can be recruited from all of these sources. Several potential pools of volunteers are available to assist with these efforts, starting with the local partners already identified. In addition, local conservation and sports fishing groups should be contacted (consider doing a presentation at their regular meetings). Often there are more volunteers willing to participate than there is space on the boats. Ideally recruit two volunteers per vessel in addition to the captain (of powerboats/airboats). The more volunteers on boats, the less space for traps; too many volunteers can limit the number of traps that can be collected onboard the vessels.

Assemble volunteers into teams (each vessel = one team) with the following: driver, one or two trap pullers, and one data recorder. It is best if the data recorder does not pull traps, as trap pullers get wet and muddy. Support vessels can accommodate a larger team with more volunteers to assist with transferring, off-loading, and disposing traps.

One or two volunteers should remain on land, at the disposal site. These volunteers will assist with off-loading and disposing traps, can answer questions from the public about the event, secure the dumpster/ensure no non-trap debris is placed in dumpster by the public (often a requirement of using donated dumpsters), and can set up any post-event food and drinks (see below). These volunteers can also collect data sheets and supplies from the boat crews as they return to dock.

Communicate with volunteers well in advance of an event. Maintain a complete and current contact list (name, email address, cell phone number) of volunteers. Help volunteers prepare: inform when and where to meet; wear sturdy clothing and shoes/boots that can get wet and dirty; bring personal work gloves (if desired); have water to drink/snack to eat; indicate what to do in the event of bad weather. Exchange day-of-event contact information (volunteers should have the event coordinator's cell phone number and vice versa).

All volunteers must be trained on identifying derelict trap, according to the rules and guidelines listed under "Trap Retrieval Rules" (above). This is essential for cleanups outside of closed seasons. Training can be done the day of event, immediately before the actual cleanup begins, and is discussed below.

Trap Disposal

All traps must be disposed of the day of the event and not left unattended overnight. Plan to transport traps to a landfill or transfer station immediately following event, or secure a dumpster that can be picked up the same day as the event. Solid waste management companies have dumpsters available for rent, including drop-off and pick-up on designated dates. Many of these companies will donate dumpsters for these cleanup events or provide them at reduced cost. Early notification is important and sometimes a donation request must be submitted in writing.

Approval may be needed for temporary disposal of traps at onshore sites; city, county, navigation district, or private ramp owners should be contacted prior to the event. Exhaust all means to

recycle before traps are disposed in landfills. But note, in the past scrappers have not expressed interest in recycling the trap material. However, before using a scrapper to dispose of derelict traps, receive permission from the FWC.

Early contact with recycling and landfill facilities helps ensure adequate trap disposal. If contacted early, recycling centers or landfills are often willing to reduce charges for landfill disposal, dumpster rental, dump truck hauling, manpower, etc. Coordinators can also try to contact their local county waste management department to see if they would be willing to write a letter of disposal waiver.

Permission must also be granted from the site property manager to place the dumpster at the staging area; city, county, navigation district, or private ramp owners must be contacted prior to the event. Work with the property manager to identify a location to place dumpster so that it will not interfere with the use of the site, but will be conveniently located to wherever traps will be off-loaded (i.e., close to boat ramp). In addition, coordinate with manager as well as dumpster company on drop-off date (day before cleanup) and pick-up (day of cleanup, approximate time). The dumpster must be picked up the same day as the event and not left on site overnight.

Food and Drink

For efforts involving volunteers, it is appropriate to provide volunteers with snack, meal, and/or beverage to show appreciation for the efforts. Many local businesses will donate or discount items for this purpose: pizza, snacks, water, soda, etc. You may wish to first approach businesses closest to your cleanup site since they are more likely to be familiar with the area and appreciate the need for the cleanup effort. Some of the local partners (listed above) may also have resources available (funds to purchase food, t-shirts, and other goodies; contacts with local businesses). When asking for food donations, have an approximate number of volunteers anticipated.

Local Crabbers

Contact the FWC Liaison in the Division of Marine Fisheries Management for list of current crab endorsement (license) holders (sorted by endorsement number) in the clean up county (and adjacent counties). As a courtesy, you may wish to notify local crabbers of data and location of your planned effort at least a few months in advance. Rather than contact every crabber in the county, contact one or two and ask who crabs in the area you will be working, and then contact that person. Alternatively, contact a local fish house; they will often know which crabbers work particular areas.

The list of endorsement holders will also be necessary during the actual cleanup (one copy per vessel) to check whether licenses are current (see "Clean up Methods" below).

Law Enforcement

Local law enforcement (LE) should be notified several weeks in advance of the event, both as an informational courtesy, and to invite participation. While LE presence is not necessary with a Commission-approved event, their participation is beneficial to address issues with questionable traps and to field questions from the public -- especially any commercial fishermen or crabbers

who may not have received notice of the event. The primary LE partner should be the local FWC office (to find closest FWC LE office, visit www.myfwc.com/law). Also consider contacting LE from USFWS, DEP, US Coast Guard, County Sheriff, or Marine Police (municipal).

A Float Plan must be submitted to local office of FWC Division of Law Enforcement at least 24 hours in advance. The Float Plan should include event date, location, time of event, launch site; for each vessel, include the vessel type, length, registration or Coast Guard documentation number, captain name, names and numbers of passengers/volunteers, and a contact phone number (ideally cell phone) for that vessel. This information should also be submitted to US Coast Guard to notify them of the activities.

Pre-Cleanup Site Assessment

To maximize efficiency and effectiveness during the cleanup, collect in advance information about concentrations of traps and/or individual trap locations in advance. As described under “Site Assessment”, request that local fishing guides, commercial fisherman, recreational boaters and fishermen, and/or kayakers record locations over the weeks and months prior to the cleanup (request GPS coordinates and/or locations marked on maps).

Aerial surveys (conducted on clear days with low winds, and preferably on low tides) are also effective at locating traps across large areas, as also mentioned in “Site Assessment” section. Although traps can not be clearly identified as derelict vs. active from the air, the “box shape” of the traps are visible in clear water and/or low tide, and traps without an associated buoy or “stray traps” (not set in a line with other buoyed traps) are good candidates to examine more closely during the actual cleanup. Aerial survey services are sometimes donated by environmental organizations such as LightHawk, by local news helicopters, and other creative resources.

Map Area

Create maps of the region (navigation chart, Google Earth map, etc) and, using the information from the Site Assessment, divide area into zones and assign teams to each zone. This will ensure effort is evenly distributed and that all areas receive adequate coverage. Maps should be gridded or labeled to make it easy for users to reference specific regions on the maps; this facilitates on-water communication if two vessels are trying to rendezvous, or if one vessel requests another vessel cover a portion of their assigned area, etc. Maps should be “waterproofed” in some manner (laminated, printed on waterproof paper, placed in Ziploc bag or clean plastic sleeve, etc). Ensure that key features (launch and off-loading sites/staging area, channel locations, zone number, etc) are displayed on the map.

Final Cleanup Plan

Cleanup coordinators should stay in close contact with the FWC Liaison throughout the planning process and the development of the cleanup plan. A final cleanup plan must be submitted to the FWC and approved prior to the event. FWC has a “Derelict Trap and Debris Removal Event Application” (Appendix C1). You may wish to also complete your own “Clean Up Plan” (sample plan in Appendix C2). The plan should include the following information: When, Where (including maps), Who (numbers of volunteers and agencies), Vessel Info, What, and How (including disposal methods and data collection methods).

Upon submission of final plan application, await FWC approval in the form of a Letter of Approval.

The final float plan should be submitted to local FWC DLE at the same time the cleanup plan is submitted 24 hours before the cleanup.

Program Promotion: Media, Education, Outreach

Publicity – especially through media exposure in advance of the cleanup -- will help make the community aware of the event and generate public support, and may also help facilitate efforts with additional volunteers, partners, sponsors and/or donations. Prepare and distribute a press release to local media (local news channels, public access TV, local newspaper, outdoor writers, outdoor/fishing radio shows, etc). List the event on event calendars and include information on partner websites and newsletters.

Make whatever arrangements necessary to accommodate media on the day of the cleanup event; invite them to ride along on a support vessel and give them close access to the working boats.

Upon completion of the cleanup, quickly compile the pertinent data (number of volunteers, number of traps removed, and noteworthy observations) and submit a second press release either the afternoon following the cleanup or early the next morning.

Assemble Captain's Packets

A “Captain’s Packet” should be assembled for each vessel which includes the following important information necessary for each team to successfully conduct the task at hand:

- Copy of FWC Rules
- Copy of FWC Letter/Notice of Approval for Event (Map of area (waterproofed, preferably gridded)
- List of contacts for each participating vessel, event organizer, and law enforcement officers (cell phone numbers and/or VHF Radio information)
- List of current license holders
- Bycatch ID photos/cards/sheets

This information can be assembled in a three-ring binder. Materials should be printed on waterproof paper and/or inserted in plastic sleeves for protection, especially maps, contact phone numbers) and bycatch ID sheets. The datasheets for recording trap info can also be included in the notebooks. Because of expense and bulk, datasheets are often not printed on waterproof paper, but ensure they are kept relatively dry.

Assemble Cleanup Kits

Each vessel should have a cleanup kit with necessary supplies. Supplies can be distributed among vessels at the start of the cleanup, and then collected at the end of the event. It may be useful to assemble supplies in 5-gallon buckets (one per vessel), making it easier to distribute and collect everything together (and minimize equipment loss). The following kit contents are recommended:

- Work gloves (thick garden gloves; reinforced palms recommended)

- Notebook/waterproof clipboard with datasheets (may be in captains packet)
- Pencils/waterproof ink pens
- Handheld GPS unit (request all vessels to use same format for recording coordinates, such as decimal degrees)
- Wire cutters/sheers (to release bycatch or to open traps that can not be removed)
- Boat hook or gaff (for pulling traps from water/sediment). A simple hook can be made by screwing a utility hook into one end of a six-foot broom handle or pole. The opposite end of the pole can be marked at ½ meter intervals and used to measure water depth.
- Tarp(s) (to cover and protect boat deck)
- Shovel (for dislodging partially buried traps)
- Disposable (or digital) camera
- First aid kit (should include one per vessel; if not, ID which vessel(s) are carrying first aid).

All vessels should also have a cell phone and back-up, or a VHF radio.

Conduct Volunteer Training

Schedule a time and location to meet with all crab trap cleanup volunteers, including those who have participated in past cleanups (to review with them, or go over changes). Ideally this training would be conducted in advance of the cleanup, but often it is done on-site at the staging area on the morning of the event. Find a location that is somewhat sheltered from the elements (in the event of wind and/or rain). Volunteer training should include boat captains and cover the following elements, described below:

- Review safety: Instruct participants to use common sense when handling traps that are often fouled and/or have sharp wire. Treat cuts or abrasions from handling traps properly. Consider weather precautions. Ensure captains go over boat safety (location of life vests, fire extinguisher, airboat safety if applicable); all vessels must meet USCG requirements, and must have a sufficient number of life vests for all occupants.
- Review communication protocol: Identify who to contact with questions, who to contact to transfer traps to support vessel and/or disposal site. Have a cell phone number or VHF frequency (VHF preferred in areas with poor cellular coverage) for all vessels.
- Review contents of captain's packet and cleanup kits
- Review rules: Describe exactly what constitutes derelict trap. Give examples of what IS derelict (lacks six intact sides; missing 3 of the 4 identified components. If a trap is missing both buoy and tag, it is derelict because without number from a tag or buoy, one can't determine whether the license is current). Give examples of what is NOT derelict (no buoy, no line but has tag, license is current, and trap is intact). Teach the mantra: "When in doubt, don't pull it out."
- Review and demonstrate how to complete datasheets and identify bycatch. Hand out a sample completed data sheet and review it line-by-line (Appendix D). It is tedious but essential for training.
- Review protocol for questionable traps: Identify LE officer(s) and/or key experienced participants experienced to answer questions about nebulous traps.
- Provide a sample trap tag (if possible) and review how to look up endorsement to determine if current (may have to go through several lists of endorsements: V, HS-Inshore, SS-Inshore, etc)

- Provide sample photos of traps in various stages of decomposition (Appendix E)
- Provide photos or Field Guides to help identify species commonly encountered as bycatch (Appendix F)
- Review assignments: Identify which volunteers will be completing which tasks (recorder, puller), assigned to which vessels, with which captains.

At the end of training, have volunteer read, sign, and return waivers/release forms (with photo release; Appendix G).

Volunteer training should include boat captains. In addition, boat captains should review safety protocols for their vessel (location of life vests and fire extinguisher; weight distribution; where to store personal gear; additional airboat safety and ear protection).

Cancellation Plan

Although no one wants their event to be cancelled, if using airboats or human-powered vessels (canoes/kayaks), high winds can pose risks to participants and equipment. Therefore, a plan should be in place to notify partners, boat captains, volunteers, and law enforcement of any last minute changes. The “list of contacts within the captain’s packet serves as a good starting point, but also be sure to have contact phone numbers for all volunteers (or a volunteer coordinator if there is one) so that volunteers are also notified. As soon as event is cancelled, evaluate the prognosis for being able to do the cleanup on the backup date (established when cleanup date was initially selected), and agree to follow up by a specific date/time.

METHODS

Once the event planning is complete, all that is left is to retrieve the traps. Although there are no set methods for conducting the actual derelict blue crab trap removal effort, and some of the methodologies have likely already been considered during the planning stages (i.e., which vessel type(s) to use), below are some “helpful hints” for pulling traps based on past experience of numerous individuals.

Search Pattern

If each vessel has been assigned an area or zone in which to work, determine a search pattern in advance for covering the area. Following natural “handrails” (such as shorelines, channels, etc) are helpful, but depending on size of the area, may also need to traverse in back-and-forth pattern (transects) across an area.

Search Image

Traps are either completely exposed, partially exposed, or completely submerged. The appropriate “search image” depends on where you area searching. If traversing along the shoreline, look for exposed traps, objects underneath mangroves, and piles covered with other debris. In shallow water, the tops of traps may be exposed; look for a fixed, square object breaking the surface of the water. In slightly deeper water (> 1 m), traps will likely be submerged. Try to search from an elevated platform (seats on an airboat) and peer down into the water; polarized sunglasses are helpful for reducing the glare on the water’s surface. Submerged

traps will often appear dark against a light background; occasionally lighter against a darker background. Decomposing or decrepit buoys are also often good indicators of potentially derelict traps.

Securing Trap

Once a potentially derelict trap is located, secure it for more careful inspection. For submerged traps (partially or completely submerged), have the boat pull along side and use gaff or boat hook to secure trap. If a trap is lodged in muddy substrate, the boat can sometimes be used to dislodge a trap (by slowly driving forward while holding onto gaff hooked to trap; this should be avoided in seagrass beds). Sometimes traps (exposed, partially or fully submerged) are partially buried in the substrate. If you can not dislodge with gaff/boat hook and boats propulsion, use the shovel (unless the trap is buried within a seagrass bed). Do not attempt to touch or otherwise move a trap until it is verified that it meets the definition of a derelict trap, and data on presence of bycatch are recorded.

Once the trap is secured alongside the vessel (but before bringing on board), closely inspect traps for bycatch (live or dead: carcasses, bones, shells) and record any on datasheet. The more the trap is handled, the more likely by-catch will be lost; attempt to document by recording and photographing when feasible as much by-catch as possible.

While trap is still alongside vessel, attempt to rinse as much mud and debris from trap before bringing onto boat (watch for bycatch or carcasses that may fall out) by dunking the trap up and down in the water, or have the boat pull forward slowly.

For traps partially submerged that can not be dislodged, use shears to cut away exposed mesh; leave rebar frame intact. Likewise, if a trap is entirely encrusted with barnacles and oysters and has become a habitat, ensure there are openings in the trap (so organisms will not become entrapped – use wire cutters to open side-panels), record trap information (complete data sheet) and leave *in situ*.

Recording Data

As noted above, each vessel should have a dedicated data recorder, remaining relatively clean and dry. Care should be taken to keep the data sheets from getting wet, muddy, or blowing away.

At least two versions of data sheets exist and may be used to record trap data. One was produced by FWC (Appendix H1); the other by the Florida Entanglement Working Group (FEWG; Appendix H2). Either of these datasheets are suitable for use, or another could be developed and used provided that the data are recorded and reported to FWC:

- a. Trap Type (blue crab, stone crab, spiny lobster, other).
- b. Trap Components. Does the trap have:
 - i. 6 intact sides?
 - ii. Buoy?
 - iii. Line?
 - iv. Current FWC-issued trap tag?
 - v. Identification (name and address)?

- c. Is the trap fishable, or trap debris?
- d. Recreational or commercial trap (stone crab and blue crab fisheries only; or unknown).
- e. By-catch present (by category and number). Categories include, but not limited to:
 - i. Fish.
 - ii. Crabs.
 - iii. Oysters and/or mussels.
 - iv. Terrapins.
 - v. Other invertebrates.
 - vi. Other vertebrates.
- f. Additional comments (optional).

The FEWG data sheet was developed so that information could be collected in the sequential order as a potential derelict trap is inspected, and also provides a step-wise means of documenting if it is or is not in fact derelict. Especially for efforts during the closed season, the FEWG datasheet minimizes the risk of inadvertently removing a trap that is not derelict. A sample of a completed data sheet with notes to assist with data recording is included in Appendix D. Which datasheet to use depends on how much information is anticipated to be needed. When in doubt, the FEWG datasheet is more complete and, because of the step-wise method for completing it, minimizes likelihood that a fishable trap will accidentally be removed.

All traps should have either a trap tag or identification (typically imprinted on plastic tag). These tags are affixed to the trap. Check the endorsement number to verify if an endorsement is current and record number on data sheet. If the trap has been submerged for a long period, the tag may be heavily encrusted so check carefully before determining that no tag is present.

All data should be double checked by the data recorder, as well as by the event coordinator at the end of the cleanup day.

Trap Handling

After traps are removed from the water, and datasheets are completed, traps should be compacted as much as possible to maximize available space on vessels. Traps can be crushed by standing on top of them, but be careful to avoid injury. Continue removing, documenting, crushing, and stacking as many traps as can safely be managed onto vessels. Do not overload vessels. Once a vessel has reached maximum trap capacity, it may either return to the drop-off site to offload traps, or rendezvous with a support boat, and transfer traps to the support boat, which can then off-load traps while the original (shallow draft) vessel continues to retrieve traps.

As traps are off-loaded at disposal site, they can be deposited directly into the dumpster or appropriate receptacle as arranged. Alternatively, traps may be piled on shore at a designate location so that at the end of the cleanup a group photo can be taken to document the effort with all the recovered traps and trap debris and cleanup participants. After photos have been taken, traps can be further compacted using log splitters and/or plywood sheets; compacting traps will maximize the number of traps that can fit in the receptacle. A step stool may be helpful to get

traps into receptacle if it has high sides. If traps are being recycled, remove all lines and buoys and dispose of properly.

After any “group photos”, all traps must be placed in dumpster and disposed of properly. Remove all trap debris and waste. Leave the staging area in the same condition you found it. Barnacles, oysters, mud, and other fouling material that falls off traps during loading and unloading will create a smelly mess; do not leave any smelly mess behind. Shovels, rakes, brooms and/or buckets are recommended for cleaning up waste material. Ensure that traps are removed from public area (e.g., dumpster is picked up the same day as the event).

Post-Event Wrap-Up

Once all the cleanup participants have returned to the boat launch, any group photos have been taken, all traps have been placed into the proper disposal receptacle (dumpster), and the staging area has been cleaned, volunteers should be thanked (and hopefully given food and drink). A few final wrap-up tasks remain.

Collect all materials from volunteers and vessels; each team should return their clean-up kit and captain’s packet. The event organizer may wish to designate one person to collect these materials and datasheets. Compile the completed data sheets; review sheets to ensure all of the pertinent fields have been correctly completed. Do a preliminary count of total number of derelict traps retrieved; it is very rewarding for the participants to hear the estimated results of their efforts immediately, while most are still on-site.

Make note of in-kind services and materials provided for the cleanup. Record number of volunteers, volunteer hours, number of vessels, vessel hours, cost of fuel, value of any donated items such as food or drinks and other materials or incentives.

As soon as possible (preferably later that same day), summarize the area covered, traps collected, participants involved, and problems encountered. Review datasheets again and confirm trap counts. Contact media to report with event summary (number of traps, number of boats, number of participants) once data has been verified. Submit a few quality photos of event as well. Submit this information to FWC Liaison as well.

In the days and weeks to follow, verify all data. If maintaining a database, complete all data entry within 30 days. Submit final report to FWC Division of Marine Fisheries Management within the timeframe specified, including summary information listed above.

Appendix A: Sample Timeline

The timeline for planning a trap retrieval event depends on how large the event will be, when and where it will be held, and if it is a new event or a recurring event. Established events may have shorter timelines as the trap retrieval logistics have already been worked out, and organizers may have existing pools from which to solicit volunteers. For experienced coordinators, this timeline can be condensed to two months.

Timeline of Planning Efforts in Florida

<u>Pre-Event</u>
12 months
<ul style="list-style-type: none">• Site identification• Contact FWC Liaison• Determine most appropriate types of vessels• Determine approx time period for effort
6 months
<ul style="list-style-type: none">• Select event date (send date to FWC Liaison)• Identify and contact local partner organizations• Consider budget, funding, and sponsorship
3-4 months
<ul style="list-style-type: none">• Recruit volunteers, including vessel owners/operators• Secure dumpster and associated permissions• Identify sources of food/drink• Contact local law enforcement; invite to participate• Contact local crabbers• Request LE, boater, crabbers document locations of potential derelict traps
1-2 months
<ul style="list-style-type: none">• Continue Recruit volunteers, including vessel owners/operators• List event on community calendars• Conduct pre-cleanup site assessments• Create maps of area; indicate locations of potential derelict traps• Draft cleanup plan (send draft to FWC Liaison for initial consideration)• Draft press release; begin media contacts• Assemble necessary supplies (cleanup kits, volunteer incentives)• Confirm dumpster• Secure materials to compile Captain's Packets and Cleanup Kits
1- 2 weeks
<ul style="list-style-type: none">• Order volunteer incentives (t-shirts, etc) if not already complete• Distribute press release• Confirm food/drink• Confirm volunteer and vessel participation; compile contact info• Confirm law enforcement participation• Determine volunteers assignments (who on which vessels)• Finalize Cleanup Plan; submit to FWC for final approval• Finalize Float Plat; submit to LE• Create Contact List with communication contacts for all vessels

- Schedule volunteer training; Assemble volunteer training materials
- Assemble Captain's Kits
- Assemble Cleanup Kits
- Follow up with media; designate media representative; determine which boat to carry them

Day of Event

- Conduct volunteer training
- Review safety; sign and collect waivers
- Review cleanup plan; which vessels assigned to which area
- Properly dispose of all traps and clean up disposal site
- Collect, review, and summarize datasheets to determine preliminary results
- Collect all supplies
- Thank volunteers
- Provide preliminary results to media if requested

Post Event

Following day

- Ensure dumpster was removed and contents were properly disposed of
- Review data and prepare summary of event (number traps, number volunteers), compile photographs, and distribute to media

Within 2 weeks

- Send thank you message to volunteers, including results
- Enter data into database
- Conduct a post-event review with major partners to discuss ways to improve

Within 60 days of event

- Submit final report of cleanup data to FWC

Appendix B: Experienced Organizations and Individuals

(Sample List, Not Exhaustive)

Organization	Phone	Name	Email
Brevard County	321-633-2016	Chris Koepfel	chris.koepfel@brevardcounty.us
Charlotte County Government	941-764-4340	Roger DeBruler	Roger.DeBruler@charlottefl.com
Collier County Government	239-213-2980	Pamela Keyes	PamelaKeyes@colliergov.net
FFWCC	850-922-4330	Kent Smith	kent.smith@ MyFWC.com
FFWCC	850-488-6058	Gus Cancro	gus.cancro@MyFWC.com
Florida Sea Grant, Charlotte County	941-764-4346	Betty Staugler	Elizabeth.Staugler@charlottefl.com
Florida Sea Grant, Collier County	239-417-6310	Bryan Fluech	fluech@ufl.edu
Florida Sea Grant, Lee County	239-533-7518	Joy Hazell	hazellje@leegov.com
Florida Sea Grant, Miami-Dade	305-421-4017	Lisa Krinsky	lkrinsky@ufl.edu
Florida Sea Grant, Nassau/St. John	386-437-7464	Maia McGuire	mpmcg@ufl.edu
Miami-Dade County DERM	305-372-6581	John Ricisak	RicisJ@miamidade.gov
NOAA Restoration Center	727-824-5384	Daphne McFarlan	Daphne.mcfarlan@noaa.gov
NOAA Restoration Center	727-824-5384	Tom Moore	Tom.Moore@noaa.gov
NOAA, NMFS	727-551-5743	Michael Bailey	Michael.Bailey@noaa.gov
Ocean Conservancy	727-369-6610	Jessica Koelsch	jkoelsch@oceanconservancy.org
Tampa Bay Estuary Program	727-893-2765	Nanette O'Hara	nanette@tbep.org
Tampa Bay Estuary Program	727-893-2765	Lindsay Cross	lcross@tbep.org
Tampa Bay Watch	727-867-8166	Serra Herndon	sherndon@tampabaywatch.org
Tampa Bay Watch	727-867-8166	Peter Clark	pclark@tampabaywatch.org
Tampa Electric Company	813-630-6972	Wendy Anastasiou	wfanastasiou@tecoenergy.com
US Fish & Wildlife Service	904-731-3079	Nicole Adimey	nicole_adimey@fws.gov
US Fish & Wildlife Service	239-353-8442	Takako Sato	Takako_Sato@fws.gov
Volusia County	386-736-5927	Georgia Zern	gzern@co.volusia.fl.us

Appendix C1: Event Application



Derelict Trap and Trap Debris Removal Event Application
Florida Fish and Wildlife Conservation Commission
Division of Marine Fisheries Management
620 S. Meridian St., Mail Station 4B3, Tallahassee, Florida 32399-1600
Ph: 850-487-0554 • Fax: 850-487-4847

Complete all information that is applicable to your requested event. If additional space is required other than what is provided on this form, you may provide additional attachments as long as they are clearly marked and identifiable. Documents submitted separately from an application form must be marked (or files named) with the applicant’s name and affiliation.

(Please Print or Type)

A. GENERAL APPLICANT INFORMATION

Organization Name: _____
Contact Name: _____
Mailing Address: _____
City: _____ State: _____ Zip: _____
Phone Number: () _____ Fax: () _____
Alt. Phone Number: () _____
Email Address**: _____
Previous Authorization Number (if applicable): _____

****To provide more timely exchange of information please check this box:**

I authorize FWC to send me future correspondence regarding this application, including requests for additional information and final agency actions by either e-mail or express delivery. Future agency actions will be provided henceforth by either e-mail or express delivery.

Applicant Signature: _____ **Date:** _____

Certification: By signing this document, I also agree to comply with the reporting and notification requirements outlined in sections “J” and “K” of this application form and affirm that I have read the rules pertaining to the removal of derelict traps and trap debris as stated in [Chapter 68B-55, Florida Administrative Code](#). I further state that I will abide by all applicable State, Federal, and local laws.

D. EVENT OVERVIEW. Briefly describe the proposed event, including where it will be held, why a cleanup is needed in this area, your goals for this event, and how you plan to accomplish these goals.

E. DATE OF PROPOSED CLEANUP EVENT.

1. Please identify the date(s) your event will take place as well as the anticipated start and finish times for each day of the event (if applicable).

2. Please identify any potential backup date(s) scheduled should you need to postpone your event (because of inclement weather, etc.).

3. Please indicate why these dates were chosen for your event.

F. LOCATION(S) OF PROPOSED CLEANUP EVENT.

1. Please identify the area that you intend to cover during this event. Please be as specific as possible (e.g., “The cleanup will be conducted in East Bay, lower Apalachicola River, Cat Point, and Two-Mile Channel.”).

2. Please provide details on why this location was selected, and please indicate if any pre-event surveys or scouting efforts have been or will be completed.

3. Please provide a map showing the area to be covered during your event (e.g. satellite image from Google Maps, etc.).

G. APPLICANT EXPERIENCE.

1. Have you participated in a derelict trap cleanup event in Florida in the past? YES NO

- a. If yes, please provide the date and location of the most recent event you participated in, including the name of the organization (if known).

2. Have you read the rules pertaining to the removal of derelict traps and how derelict traps are defined ([Chapter 68B-55, Florida Administrative Code](#))? YES NO

3. Are you familiar enough with these rules to adequately train volunteers? YES NO

- a. If no, please explain:

H. VOLUNTEERS.

1. List the estimated number of staff, volunteers, and/or vessels for each participating organization/volunteer group:

Name of Organization/Group	Number of Volunteers	Number of Vessels

2. All participants must understand the rules pertaining to the removal of derelict traps and how derelict traps are defined before they can begin removing traps. How will volunteers be trained prior to this event?

I. CLEANUP METHODS.

2. Data must be recorded from each derelict trap removed. Please include a sample of the datasheet to be used during your event if you will not be using the FWC datasheet. The FWC datasheet can be downloaded from the internet ([www.MyFWC.com/...](http://www.MyFWC.com/)). These data must include (at a minimum):
 - a. Trap Type (blue crab, stone crab, spiny lobster, other).
 - b. Trap Components. Does the trap have:
 - i. 6 intact sides?
 - ii. Buoy?
 - iii. Line?
 - iv. Current FWC-issued trap tag?
 - v. Identification (name and address)?
 - c. Is the trap fishable, or trap debris?
 - d. Recreational or commercial trap (stone crab and blue crab fisheries only; or unknown).
 - e. By-catch present (by category and number). Categories include, but are not limited to:
 - i. Fish.
 - ii. Crabs.
 - iii. Oysters and/or mussels.
 - iv. Terrapins.
 - v. Other invertebrates .
 - vi. Other vertebrates.
 - f. Additional comments (optional).
3. Please provide details on how derelict traps and trap debris will be disposed during your event. Please note that derelict traps and trap debris cannot be left unattended or unsecured prior to being taken to a landfill or other waste transfer station (e.g. if a dumpster is used for this event, please ensure that arrangements have been made for the dumpster to be collected on the same day as the event).

J. REPORTING REQUIREMENTS. A final report must be submitted to the Commission within 30 days after the event, or pursuant to a reporting schedule as otherwise stated in your letter of authorization. This report must include a summary of the event including the total number of traps collected, a summary of all data recorded by event volunteers and copies of completed data sheets. Applications for future events will not be evaluated until all requested information and reporting documentation required by previously

held authorizations issued to the applicant has been submitted.

K. NOTIFICATION REQUIREMENTS. All cleanup event organizers must notify the nearest Commission Law Enforcement Regional Communication Center not later than 24 hours prior to conducting a cleanup event. Notification may consist of a float plan detailing locations, dates, and times of activities. Deviations from the float plan are permitted only after 24-hour advance notification to the nearest Commission Law Enforcement Dispatch Center. Float plans are valid for the duration of the authorized cleanup event unless rescinded by the event organizer.

L. AUTHORIZATION COPIES. Please be aware that all personnel or volunteers must have a copy of the letter of authorization in his/her possession while conducting authorized cleanup activities.

M. APPLICATION SUBMISSION. Applications may be submitted electronically to the Trap Debris Removal Program Coordinator (email to CleanupTraps@MyFWC.com), may be faxed to (850) 487-4847, or may be mailed to the following address:

FWC – Trap Debris Removal Program
620 S. Meridian St., Mailbox 4B3
Tallahassee, FL 32399-1600

Documents submitted separately from an application form must be marked (or files named) with the applicant's name and affiliation.

Appendix C2: Sample Cleanup Plan

Derelict Crab Trap Cleanup Plan

- WHEN: (list organizations) will remove derelict crab traps from (general location) on (date and time).
- This date has been selected as it corresponds with low tide when a greater number of traps will be exposed above the waterline and provide easier assessment of whether they are fishable or derelict.
- WHERE: (specific location description. Use Lat/Lon, attach maps). (note how/why area was selected)
- The extent of the cleanup will include (describe). Example: The extent of the cleanup will include the inshore waters from Pendola Point to the mouth of the Alafia River (see attached map). This region has been divided into five regions. We will identify one region to target our removal efforts and attempt to remove all derelict traps within that region.
- WHO: This cleanup will include staff from organizations which are part of the (EWG or any other “coalitions”):
 - List each org and # of participating staff/volunteers
 - VESSELS: We anticipate using XX vessels: YY “flats skiffs” (list who providing) and ZZ airboats (list who providing) for locating and retrieving derelict traps. Vessels will be captained by staff from agencies providing vessels
 - AIR SUPPORT (list any helicopter or airplane, when in air, how communicating with water crew, who in them, etc)
- FWC’s Division of Law Enforcement (name Office) will be notified via a Float Plan at least 48 hours prior to the event.
- We will identify local crabbers (with assistance from Juli Dodson, FWC) prior to the event to alert them to our activities in the specified areas. We will coordinate with Ms. Dodson to notify them.
- WHAT: teams will remove derelict traps based on definitions in Rule 68B-55.001 FAC; cleanup protocols will be consistent with Rule 68B-55.002 FAC:
 - "Derelict trap" means any trap (during any closed season for the species), or any fishable trap (with six intact sides) during the open season that lacks three (3) or more of the following elements:
 - (a) Buoy.
 - (b) Line.
 - (c) Current trap identification.
 - (d) Current license.

Note: Information on “current license” will be based on information provided by FWC staff (list

of current license holders).

- A captain's package will be prepared for all boat teams with copies of rules for derelict cleanups (Rule 68B-55.004 FAC) and definitions (Rule 68B-55.001 FAC), local charts (highlighting priority areas), data sheets, site captain contact information and additional supporting materials.
- A data sheet will be completed for each crab trap recovered (sample attached):
 - a) Trap Condition (intact, dented, collapsed, decomposed)
 - b) Presence/absence of Rope/Buoy (and buoy #) and condition of buoy (floating or sunk. Also: clean, lightly fouled, heavily fouled)
 - c) Presence/absence of required tag, identification, endorsement number
 - d) Wire or Plastic coated wire construction
 - e) Location of trap (lat long)
 - f) Trap depth
 - g) Encrusting organisms
 - h) Escape possible?
 - i) By-catch present (by species and number)
- HOW: (Describe protocols). Example: The following protocols will be employed:
 - One airboat with one captain, one previous cleanup participant, and one or more other volunteers will be assigned to each quadrant (identified on attached maps).
 - Each airboats will traverse shallow, more inshore waters, searching for traps protruding above the water or just below the surface.
 - Skiffs or support vessels will remove traps located in deeper water. They will also coordinate with a helicopter (via VHF radios) to locate additional traps. A team member in the helicopter will direct one vessel at a time to a location with a submerged trap.
 - Airboats will periodically off-load traps onto skiff/support vessels who will transport them to disposal/drop-off site (or airboats will off-load directly at site)
 - For each trap recovered, a data sheet will be completed.
- Traps will be transported to the (location) for immediate disposal.
- Results of the pilot program will be tabulated and reported to FWC, (partner organizations), and sponsoring organizations. Within 45 days of each cleanup, a report with details of cleanup will be submitted to the Commission.
- Any follow-up cleanup plans

Appendix D: Sample Completed Datasheet

Crab Trap Data Sheet

Date: 1.24.09 Vessel: BOAT A Buoy #: —
 Location: (GPS Lat/Long) N27.51624 W82.23937 Water Depth (m) 1M ← meters
 Substrate type: Sand Tide Level: Low Mid High

Check buoy then circle appropriate answer:

1. Legal buoy = readable V-number, styrofoam sphere

NO YES → V-number _____
 If NO, → go to #2
 → Condition: Clean lightly fouled mod. fouled heavily fouled

Pull trap to inspect items 2 - 8 and circle appropriate answers:

2. Line attached?

NO
 If NO, → go to #3

YES Line length (m) 5M ← meters

→ Line type: Nylon Polv Other

→ Line diameter: 1/2 9/16 Other

3. Trap Tag/ ID? NO

YES # _____

4. License Current? NO

YES Please check list provided by FWC

If NO to < 3 of conditions 1-4 → PULL, go to #6

If YES to 3 + conditions → go to # 5

if it has tag or V# on buoy, check against license list

5. Six Intact Sides?

NO
 If NO, → PULL, go to #6

YES ← **CIRCLE ONE**

6. Trap Condition (circle one):

Not collapsed (fishable)
 Dented (fishable)
Collapsed (Not fishable)
 Rusted/Decomposed (NOT fishable)

Construction Material (circle all that apply):

galvanized wire
plastic coated wire
rebar frame
 Other-describe: _____

7. Is Trap Fouled?

NO

YES

CIRCLE Fouling Organisms: Barnacles Oysters Tunicates Algae

Whelk egg cases Green Mussels Other - describe:

8. Is escape (of catch or by-catch) possible?

NO

YES

(Please turn page over)

CIRCLE ONE - CANNOT BE N/A !!

Appendix E: Photos of Derelict Traps

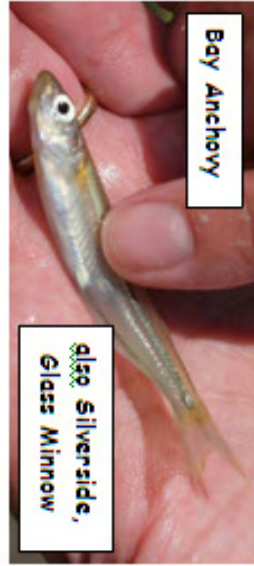
(Note: traps with six intact sides must be lacking 3 or more of the components as identified in state rule).



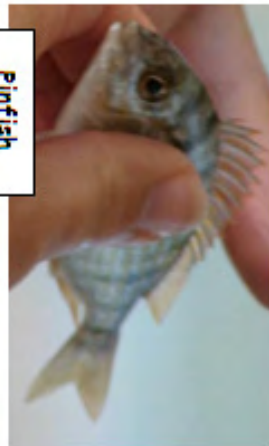
Appendix F: Species Identification Photos to ID Common By-Catch in Traps

(The below photos are common in Tampa Bay, but may also be found elsewhere in Florida)

Tampa Bay Estuary Fish Species ID Guide



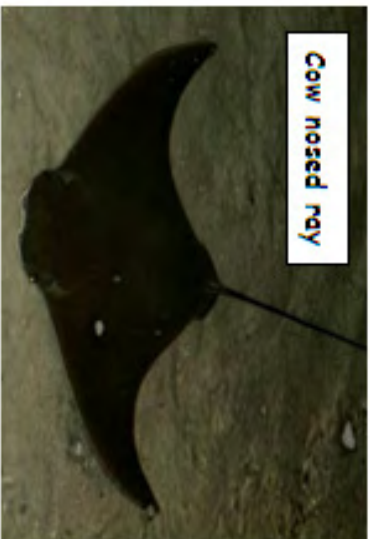
**also Silverside,
Glass Minnow**



Tampa Bay Estuary Fish Species ID Guide



Striped Mojarra



Cow nosed ray

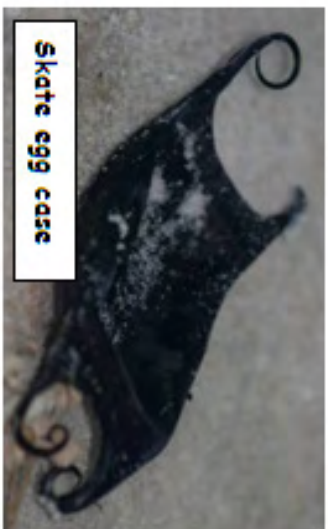


Stingray



Puffenfisch, Blowfish

*Drawings courtesy of the Florida Fish & Wildlife Conservation Commission and Florida Wildlife Research Institute
Photos courtesy of Richard Czina
in conjunction with the Florida Master Naturalist Program



Skate egg case



Mullet*



Sheepshead*



Snook*

Tampa Bay Estuary Invertebrate Species ID Guide



Barnacles



Ghost shrimp



Hermit crab



Horseshoe Crab



Blue crab



Juvenile blue crab



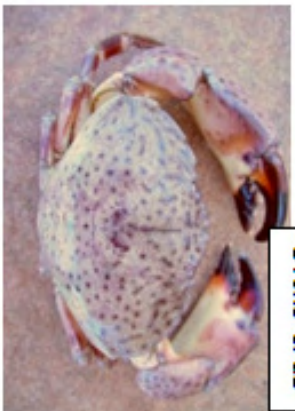
Spider Crab



Stone crab



Juvenile Stone Crab



Appendix G: Sample Waiver/Photo Release

**THANK YOU, for volunteering for Derelict Crab Trap Cleanup
 From _____ am to _____ m on _____, 20____
 EVENT SIGN-IN AND RELEASE FORM FOR INDIVIDUALS AND GROUPS**

Your signature below indicates that you understand that _____ and all event sponsors, their principals, directors, officers, employees, staff, and affiliates shall not be held liable under any circumstances for any injuries or damages to person(s), be they physical injuries or otherwise, arising out of or resulting from or in any way connected to your participation in this volunteer activity. Your signature also, in case of accidental injury, authorizes event coordinators to seek proper medical attention for you. Your signature also authorizes _____ to utilize, without compensation, any pictures taken at the event that include your image or likeness, for any publication, newsletter, report or other documentation. If you are under 18 years of age, your parent or legal guardian must sign this release on your behalf in order for you to be eligible to participate.

SIGNATURE	PRINTED NAME	ADDRESS (Please include City and Zip)	EMAIL	Add me to newsletter list

Appendix H1: Sample Datasheet: FWC

eg 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 Total	Trap Type (✓)				Trap Components (✓)				Trap Sector (✓)			Bycatch (Count)			Additional Comments						
	Blue Crab	Stone Crab	Lobster	Other, Unknown (List if Other)	6 Intact Sides	Buoy	Line	Current FWC Tag	Identification (Name and Address)	Fishable Trap	Trap Debris	Commercial	Recreational	Unknown		Fish	Crab	Oysters and/or Mussels (✓)	Terrapin	Invertebrate - Other	Vertebrate - Other
To be a fishable trap it must have 6 intact sides and at least two of the other three components otherwise it is trap debris																					

Date _____ Name of Data Recorder _____ Page ___ of ___

Appendix H2: Sample Datasheet: Entanglement Working Group (EWG)

Crab Trap Data Sheet

Date: _____ Vessel: _____ Buoy #: _____

Location: (GPS Lat/Long): _____ Water Depth (m) _____

Substrate type: _____ Tide Level: Low Mid High

Check buoy then circle appropriate answer:

1. Legal buoy = readable V-number, styrofoam sphere

NO YES → V-number _____
 If NO, → go to #2 → Condition: Clean lightly fouled mod. fouled heavily fouled

Pull trap to inspect items 2 - 8 and circle appropriate answers:

2. Line attached?

NO YES → Line length (m) _____
 If NO, → go to #3 → Line type: Nylon Poly Other
 → Line diameter: 1/2 9/16 Other

3. Trap Tag/ ID ? NO YES # _____

4. License Current? NO YES Please check list provided by FWC

If NO to < 3 of conditions 1- 4 → PULL, go to #6 If YES to 3 + conditions → go to # 5

5. Six Intact Sides?

NO YES
 If NO, → PULL, go to #6

6. Trap Condition (circle one):

Construction Material (circle all that apply):

Not collapsed (fishable) galvanized wire
 Dented (fishable) plastic coated wire
 Collapsed (Not fishable) rebar frame
 Rusted/Decomposed (Not fishable) other-describe: _____

7. Is Trap Fouled?

NO YES →
 CIRCLE Fouling Organisms: Barnacles Oysters Tunicates Algae
 Whelk egg cases Green Mussels Other - describe:

8. Is escape (of catch or by-catch) possible?

NO YES (Please turn page over)