

DOUGLAS INDIAN ASSOCIATION

Anax Yaa Andagan Ye- Sayeik

Where the Sun Rays Touch First- Spirit Helper



DERELICT CRAB POTS

Lost crab pots
can continue to
fish long after
they are lost,
called ghost
fishing.

DOUGLAS INDIAN ASSOCIATION
NOAA MARINE DEBRIS PROJECT
Crab Pot Loss and the Negative Impacts of
Derelict Crab Pots in the Gastineau Channel

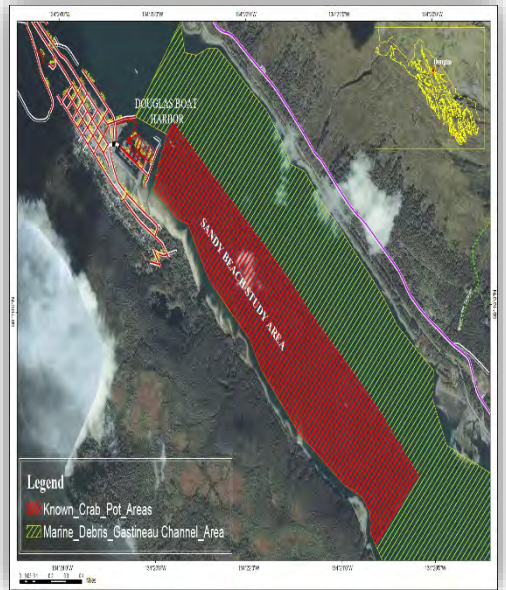
DIA | - NOAA MARINE DEBRIS PROJECT BOOKLET

811 WEST 12TH STREET JUNEAU, ALASKA 99801-1529
PHONE: (907) 364-2916 FAX: (907) 364-2917

DOUGLAS INDIAN ASSOCIATION NOAA MARINE DEBRIS PROJECT

Study Area

The Sandy Beach region on the west side of the Gastineau Channel (see map to the right) is historically and currently a popular area for both recreational fishing for Dungeness crab (*Cancer magister*) and Tanner crab (*Chionoecetes bairdi*) and commercial fishing for Dungeness crab. High levels of fishing effort for crab are observed at Sandy Beach relative to other areas due to its accessibility and productivity. The area is adjacent to a major harbor with a launch ramp in the community of Douglas which leads to accessibility by a wide variety of recreational vessels both small and large under reasonable weather conditions regardless of season. This area also has a reputation for reliable catches particularly of Dungeness crab which leads to targeting by both recreational and commercial vessels in season. Anecdotally, the Douglas Indian Association (DIA), local fisheries management and enforcement, and active recreational users agree that lost fishing gear is common in this area. The study region identified for this project ranges is a “shelf” that extends to approximately 25 m in depth and extends approximately 4 km southeast from the Douglas boat harbor.



Sandy Beach Study Area

DOUGLAS INDIAN ASSOCIATION NOAA MARINE DEBRIS PROJECT

Overview

The **DIA Marine Debris Removal Project** was conducted to: locate, remove and prevent accumulation of derelict crab pots from marine habitats of the Juneau marine environment, Gastineau Channel area identified as Essential Fish Habitats, including marine protected areas, Habitat Areas of Particular Concern for salmon and known distribution areas for halibut, Dungeness, Tanner and King crab.

DIA NOAA Marine Debris Removal Project

Project Goals: Remove lost crab pots from Gastineau Channel and document impacts of lost pots. Build capacity between local partners to implement lost fishing gear projects.



Sonar Scan: The DIA Marine Debris Project Conducted 3 days of Sonar Scanning in the Gastineau Channel, Sandy Beach Study area on April 18-20, 2017. Sonar results: Fen Enterprises (AFS), Scanned 40 linear miles, located a total 209 pot targets. 169 pots up to 1 meter in size, 32 pots up to 2 meters in size, and 8 pots over 2 meters or larger in size. We also found 4 sunken boats and 5 tires.

Removal operations: The DIA Marine Debris Project Conducted 10 days of removal operations on May 15-24, 2017. DIA contracted Natural Resources Consultants, Inc. (NRC) to coordinate field operations. The Alaska Department of Fish & Game (ADF&G)

DOUGLAS INDIAN ASSOCIATION NOAA MARINE DEBRIS PROJECT

provided a 22' Munson landing craft with a pot puller. An engineered grapple system was used to retrieve the lost pots.

Removal Results: A total of 33 derelict crab pots were removed from the Channel: 27 Dungeness crab pots, 19 recreational, 7 commercial, 1 ring, 5 Shrimp Pots (personal use string), 1 Tanner crab pot, 1 halibut longline skate, 1 pile of line. 92%

Dungeness crab pots used escape cord (biotwine).

All 22 crabs (20 live, 2 dead) found in 2 pots w/o biotwine.

Constraints: During the project constraints consisted of limited approachable targets (i.e., near cable, near sunken ships, RKC pots, boulders, etc.). Limited vessel capacity (i.e., size, pot puller, etc.). Depth of pots, tide changes, weather changes, etc.

Observed impacts: 22 legal sized Dungeness crab were found in 2 lost crab pots, 20 alive and 2 dead. We also found 1 tanner crab, 1 white spotted greenling, several sea urchins and star fish trapped in the lost crab pots.

Recycled: 4 pots recycled, 3 went back to sports fisherman and 1 went back to the Alaska State Troopers.



Observed impacts during the derelict pot removal

DOUGLAS INDIAN ASSOCIATION NOAA MARINE DEBRIS PROJECT

Reason for loss:

Lost crab pots in the Gastineau Channel are due to pots getting tangled together from buoy lines, either being too long or set too close together. Other factors assume that the strong tides may have an effect on pushing the pots



Kamal Lindoff, Project Manager looking over the lost pots retrieved from the channel

close together, resulting in tangling and causing the buoys to submerge and sink. Another observation shows that most of the buoys may have failed due to extreme overgrowth of marine life (plants, muscles, barnacles, etc.) on the buoys, causing them to submerge and sink below the water lines. A final observation shows that poor buoy systems are being used, such as milk jugs, or cheap plastic containers, which are not adequate enough to stay afloat in this harsh marine environment.



DOUGLAS INDIAN ASSOCIATION NOAA MARINE DEBRIS PROJECT

Key findings summery

- 27 Dungeness crab pots.
- 19 recreational pots.
- 7 commercial pots.
- 1 ring pot.
- 5 Shrimp Pots (personal use string).
- 1 Tanner crab pot, 1 halibut longline skate, 1 pile of line.
- 92% Dungeness crab pots used escape cord (biotwine).
- All 22-crab found in 2 pots w/o biotwine.
- Pot density: 45/km².
- Much higher than Maselko et al findings of 1.5-10.1/km².
- Found 22 legal sized Dungeness crab (in 2 pots), 20 live, 2 dead.
- Found 1 Tanner crab, 1 white-spotted greenling, Several green sea urchins and Starfish.
- Reason for loss: Long buoy lines getting tangled, strong tides causing buoy lines to tangle together, extreme overgrowth of marine life on buoys, and poor buoy systems that fail over time.
- Recycled: 4 pots recycled, 3 went to fisherman and 1 went to the State Troopers.



Kamal and Bernadine collecting data from the lost pots. This pot was full of Dungeness.

DOUGLAS INDIAN ASSOCIATION NOAA MARINE DEBRIS PROJECT

Partners

This Marine Debris Project was designed and executed in partnership with Natural Resources Consultants, Inc.(NRC), Alaska Department of Fish & Game (ADF&G), Fenn Enterprise, Aldrich Offshore Services,



DIA NOAA Marine Debris Crew

Sealaska (AFS), U.S. Coast Guard (USCG), Alaska State Troopers (AKST), Northwest Straits Foundation (NWSF) and funded by the NOAA Marine Debris Grant, World Animal Protection Grant, North West Straits Foundation(NWSF) and in-kind from all project partners.

For more information contact:

Kamal Lindoff, Environmental Director
907-364-2916 | klindoff-dia@gci.net

Bernadine DeAsis, Environmental Specialist
907-364-2916 | bdeasis-dia@gci.net

www.facebook.com/DouglasIndianAssociation

DOUGLAS INDIAN ASSOCIATION NOAA
MARINE DEBRIS PROJECT

Courtesy of



*DOUGLAS INDIAN ASSOCIATION
TRIBAL GOVERNMENT*



811 West 12th Street Juneau, Alaska 99801-1529
Phone: (907) 364-2916 Fax: (907) 364-2917

*Anax Yaa Andagan Ye- Sayell
Where the Sun Rays Touch First- Spirit Helper*

*BOOKLET CREATED BY
DOUGLAS INDIAN ASSOCIATION
ENVIRONMENTAL DEPARTMENT*

PUBLISHED JUNE 2017