



NOAA
FISHERIES

National Marine Fisheries Service
Pacific Islands Regional Office



PROTECTED SPECIES WORKSHOP

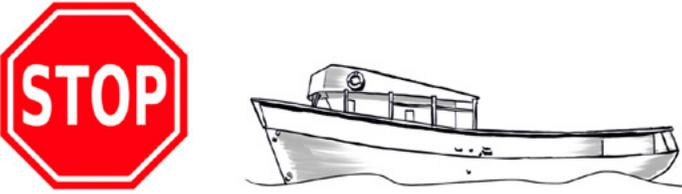
Handling, Release, and Identification Guidelines

PACIFIC ISLAND PELAGIC FISHERIES

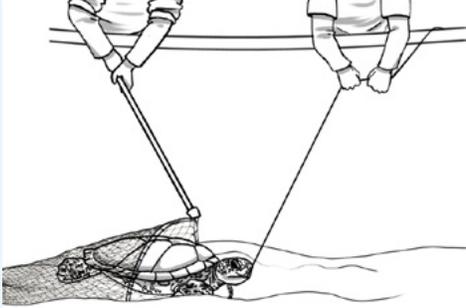


Sea Turtles

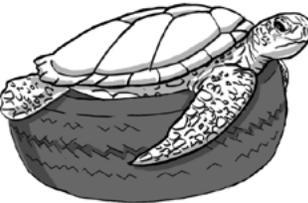
Turtles small enough to bring aboard



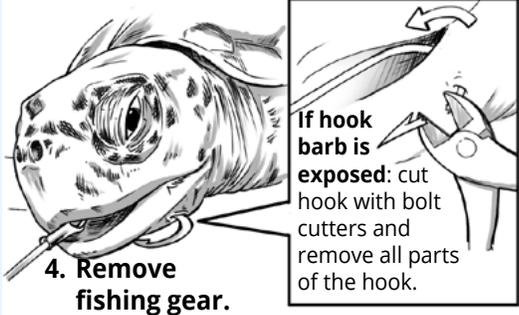
1. Stop vessel.



2. Use dip net to bring small turtles onboard to remove gear.

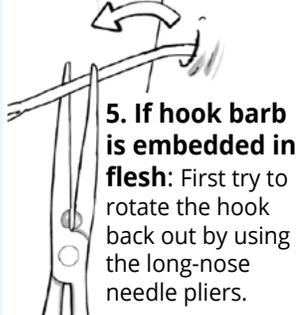


3. Place turtle on tire to help hold in place.



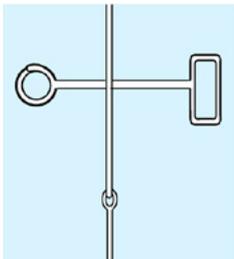
4. Remove fishing gear.

If hook barb is exposed: cut hook with bolt cutters and remove all parts of the hook.

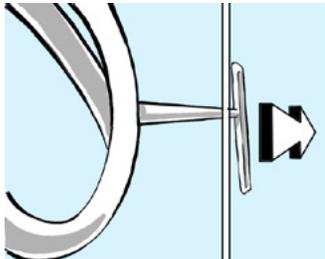


5. If hook barb is embedded in flesh: First try to rotate the hook back out by using the long-nose needle pliers.

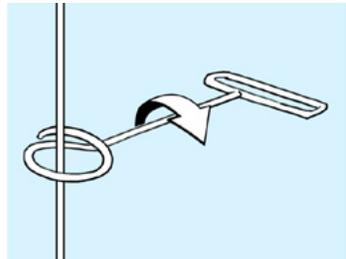
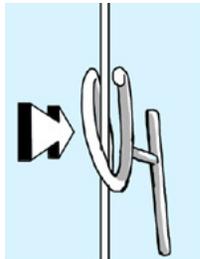
6. If hook barb is embedded in flesh, but long-nose needle pliers are not effective in removing the hook, then try to use a short-handled dehooker:



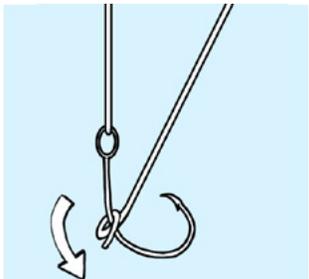
6a. Place the dehooker at 90 degrees to the line with the end of the pig-tail facing up.



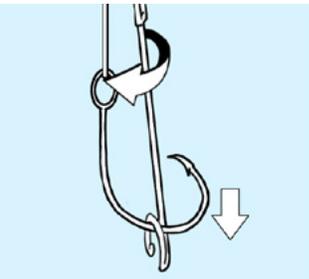
6b. Draw the dehooker back towards you like a bow and arrow until the loop pulls on the line, maintaining contact between the dehooker and the line.



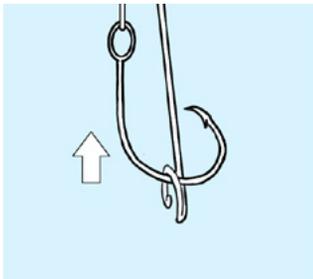
6c. Rotate the dehooker 1/4 turn clockwise (line should be inside the curl of the dehooker).



6d. Run the dehooker down the line until it engages the bottom of the hook.



6e. Pull the line tight and parallel to the dehooker, giving 2-3 quick, twisting thrusts to remove the hook.



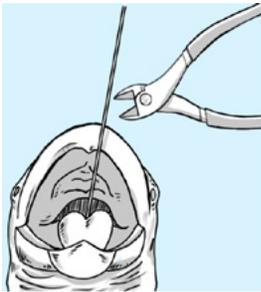
6f. Keep the line tight, so the hook remains inside the curl of the dehooker, until the hook is clear of the turtle.



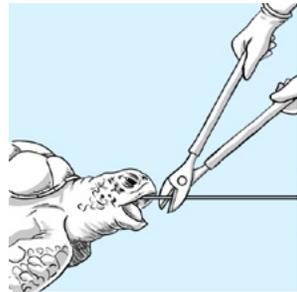
Sea Turtles

Turtles small enough to bring aboard

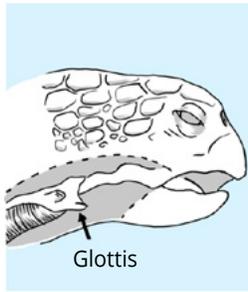
7. Leave the hook, and cut the line as close as possible to the hook if:



The turtle has swallowed the hook.

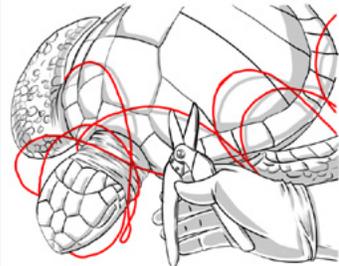


The hook has penetrated the roof of the mouth.

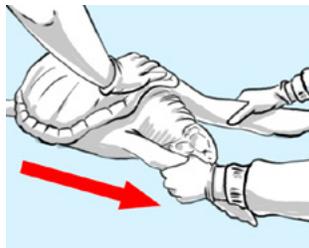
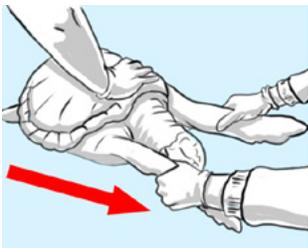


The hook is in the back of the throat (glottis).

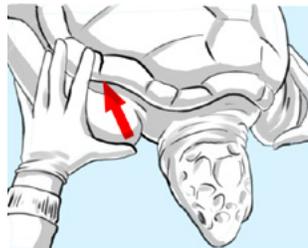
8. If turtle is tangled in fishing line, use monofilament line cutters to remove all fishing line from the turtle.



9. Turtle CPR: If turtle is unconscious (appears dead or inactive), resuscitate the turtle (repeating steps 9a and 9b).



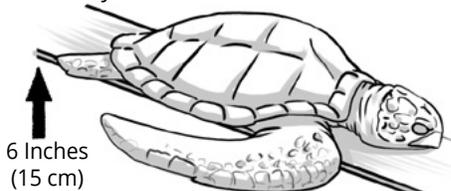
9a. Moving front flippers in full range of motion 7 times.



9b. Folding front flippers under body, and pushing joints of flippers into body cavity 7 times, with firm thrusts.

Then, repeat the entire cycle a few times to try to resuscitate the turtle.

9c. If turtle is still unconscious, keep the turtle's rear flippers elevated 6 inches (15 cm) to let water drain from the lungs. Give turtle at least 4 hours to recover as required in regulations, or up to 24 hours if possible. Turtles often are in shock and may appear dead, but often they can still recover.



10. Carefully release turtle. Once the turtle is alive and active, put the engine in neutral and release the turtle.



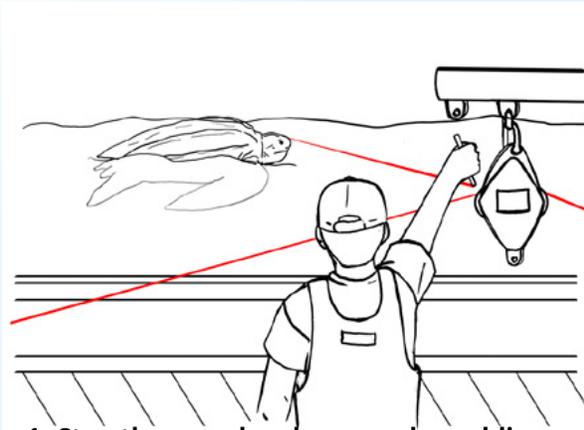
11. Record interaction in logbook.

	Protected Species		
	Number Released		
	Uninjured	Injured	Dead
TLES:			
back 54			
en 53			

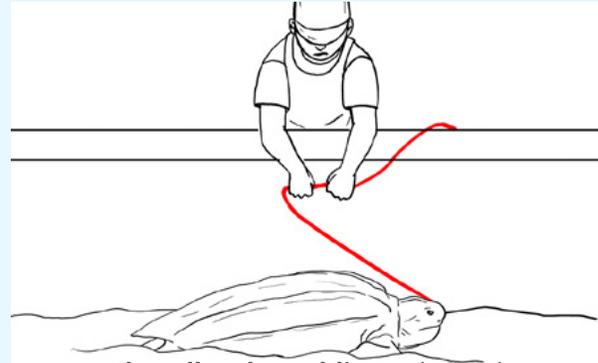


Sea Turtles

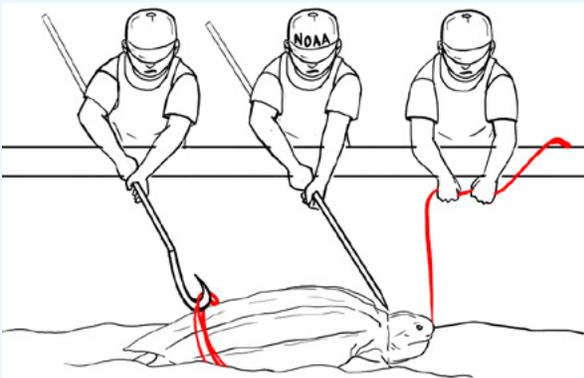
Turtles too big to bring aboard



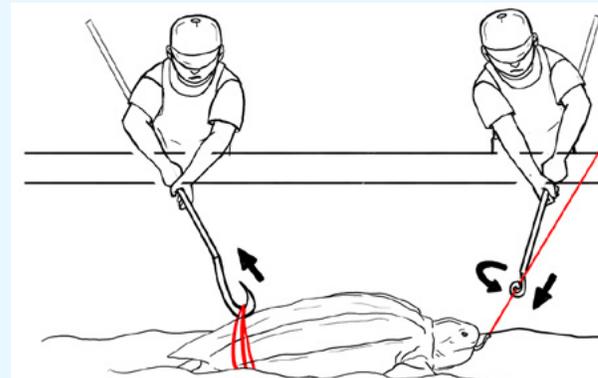
1. Stop the vessel and remove branchline snap from mainline and gently pull branchline until large turtle is close to rail.



2. Gently pull on branchline to bring the turtle to the side of the vessel. Assess situation and determine what tools are needed to release and remove as much gear off turtle as possible.



3. If turtle is tangled with line, secure tangle with long-handled gaff, taking care not to poke the animal. Allow NOAA observer to use long-handled tool to acquire DNA sample.



4. If hooked, using the long-handled dehooker, pull line into the dehooker loop, rotate 45 degrees, and slide dehooker down to the hook shank.

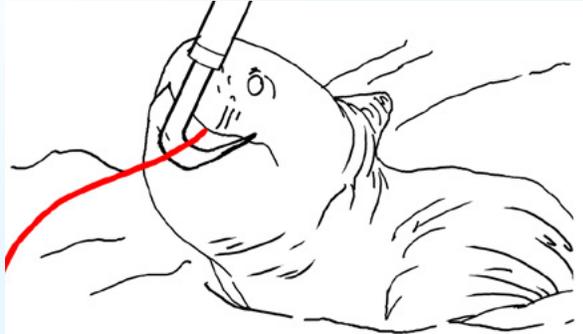


5. If hooked, using the long-handled dehooker: secure hook if possible/ visible and twist and push hook to release hook away from the flesh of the animal. If hook fails to release after 2 or 3 attempts, use long-handled line cutter to cut line as close as possible to hook.

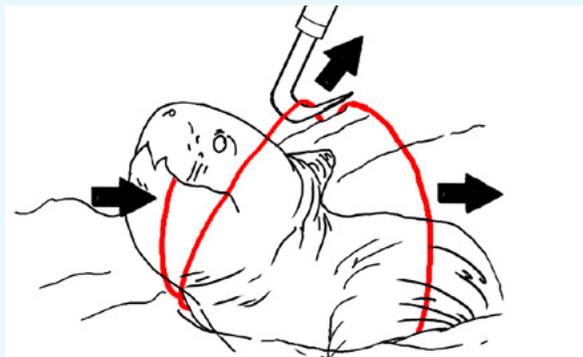


Sea Turtles

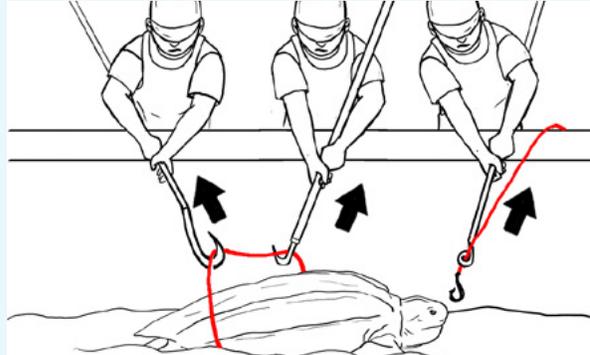
Turtles too big to bring aboard



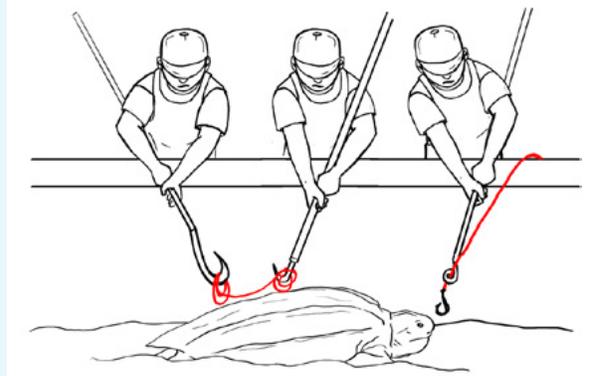
6. If hook is swallowed, use the long-handled line cutter to cut line as close to mouth as possible.



8. If the turtle is tangled in line, using the long-handled line cutter (1) first cut line as close to the mouth as possible (if swallowed), (2) cut line wrapped around flippers and neck, and (3) cut the remaining gear off the body last.



7. If hooked and entangled (1) hold turtle in place and grasp tangled line using the long-handled gaff, (2) if you can see the hook, try to de-hook using the long-handled dehooker, and (3) cut the remaining line using the long-handled line cutter. If possible, try to get all gear including hook back into the vessel.



9. Release turtle with no gear attached.

10. Record the interaction in your logbook.

- (1) Record species.
- (2) Describe if any gear is still remaining on the turtle.

Protected Species			
	Number Released		
	Uninjured	Injured	Dead
TLES:			
rback 54			
en 53			

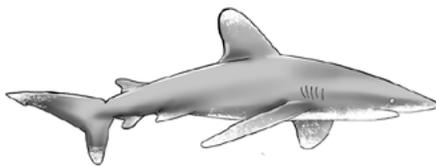




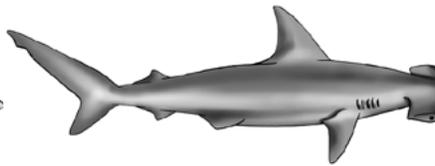
Sharks

Three species of sharks that are sometimes encountered in Pacific longline fisheries are either protected or there is concern about their population status; the oceanic whitetip, the scalloped hammerhead, and the silky. Extra handling care should be followed whenever possible to ensure their safe release and survival.

Oceanic Whitetip Shark



Scalloped Hammerhead Shark



Silky Shark

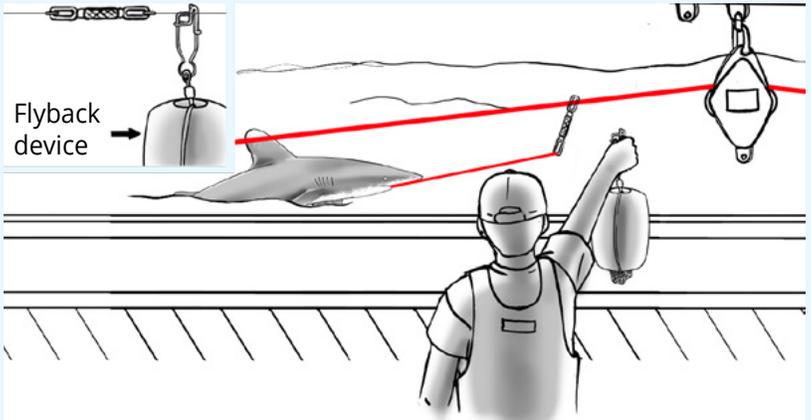


Regulations require fishermen to safely release oceanic whitetip and silky sharks (50 CFR 300.226).

If a shark is hooked or entangled:



1. Stop the vessel.

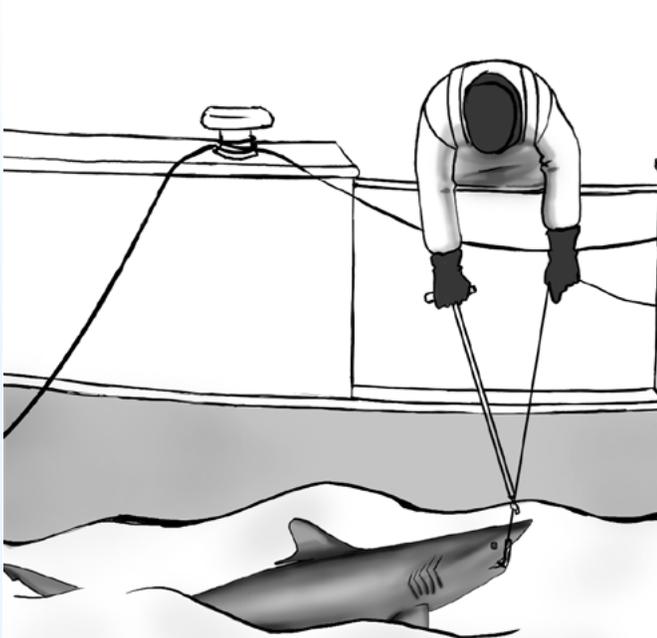


2. Bring shark alongside the vessel. Leave shark in water and do not bring shark on deck. Shark survival is much higher when left in the water.

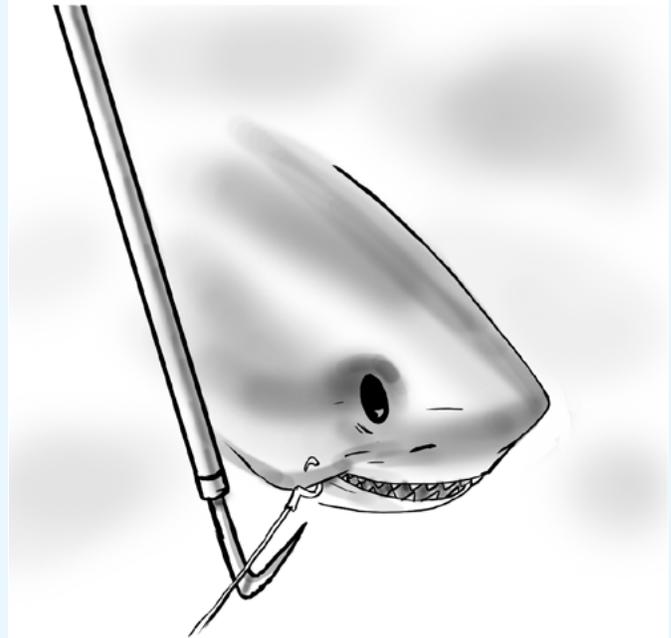
If you have a large shark, consider attaching a flyback prevention device to the branchline to reduce risk of a lead (or hook) flyback accident.



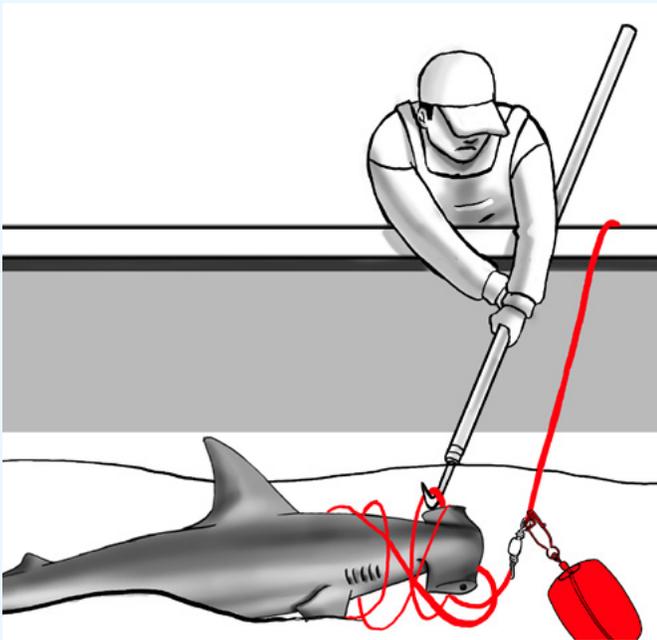
Sharks



3. If shark is hooked, use a long-handled dehooker to remove hook from shark whenever possible.



3a. For mono leader, cut with a long-handled line cutter. Cut below the lead as close to the hook as possible.



4. If shark is entangled, use a long-handled line cutter to remove line wrapped around the body.

PELAGIC SPECIES		
	NUMBER OF FISH	
	Kept	Released
Shark 7		
Shark 8		
Shark 9		

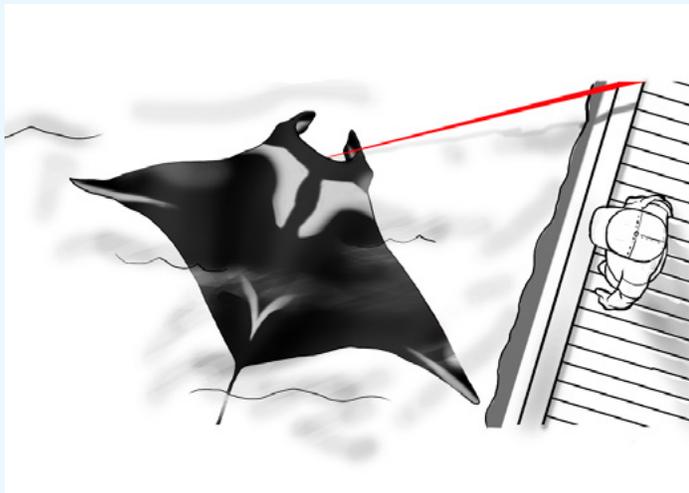
5. Record the interaction in your logbook. Record the shark species and whether you kept or released it.



Giant Manta Rays

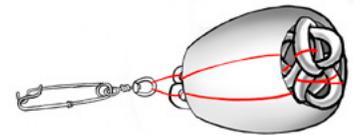


1. Stop vessel.

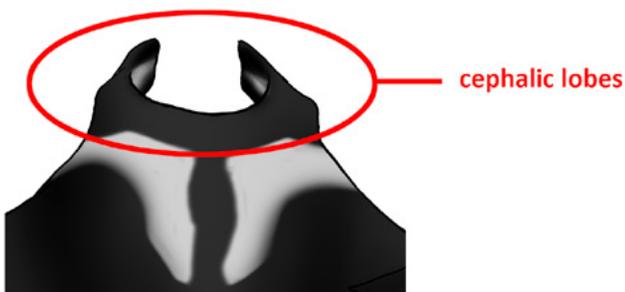


2. Bring the giant manta ray alongside the vessel, if possible. Always leave the animal submerged in the water so that its chance of post-release survival will be much higher.

If the animal is not entangled and can be brought close to the boat, consider attaching a flyback prevention device to the branchline to reduce the risk of a lead (or hook) flyback accident.

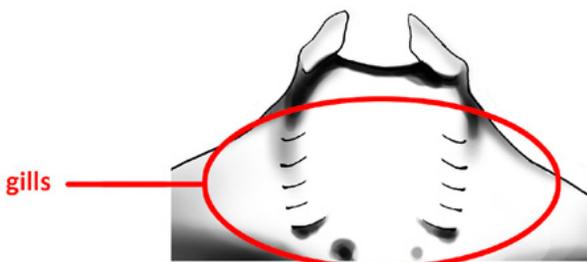


flyback prevention device



3. To help ensure that the animal is released quickly and to minimize injuries, use only long-handled tools to remove the branchline trailing gear.

When trying to remove the branchline trailing gear, avoid touching the gills or cephalic lobes with the long-handled tools.

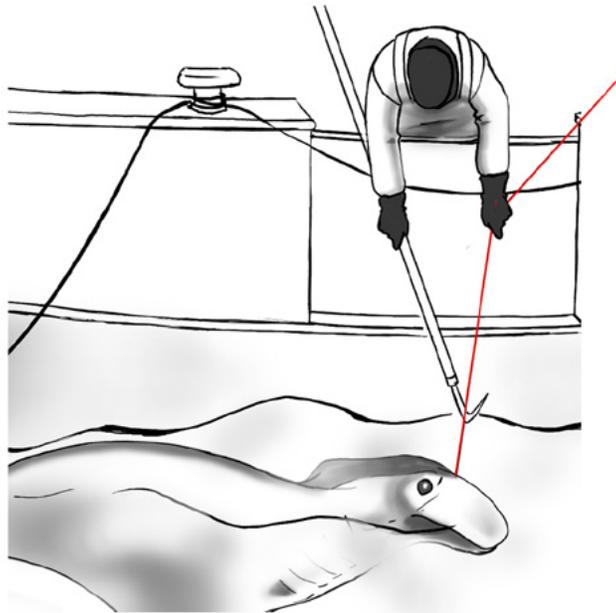




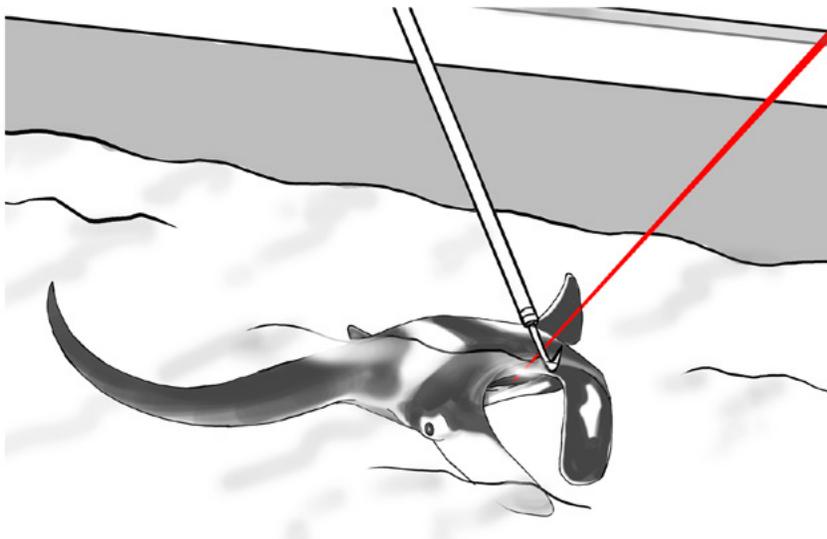
Giant Manta Rays

If a giant manta ray is hooked:

3a. For monofilament leader, cut with a long-handled line cutter. Cut as close as possible to the hook.



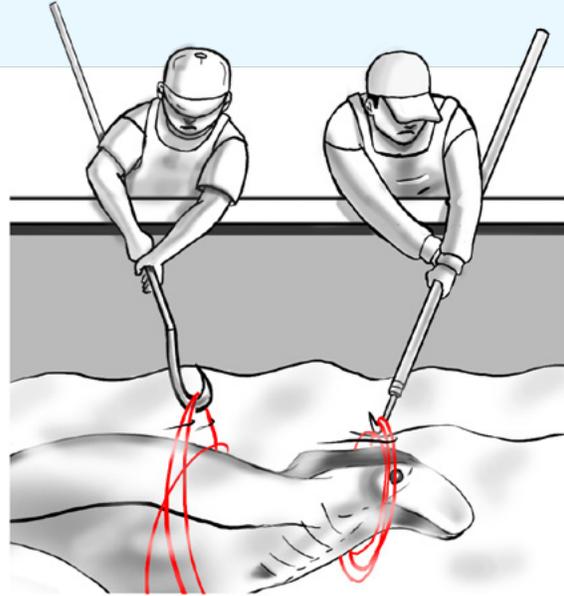
3b. If the giant manta ray has swallowed the hook, cut the leader as close as possible to the mouth.





Giant Manta Rays

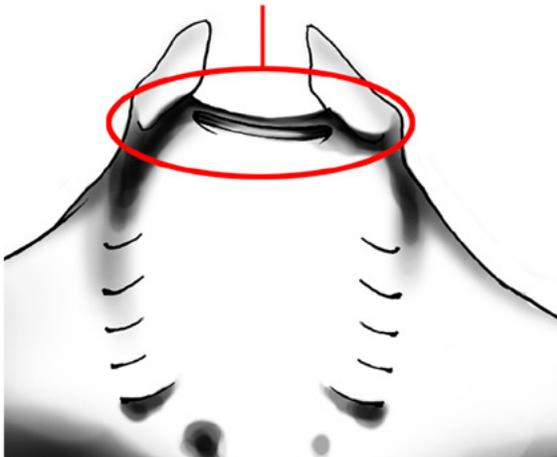
3c. If the giant manta ray is entangled, secure any excess tangled line with the long-handled gaff, while another crew member uses a long-handled line cutter to remove as much tangled monofilament line as possible. Make sure that you don't accidentally poke the animal with the long-handled tools.



4. Record the interaction in your logbook under protected species as Giant Manta Ray along with the specified released condition.

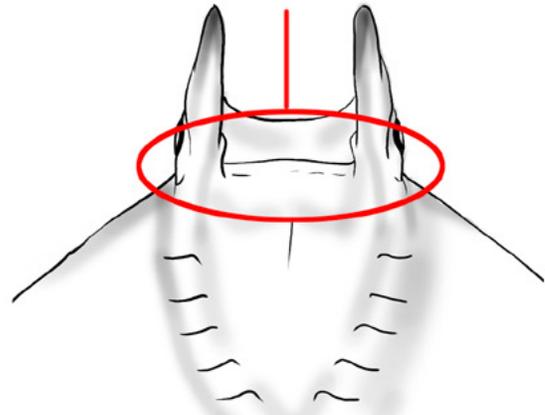
	Protected Species		
	Number Released		
	Uninjured	Injured	Dead
TLES:			
back 54		✓	
en 53			

terminal mouth



Keep in mind that the giant manta ray has a "terminal" mouth, which is visible at the very front of the animal.

ventral mouth



Other large ray species have mouths that are "central," or farther back and underneath the front of the animal.



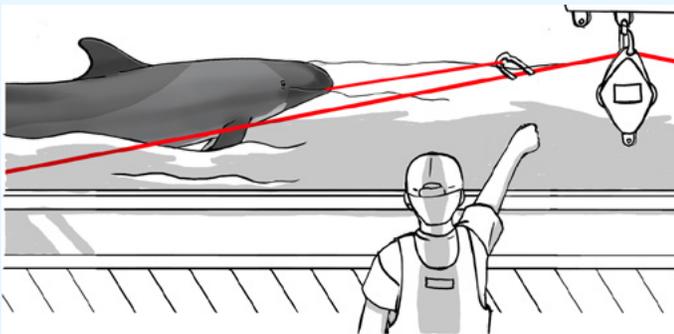
Small Whales & Dolphins



- 1. Notify captain and deck boss** as soon as a marine mammal is seen on the line. If captain is not on deck, immediately alert captain inside the wheelhouse.

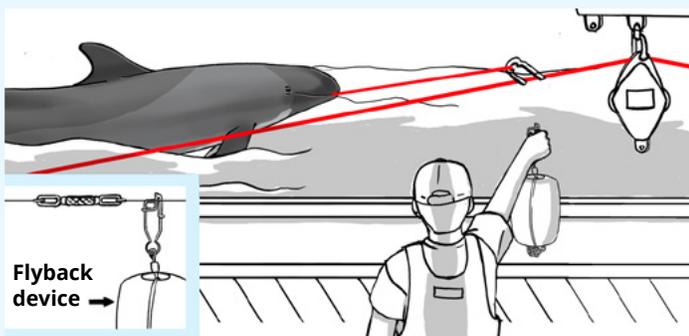


- 2. Stop vessel.**



- 3. Assess status of marine mammal.** Quickly assess the situation to make sure the marine mammal has not swallowed the hook. If not, you might be able to straighten the hook and reduce further injury to the animal.

Make sure the observer has an opportunity to identify the correct species.

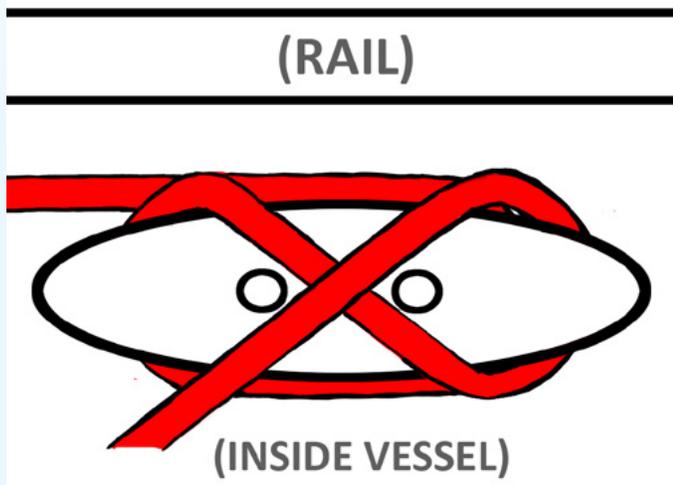


- 4. If the animal is fighting the line,** slide a flyback prevention device down the branchline to reduce lead flyback risk.

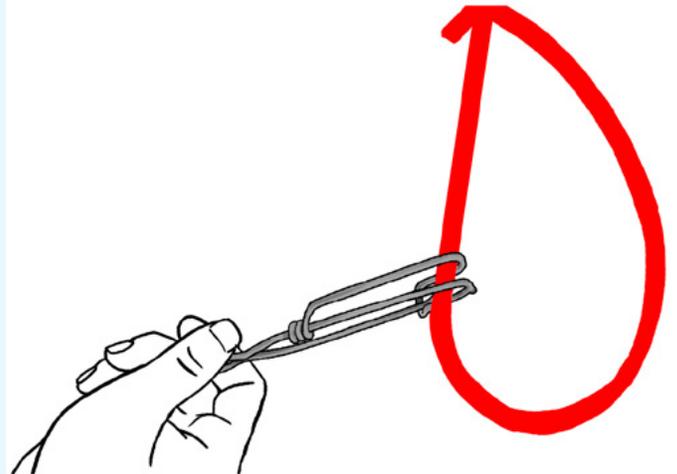


Small Whales & Dolphins

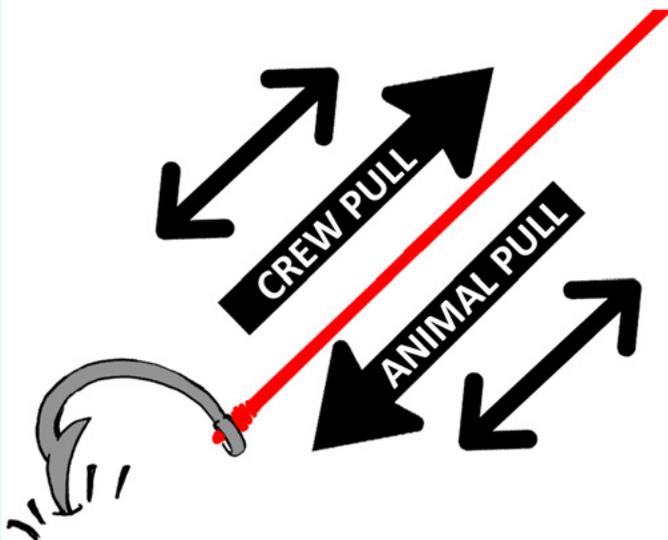
- 5. Tie off one end of the fighting line** to vessel rail cleat, so line can be recovered.



- 6. Remove branch line from the mainline.** Tie the other end of the fighting line through the snap of the branch line and quickly attach it to the fighting line.

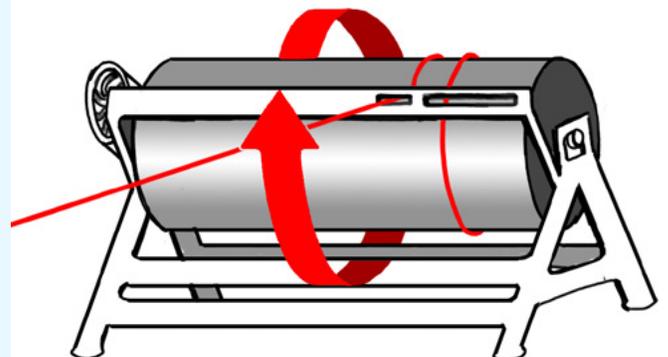


- 7. Use dynamic tension to try to straighten the hook.** One way is to pull on the fighting line. You can also try using the drum hydraulics explained in step 8 to straighten the hook.



- 8. Use mainline drum to straighten hook.** If needed, remove branchline and fighting line from cleat and attach to mainline spool, gently using drum hydraulics to assist with hook straightening, or to help get the animal close to the vessel rail.

*Do not spend more time than necessary to straighten the hook to avoid further stress or injury to the animal. If the hook has not straightened after a few minutes, or if you determine at any point that the marine mammal has swallowed the hook, move onto the next step.



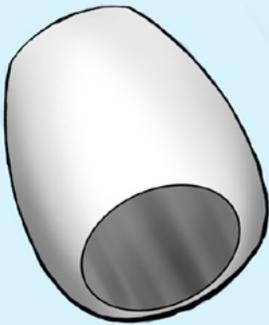


Flyback Prevention

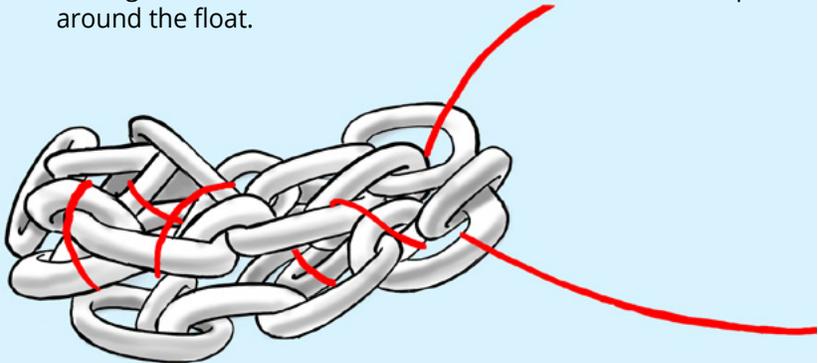
How to build a flyback prevention device

Handling large animals in a way that reduces the chance of lead flying back at the crew can be a challenge. One tool to reduce risk to crew, is a lead flyback prevention device.

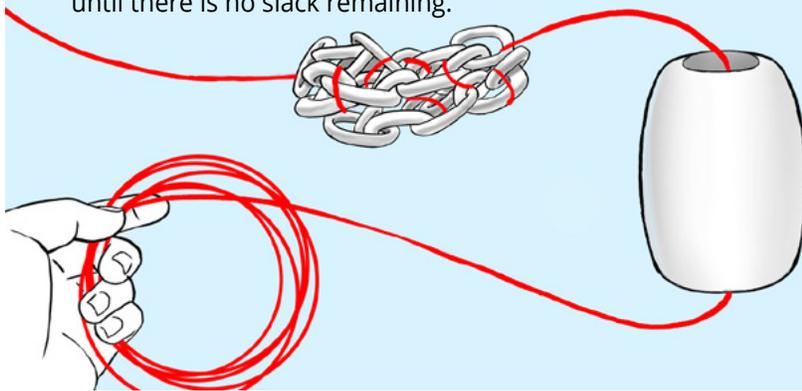
1. Bore out the center of a small float to make room for inserting steel chain.



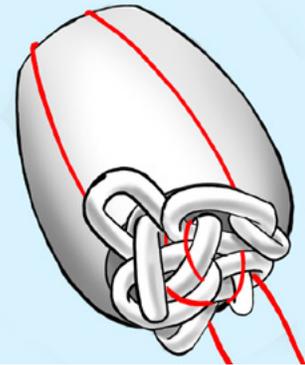
2. Weave branchline monofilament through 1 foot of chain, leaving a few feet of slack on each side of the chain to wrap around the float.



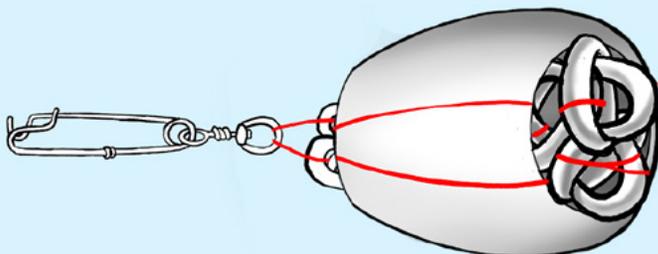
3. Insert both ends of the slack monofilament through the center of the float and continue wrapping around the float until there is no slack remaining.



4. Stuff the chain into the float and pull all the lines tight.



5. Tie longline snap to the two ends of the monofilament at the top of the float.





HANDLING & RELEASE GUIDELINES

Seabirds

YOU WILL NEED →

- 
towel
- 
bolt/wire
cutter or pliers
- 
dip net
- 
gloves
- 
safety
glasses
- 
safe enclosure
for bird

1.



- Stop vessel to reduce tension on line.
- Wear gloves, safety glasses, and arm covers for protection.
- Use dip net to bring bird onto vessel.

2.



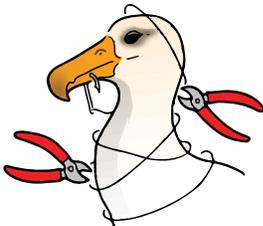
- Hold bird by bill without covering nostrils.
- Fold wings into bird's body.

3.



- Cover bird with towel to protect and calm it.
- Straddle bird if necessary.

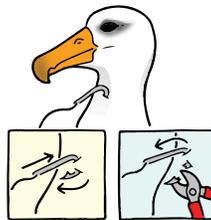
4.



Remove any entangled lines.

NOTE: If the bird is an albatross with a bright pink bill, it may be a short-tailed albatross (STAL). See reverse side for the rest of the STAL handling requirements as per (50 CFR 665.815[b]).

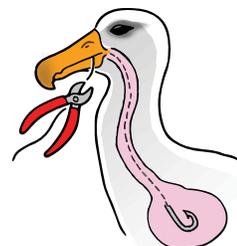
5.



If you can handle hook but cannot see barb:

- Push hook through skin to expose barb.
- Use pliers to flatten barb or bolt cutters to cut off barb.
- Back hook out.

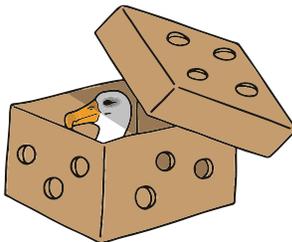
6.



If you cannot handle hook (it's deeply ingested):

- Cut as much line off as possible and leave hook in bird.

7.



- Leave bird to recover in safe enclosed space.
- Do not provide food or water to bird.

8.



Bird can be released to sea surface when:

- Feathers are dry.
- (approximately 1/2 to 4 hours)
- Bird is alert and head is erect.
- Breathes without noise.
- Wings can flap and retract onto back.
- Stands on both feet with toes forward.

9.



If bird has not recovered after 4 hours, either

Release bird to sea surface **or** call nearby bird rescue center for guidance (vessels 1-2 days from port):

- Honolulu (808) 884-5000
- Los Angeles (310) 514-2573
- San Francisco (707) 207-0380

Please report all banded birds: 1-800-327-BAND (2263) or www.pwrc.usgs.gov/bbl
Questions? Call NMFS Pacific Islands Regional Office, Sustainable Fisheries Division at (808) 725-5000



Short-tailed Albatross



Juvenile



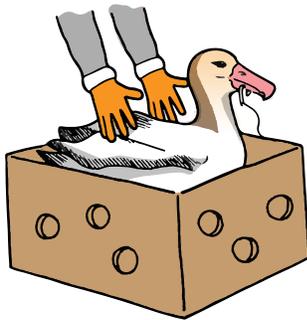
Sub-adult



Adult

[Follow Steps 1-4 on Reverse Side]

5.



- Place bird in safe enclosed place if bird is alive*
- Do not provide food or water to bird.

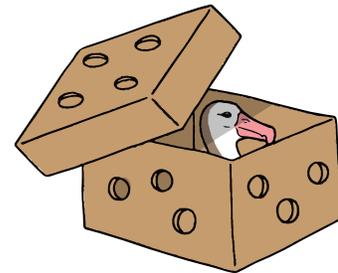
6.



Immediately contact NMFS, U.S. Coast Guard (USCG), or U.S. Fish and Wildlife Service (USFWS) to request veterinary guidance.

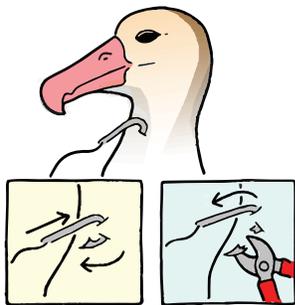
- NMFS: 808-725-5000
- USFWS: 808-792-9400
- USCG: 808-535-3333
- Email: JRCCHonolulu@uscg.mil
- VHF-FM Channel 16 (in the main Hawaiian islands)

7.



- Keep bird in safe enclosed place and follow veterinary guidance for handling and release of bird.

8.



If bird is externally hooked and no veterinary guidance is received within 24-48 hours:

- Push hook through skin to expose barb.
- Use bolt cutters to cut off barb.
- Back hook out.

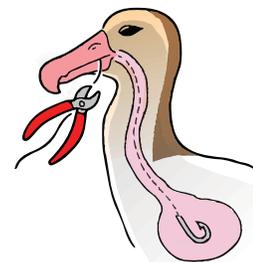
9.



Bird can be released to sea surface only when:

- Feathers are dry. (approximately 1/2 to 4 hours)
- Bird is alert and head is erect.
- Breathes without noise.
- Wings can flap and retract onto back.
- Stands on both feet with toes forward.
- Complete STAL recovery data form issued by NMFS.

10.



If you cannot handle hook (hook deeply ingested) and/or bird does not recover as described in box 9:

- Do not give bird food or water
- Cut the line as close as possible to ingested hook.
- Complete STAL recovery data form issued by NMFS.
- Submit bird to NMFS immediately upon vessel's return to port.

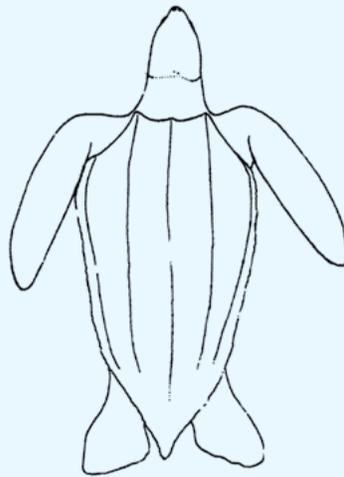
*If bird is dead, fill out the top section of the STAL recovery data form. Freeze bird with identification tag attached that indicates species, location, and date of mortality, and band number if bird had leg band. Any leg bands present must remain on bird. Attach duplicate identification tag to bag or container holding bird. Contact NMFS, USFWS, or USCG at numbers listed above in Step 6. Inform them you have a dead STAL on board and submit bird to NMFS within 72 hours following completion of fishing trip.



Leatherback Sea Turtle



- Dark gray/black w/white spots
- Only soft-shelled species
- Very large size



5-7 head-to-tail ridges on back



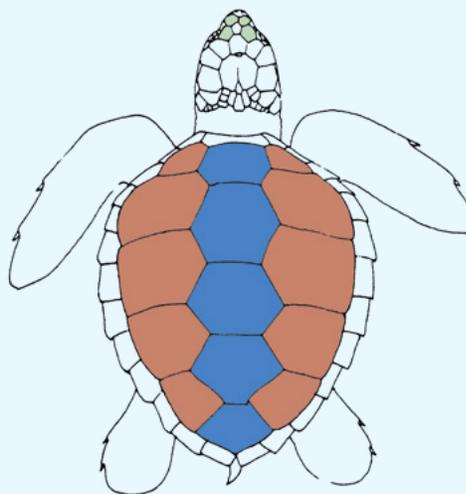
W-shaped upper jaw or beak



Loggerhead Sea Turtle



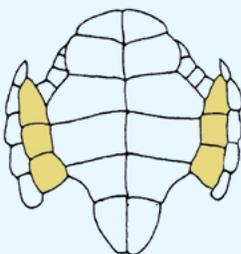
Thick, wide neck with large head



5 central scutes, and 5 lateral scutes

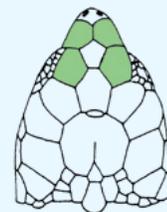


4-5 prefrontal scales



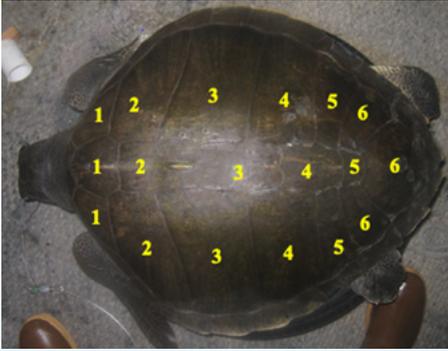
3 pairs of inframarginal scutes

● Central scutes	● Inframarginal scutes
● Lateral scutes	● Prefrontal scales

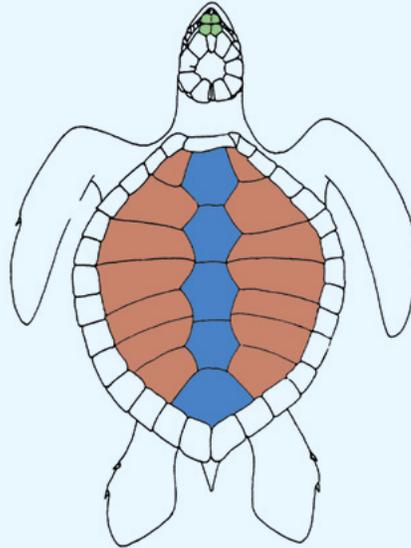




Olive Ridley Sea Turtle



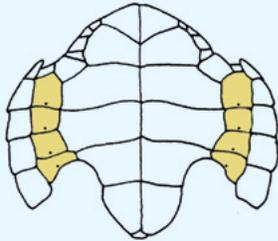
Olive-colored, heart-shaped shell



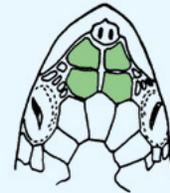
5 or more central scutes,
and 5 to 9 lateral scutes



4 prefrontal scales

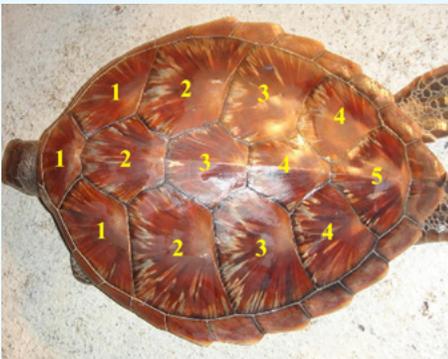


4 pairs of inframarginal scutes
with one pore on each scute

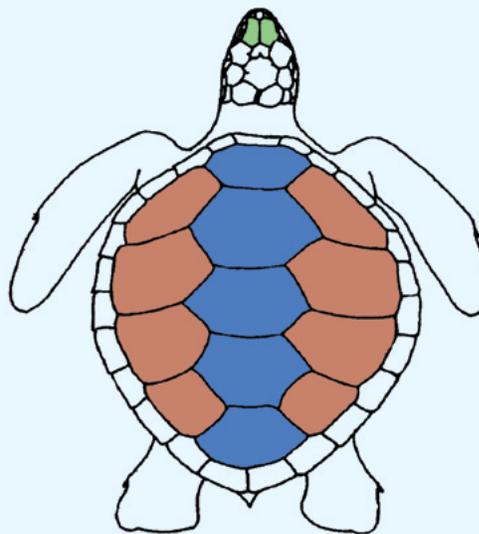


- Central scutes
- Lateral scutes
- Inframarginal scutes
- Prefrontal scales

Green Sea Turtle



Sunburst color pattern on
younger turtles



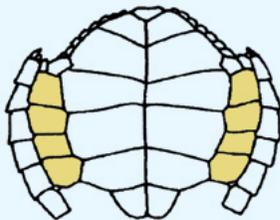
5 central scutes, and 4 lateral scutes



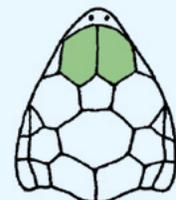
Serrated lower jaw



2 prefrontal scales



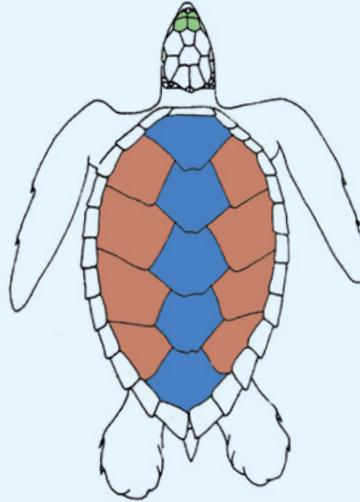
4 pairs of inframarginal scutes



- Central scutes
- Lateral scutes
- Inframarginal scutes
- Prefrontal scales



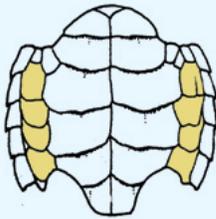
Hawksbill Sea Turtle



Distinctive, hawk-shaped upper beak



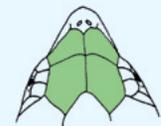
4 prefrontal scales



4 pairs of inframarginal scutes

5 central overlapping scutes,
4 overlapping lateral scutes

● Central scutes	● Inframarginal scutes
● Lateral scutes	● Prefrontal scales



Seabirds



Laysan Albatross

- Mostly white body
- Brown wings, back, and tail



Black-footed Albatross

- White ring at base of tail
- Black/brown bill and feathers



Short-tailed Albatross

- Unique pink bill
- Black/brown feathers as juvenile
- Adult feathers change colors to white and yellow as adults



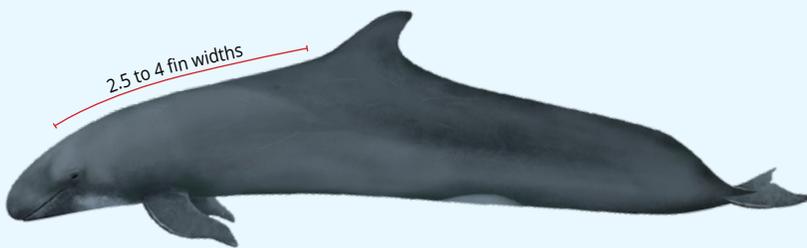
Risso's Dolphin

- Blunt head
- High, curved dorsal fin
- White scars (more with increased age)
- Grey body (6-12 feet long)
- White throat and belly



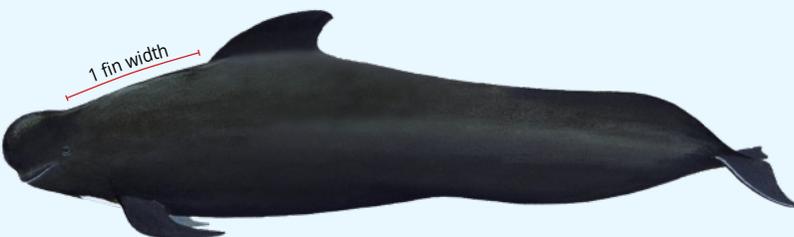
Rough Toothed Dolphin

- White or pink patches on belly
- No crease in beak or head
- White lips



False Killer Whale

- Distance from the blowhole to the dorsal fin is usually 2.5 to 4 times the width of the dorsal fin, and the dorsal fin occurs half-way through the body length
- Commonly 12-15 feet long



Short-finned Pilot Whale

- Dorsal fin is approximately 1 fin width from blow hole, and about 1/3 through the body length
- Commonly 15-18 feet long



**NOAA
FISHERIES**

National Marine Fisheries Service
Pacific Islands Regional Office

SPECIES IDENTIFICATION GUIDE



Oceanic Whitetip Shark

- Wide snout
- White tipped dorsal and pectoral fins



Silky Shark

- Copper-brown body
- Small dorsal fin



Scalloped Hammerhead Shark

- Indentation at midline snout ("scalloped")



Giant Manta Ray

- "Terminal" mouth at very front of the head



U.S. Secretary of Commerce
Gina M. Raimondo

Acting Under Secretary of Commerce
for Oceans and Atmosphere
Rick W. Spinrad

Assistant Administrator for Fisheries
Janet Coit

April 2022

www.fisheries.noaa.gov

OFFICIAL BUSINESS

**National Marine
Fisheries Service**

NOAA Inouye Regional Center
1845 Wasp Blvd., Bldg. 176
Honolulu, HI 96818

Contacts

Protected Species Workshops

NMFS Pacific Islands Regional Office
1845 Wasp Blvd., Bldg. 176
Honolulu, HI 96818
Phone: (808) 725-5000
Email: piropsw@noaa.gov
Web: <https://go.usa.gov/xvND7>

American Samoa Field Office

NMFS Pacific Islands Regional Office
Pago Plaza
Highway 1, Suite 202
Pago Pago, AS 96799
Phone: (684) 633-5326

Vessel Departure Notification or Observer Placement

NMFS Observer Program Contractor
Lynker, LLC, Attn: Josee Vincent, Program Director
47-559 Nenehiwa Pl.
Kaneohe, HI 96744
Vessel call-in: (808) 235-5575
Email: jvincent@lynkertech.com
Office: (808) 321-9183

Obtain or Submit Logbooks

NMFS Pacific Islands Fisheries Science Center
1845 Wasp Blvd., Bldg. 176
Honolulu, HI 96818
Phone: (808)725-5325
Email: walter.machado@noaa.gov

VMS, Enforcement Information, or to Report a Violation

NOAA Office of Law Enforcement
1845 Wasp Blvd., Bldg. 176
Honolulu, HI 96818
Phone: (808) 725-6110
Confidential hotline: (800) 853-1964
Fax: (808) 725-6199
Web: <https://www.fisheries.noaa.gov/topic/enforcement>