

§665.812 Sea turtle take mitigation measures.

(a) Possession and use of required mitigation gear. The gear required in paragraph (a) of this section must be used according to the sea turtle handling requirements set forth in paragraph (b) of this section.

(1) Hawaii longline limited access permits. Any owner or operator of a vessel registered for use under a Hawaii longline limited access permit must carry aboard the vessel line clippers meeting the minimum design standards specified in paragraph (a)(5) of this section, dip nets meeting the minimum design standards specified in paragraph (a)(6) of this section, and dehookers meeting the minimum design and performance standards specified in paragraph (a)(7) of this section.

(2) Other longline vessels with freeboards of more than 3 ft (0.91m). Any owner or operator of a longline vessel with a permit issued under §665.801 other than a Hawaii limited access longline permit and that has a freeboard of more than 3 ft (0.91 m) must carry aboard the vessel line clippers meeting the minimum design standards specified in paragraph (a)(5) of this section, dip nets meeting the minimum design standards specified in paragraph (a)(6) of this section, and dehookers meeting this minimum design and performance standards specified in paragraph (a)(7) of this section.

(3) Other longline vessels with freeboards of 3 ft (0.91 m) or less. Any owner or operator of a longline vessel with a permit issued under §665.801 other than a Hawaii limited access longline permit and that has a freeboard of 3 ft (0.91 m) or less must carry aboard their vessels line clippers capable of cutting the vessels fishing line or leader within approximately 1 ft (0.3 m) of the eye of an embedded hook, as well as wire or bolt cutters capable of cutting through the vessel's hooks.

(4) Handline, troll, pole-and-line, and other vessels using hooks other than longline vessels. Any owner or operator of a vessel fishing under the Pelagics FEP with hooks other than longline gear are not required to carry specific mitigation gear, but must comply with the handling requirements set forth in paragraph (b) of this section.

(5) *Line clippers*. Line clippers are intended to cut fishing line as close as possible to hooked or entangled sea turtles. NMFS has established minimum design standards for line clippers. The Arceneaux line clipper (ALC) is a model line clipper that meets these minimum design standards and may be fabricated from readily available and low-cost materials (see Figure 3 to this part). The minimum design standards are as follows:

(i) A protected cutting blade. The cutting blade must be curved, recessed, contained in a holder, or otherwise afforded some protection to minimize direct contact of the cutting surface with sea turtles or users of the cutting blade.

(ii) Cutting blade edge. The blade must be capable of cutting 2.0-2.1 mm monofilament line and nylon or polypropylene multistrand material commonly known as braided mainline or tarred mainline.

(iii) An extended reach holder for the cutting blade. The line clipper must have an extended reach handle or pole of at least 6 ft (1.82 m).

(iv) Secure fastener. The cutting blade must be securely fastened to the extended reach handle or pole to ensure effective deployment and use.

(6) *Dip nets*. Dip nets are intended to facilitate safe handling of sea turtles and access to sea turtles for purposes of cutting lines in a manner that minimizes injury and trauma to sea turtles. The minimum design standards for dip nets that meet the requirements of this section nets are:

(i) An extended reach handle. The dip net must have an extended reach handle of at least 6 ft (1.82 m) of wood or other rigid material able to support a minimum of 100 lb (34.1 kg) without breaking or significant bending or distortion.

(ii) Size of dip net. The dip net must have a net hoop of at least 31 inches (78.74 cm) inside diameter and a bag depth of at least 38 inches (96.52 cm). The bag mesh openings may be no more than 3 inches by 3 inches (7.62 cm by 7.62 cm).

(7) *Dehookers*. (i) Long-handled dehooker for ingested hooks. This item is intended to be used to remove ingested hooks from sea turtles that cannot be boated, and to engage a loose hook when a turtle is entangled but not hooked and line is being removed. One long-handled dehooker for ingested hooks is required on board. The minimum design and performance standards are as follows:

(A) *Hook removal device*. The hook removal device must be constructed of $\frac{5}{16}$ inch (7.94 mm) 316L stainless steel and have a dehooking end no larger than $1\frac{1}{8}$ inches (4.76 cm) outside diameter. The device must be capable of securely engaging and controlling the leader while shielding the barb of the hook to prevent the hook from re-engaging during removal. It must not have any unprotected terminal points (including blunt ones), as these could cause injury to the esophagus during hook removal. The device must be of a size capable of securing the range of hook sizes and styles used by the vessel.

(B) *Extended reach handle*. The hook removal device must be securely fastened to an extended reach handle or pole with a length equal to or greater than 150 percent of the vessel's freeboard or 6 ft (1.83 m), whichever is greater. It is recommended that the handle be designed so that it breaks down into sections. The handle must be sturdy and strong enough to facilitate the secure attachment of the hook removal device.

(ii) Long-handled dehooker for external hooks. This item is intended to be used to remove externally-hooked hooks from sea turtles that cannot be boated. The long-handled dehooker for ingested hooks described in paragraph (a)(7)(i) of this section meets this requirement. The minimum design and performance standards are as follows:

(A) *Construction*. The device must be constructed of $\frac{5}{16}$ inch (7.94 mm) 316 L stainless steel rod. A 5 inch (12.70 cm) tube T-handle of 1 inch (2.54 cm) outside diameter is recommended, but not required. The dehooking end must be blunt with all edges rounded. The device must be of a size capable of securing the range of hook sizes and styles used by the vessel.

(B) *Handle*. The handle must have a length equal to or greater than the vessel's freeboard or 3 ft (0.91 m), whichever is greater.

(iii) Long-handled device to pull an "inverted V." This item is intended to be used to pull an "inverted V" in the fishing line when disentangling and dehooking entangled sea turtles. One long-handled device to pull an "inverted V" is required on the vessel. The minimum design and performance standards are as follows:

(A) *Hook end*. It must have a hook-shaped end, like that of a standard boat hook or gaff, which must be constructed of stainless steel or aluminum.

(B) *Handle*. The handle must have a length equal to or greater than 150 percent of the vessel's freeboard or 6 ft (1.83 m), whichever is greater. The handle must be sturdy and strong enough to allow the hook end to be effectively used to engage and pull an "inverted V" in the line.

(C) The long-handled dehookers described in paragraphs (a)(7)(i) and (ii) of this section meet this requirement.

(iv) Short-handled dehooker for ingested hooks. This item is intended to be used to remove ingested hooks, externally hooked hooks, and hooks in the front of the mouth of sea turtles that can be boated. One short-handled dehooker for ingested hooks is required on board. The minimum design and performance standards are as follows:

(A) *Hook removal device.* The hook removal device must be constructed of $\frac{1}{4}$ inch (6.35 mm) 316 L stainless steel, and the design of the dehooking end must be such to allow the hook to be secured and the barb shielded without re-engaging during the hook removal process. The dehooking end must be no larger than 1-5/16 inch (3.33 cm) outside diameter. It must not have any unprotected terminal points (including blunt ones), as this could cause injury to the esophagus during hook removal. The dehooking end must be of a size appropriate to secure the range of hook sizes and styles used by the vessel.

(B) *Sliding plastic bite block.* The dehooker must have a sliding plastic bite block, which is intended to be used to protect the sea turtle's beak and facilitate hook removal if the turtle bites down on the dehooker. The bite block must be constructed of a $\frac{3}{4}$ inch (1.91 cm) inside diameter high impact plastic cylinder (for example, Schedule 80 PVC) that is 10 inches (25.40 cm) long. The dehooker and bite block must be configured to allow for 5 inches (12.70 cm) of slide of the bite block along the shaft of the dehooker.

(C) *Shaft and handle.* The shaft must be 16 to 24 inches (40.64 to 60.69 cm) in length, and must have a T-handle 4 to 6 inches (10.16 to 15.24 cm) in length and $\frac{3}{4}$ to $1\frac{1}{4}$ inches (1.90 to 3.18 cm) in diameter.

(v) Short-handled dehooker for external hooks. This item is intended to be used to remove externally hooked hooks from sea turtles that can be boated. One short-handled dehooker for external hooks is required on board. The short-handled dehooker for ingested hooks required to comply with paragraph (a)(7)(v) of this section meets this requirement. The minimum design and performance standards are as follows:

(A) *Hook removal device.* The hook removal device must be constructed of $\frac{5}{16}$ inch (7.94 mm) 316 L stainless steel, and the design must be such that a hook can be rotated out without pulling it out at an angle. The dehooking end must be blunt, and all edges rounded. The device must be of a size appropriate to secure the range of hook sizes and styles used by the vessel.

(B) *Shaft and handle.* The shaft must be 16 to 24 inches (40.64 to 60.69 cm) in length, and must have a T-handle 4 to 6 inches (10.16 to 15.24 cm) in length and $\frac{3}{4}$ to $1\frac{1}{4}$ inches (1.90 to 3.18 cm) in diameter.

(8) Tire. This item is intended to be used for supporting a turtle in an upright orientation while it is on board. One tire is required on board, but an assortment of sizes is recommended to accommodate a range of turtle sizes. The tire must be a standard passenger vehicle tire and must be free of exposed steel belts.

(9) Long-nose or needle-nose pliers. This item is intended to be used to remove deeply embedded hooks from the turtle's flesh that must be twisted in order to be removed, and also to hold in place PVC splice couplings when used as mouth openers. One pair of long-nose or needle-nose pliers is required on board. The minimum design standards are as follows: The pliers must be 8 to 14 inches (20.32 to 35.56 cm) in length. It is recommended that they be constructed of stainless steel material.

(10) Wire or bolt cutters. This item is intended to be used to cut through hooks in order to remove all or part of the hook. One pair of wire or bolt cutters is required on board. The minimum design and performance standards are as follows: The wire or bolt cutters must be capable of cutting hard metals, such as stainless or carbon steel hooks, and they must be capable of cutting through the hooks used by the vessel.

(11) Monofilament line cutters. This item is intended to be used to cut and remove fishing line as close to the eye of the hook as possible if the hook is swallowed or cannot be removed. One pair of monofilament line cutters is required on board. The minimum design standards are as follows: Monofilament line cutters must be 6 to 9 inches (15.24 to 22.86 cm) in length. The blades must be $1\frac{1}{4}$ (4.45 cm) in length and $\frac{5}{8}$ inches (1.59 cm) wide when closed.

(12) Mouth openers and gags. These items are intended to be used to open the mouths of boated sea turtles, and to keep them open when removing ingested hooks in a way that allows the hook or line to be removed without causing further injury to the turtle. At least two of the seven different types of mouth openers and gags described below are required on board. The seven types and their minimum design standards are as follows.

(i) A block of hard wood. A block of hard wood is intended to be used to gag open a turtle's mouth by placing it in the corner of the jaw. It must be made of hard wood of a type that does not splinter (for example, maple), and it must have rounded and smoothed edges. The dimensions must be 10 to 12 inches (24.50 to 30.48 cm) by $\frac{3}{4}$ to $1\frac{1}{4}$ inches (1.90 to 3.18 cm) by $\frac{3}{4}$ to $1\frac{1}{4}$ inches (1.90 to 3.18 cm).

(ii) A set of three canine mouth gags. A canine mouth gag is intended to be used to gag open a turtle's mouth while allowing hands-free operation after it is in place. A set of canine mouth gags must include one of each of the following sizes: small (5 inches, 12.7 cm), medium (6 inches, 15.2 cm), and large (7 inches, 17.8 cm). They must be constructed of stainless steel. A $1\frac{3}{4}$ inch (4.45 cm) long piece of vinyl tubing ($\frac{3}{4}$ inch, 1.91 cm) outside diameter and $\frac{5}{8}$ inch (1.59 cm) inside diameter) must be placed over the ends of the gags to protect the turtle's beak.

(iii) A set of two sturdy canine chew bones. A canine chew bone is intended to be used to gag open a turtle's mouth by placing it in the corner of the jaw. They must be constructed of durable nylon, zylene resin, or thermoplastic polymer, and strong enough to withstand biting without splintering. To accommodate a variety of turtle beak sizes, a set must include one large ($5\frac{1}{2}$ to 8 inches (13.97 to 20.32 cm) in length) and one small ($3\frac{1}{2}$ to $4\frac{1}{2}$ inches (8.89 to 11.43 cm) in length) canine chew bones.

(iv) A set of two rope loops covered with hose. A set of two rope loops covered with a piece of hose is intended to be used as a mouth opener and to keep a turtle's mouth open during hook and/or line removal. A set consists of two 3-foot (0.91 m) lengths of poly braid rope, each covered with an 8 inch (20.32 cm) section of $\frac{1}{2}$ inch (1.27 cm) or $\frac{3}{4}$ inch (1.91 cm) light-duty garden hose, and each tied into a loop.

(v) A hank of rope. A hank of rope is intended to be used to gag open a sea turtle's mouth by placing it in the corner of the jaw. A hank of rope is made from a 6 foot (1.83 m) lanyard of braided nylon rope that is folded to create a hank, or looped bundle, of rope. The hank must be 2 to 4 inches (5.08 to 10.16 cm) in thickness.

(vi) A set of four PVC splice couplings. PVC splice couplings are intended to be used to allow access to the back of the mouth of a turtle for hook and line removal by positioning them inside a turtle's mouth and holding them in place with long-nose or needle-nose pliers. The set must consist of the following Schedule 40 PVC splice coupling sizes: 1 inch (2.54 cm), $1\frac{1}{4}$ inches (3.18 cm), $1\frac{1}{2}$ inches (3.81 cm), and 2 inches (5.08 cm).

(vii) A large avian oral speculum. A large avian oral speculum is intended to be used to hold a turtle's mouth open and control the head with one hand while removing a hook with the other hand. It must be 9 inches (22.86 cm) in length and constructed of $\frac{3}{16}$ inch (4.76 mm) wire diameter surgical stainless steel (Type 304). It must be covered with 8 inches (20.32 cm) of clear vinyl tubing $\frac{5}{16}$ inch (7.94 mm) outside diameter, $\frac{3}{16}$ inch (4.76 mm) inside diameter.

(b) Handling requirements. If a sea turtle is observed to be hooked or entangled in fishing gear from any vessel fishing under the Pelagics FEP, vessel owners and operators must use the required mitigation gear set forth in paragraph (a) of this section to comply with these handling requirements. Any hooked or entangled sea turtle must be handled in a manner to minimize injury and promote survival.

(1) Sea turtles that cannot be brought aboard. In instances where a sea turtle is too large to be brought aboard or the sea turtle cannot be brought aboard without causing further injury to the sea turtle, the vessel owner or operator must disentangle and remove the gear, or cut the line as close as possible to the hook or entanglement, to remove the maximum amount of the gear from the sea turtle.

(2) Sea turtles that can be brought aboard. In instances where a sea turtle is not too large to be brought aboard, or the sea turtle can be brought aboard without causing further injury to the turtle, the vessel owner or operator must take the following actions:

(i) Immediately bring the sea turtle aboard;

(ii) Handle the sea turtle in accordance with the procedures in paragraphs (b)(3) and (b)(4) of this section; and

(iii) Disentangle and remove the gear, or cut the line as close as possible to the hook or entanglement, to remove the maximum amount of the gear from the sea turtle.

(3) *Sea turtle resuscitation*. If a sea turtle appears dead or comatose, the following actions must be taken:

(i) Place the sea turtle on its belly (on the bottom shell or plastron) so that the sea turtle is right side up and its hindquarters elevated at least 6 inches (15.24 cm) for a period of no less than 4 hours and no more than 24 hours. The amount of the elevation varies with the size of the sea turtle; greater elevations are needed for larger sea turtles;

(ii) Administer a reflex test at least once every 3 hours. The test is to be performed by gently touching the eye and pinching the tail of a sea turtle to determine if the sea turtle is responsive;

(iii) Keep the sea turtle shaded and damp or moist (but under no circumstances place the sea turtle into a container holding water). A water-soaked towel placed over the eyes, carapace and flippers is the most effective method of keeping a sea turtle moist; and

(iv) Return to the sea any sea turtle that revives and becomes active in the manner described in paragraph (b)(4) of this section. Sea turtles that fail to revive within the 24-hour period must also be returned to the sea in the manner described in paragraph (b)(4) of this section.

(4) *Sea turtle release*. After handling a sea turtle in accordance with the requirements of paragraphs (b)(2) and (b)(3) of this section, the sea turtle must be returned to the ocean after identification unless NMFS requests the retention of a dead sea turtle for research. In releasing a sea turtle the vessel owner or operator must:

(i) Place the vessel engine in neutral gear so that the propeller is disengaged and the vessel is stopped, and release the sea turtle away from deployed gear; and

(ii) Observe that the turtle is safely away from the vessel before engaging the propeller and continuing operations.

(5) Other sea turtle requirements. No sea turtle, including a dead turtle, may be consumed or sold. A sea turtle may be landed, offloaded, transshipped or kept below deck only if NMFS requests the retention of a dead sea turtle for research.