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UPDATED BEST HANDLING AND RELEASE PRACTICE GUIDELINES FOR SHARKS IN IATTC FISHERIES

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This document provides an update to the shark best handling and release practice (BHRP) guidelines initially developed in SAC-15-11, revised in SAC-16-10, adopted in Resolution C-24-05 and later rolled into C-25-08. Following the request made by the 102nd and then the 103rd Commission meeting that the IATTC scientific staff, in collaboration with the SAC and EBWG, continue to develop, taking into account the practicability for fishing vessels, and recommend to the Commission a comprehensive set of best handling and release practices for the safe release of sharks for inclusion in Resolution C-25-08 in 2026. These guidelines have undergone several rounds of review and revision, initially by those CPCs that responded to Memorandums 0473-410 and 610-401 (listed below), several subject matter experts and industry personnel. The shark BHRP guidelines available in SAC-16-10 have been further refined according to the comments received during the 1st IATTC Workshop to Advance Shark, Sea turtle and Seabird Best Handling and Release Practice (BHRP) Guidelines organized by the staff in December 2025 and following review of the draft document by CPCs, SMEs and industry personnel.

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SUMMARY

The incidental capture of sharks and other vulnerable and or non-target species in tuna fisheries has prompted growing efforts to improve survivorship through best handling and release practices (BHRPs). The Inter-American Tropical Tuna Commission (IATTC) has adopted measures requiring the use of BHRPs, but many lack clear, evidence-based guidance. For that reason, the IATTC staff reviewed available scientific literature, fisheries data, and stakeholder input to identify effective practices and regulatory gaps for BHRPs. Following direction from Resolution C-25-08, and considering synthesized post release

survival data as reviewed in the context of earlier versions of the shark BHRP guidelines, as well as taking into account input from IATTC Members and Cooperating non-Members (CPCs), subject matter experts (SMEs), and industry representatives, this document has been prepared to provide the most recent shark BHRP guidelines for review. It provides detailed, fishery-specific recommendations designed to enhance post-release survival of sharks, ensuring crew safety and practical implementation across the fishing gears under the IATTC purview.

1. BACKGROUND

Concerns about the incidental capture (i.e., bycatch) of elasmobranchs, have resulted in increased efforts to develop conservation and management measures that avoid interactions and or reduce mortality post interaction. The measures that have been adopted by the Inter-American Tropical Tuna Commission (IATTC) include the implementation of no retention policies, capture mitigation measures, and the adoption of best handling and release practice (BHRP) guidelines. Although most IATTC measures allude to the use of best practices, ban certain practices, or provide general common-sense recommendations, they lack specific guidance that has been tested for efficacy and measurable impacts on survival. Thus, specific BHRP guidelines still need to be developed for several non-target species, and/or improved (for sharks and sea turtles) and adopted into the regulatory framework and implemented across fishing gears regionally.

To address these gaps, the IATTC staff conducted a review of available literature, knowledge, research and data relevant to the development of BHRP guidance for sharks and other vulnerable species ([EB-01-01](#)). The document compiled all relevant research on survivorship and handling practices in commercial tuna fisheries, identified knowledge and data gaps, and reviewed the current vulnerable species¹ Resolutions to identify where BHRP guidelines can be implemented into the existing regulations and where additional research is required in the IATTC Convention Area of the eastern Pacific Ocean (EPO). The paper was presented to the IATTC's permanent Working Group on Ecosystem and Bycatch (EBWG) at its first meeting and the Scientific Advisory Committee (SAC) at its 14th meeting in 2023. Accordingly, the SAC-14 endorsed the EBWG-1 recommendations to: a) develop BHRP guidelines for vulnerable species and, b) for CPCs and other relevant stakeholders to support the IATTC staff in a survey to gather details of national efforts or programs that can help elucidate post-release survival rates of vulnerable species captured in the various fisheries under the purview of the IATTC.

In recognition of the above recommendations, the 101st meeting of the Commission adopted Resolution C-23-07 on sharks with paragraph 12 requiring *'the IATTC scientific staff, in collaboration with the IATTC SAC and EBWG, shall develop and recommend to the Commission a set of best handling guidelines for the safe release of sharks for inclusion in this measure in 2024'*. Following this request a Memorandum was sent by the Director of the IATTC to all CPCs (Reference: 0473-410) in September of 2023, requesting any existing guidelines or regulations on best handling and release practices and existing data that elucidates the post release fate of sharks. The memo also requested that Members and Cooperating non-Members (CPCs) identify and designate subject matter experts that could potentially assist the IATTC staff with the development of the guidelines for their fisheries. Several CPCs responded and provided information on BHRPs and a list of contacts. A document was then developed reviewing all the content provided by CPCs

¹ Unless specified otherwise, including but not limited to citations to vulnerability assessments and any qualitative/quantitative scores (e.g. BYC-10 INF-B; SAC-13-11), the staff's definition of "vulnerable species" refers to the species that, in the *sensu lato*, and due to their low-productivity and life-history traits (i.e. K species in r/K selection theory), are more vulnerable to the impacts of fisheries and other anthropogenic activities on these species or their habitat and ecosystem. This includes the marine mammals, seabirds, sea turtles and the elasmobranchs.

and all available scientific evidence on shark interactions in purse seine, longline and gillnet fisheries, focusing on strategies to improve shark survival after incidental interactions. Draft BHRP guidelines were also formulated by fishery and the document was circulated to those subject matter experts (SMEs) identified by the CPCs in response to Memo 0473-410 and other regional and global experts for review. The resulting document ([SAC-15-11](#)) was presented at the EBWG-2 and the SAC-15 meetings in 2024.

An updated shark Resolution C-24-05 was adopted in 2024 at the 102nd Annual Commission Meeting, amending and replacing Resolution C-23-07. Resolution C-24-05 contained BHRP guidelines that were partially derived from the best available scientific advice provided in SAC-15-11. The Resolution also, in paragraph 12, required:

*“The IATTC Scientific Staff, in collaboration with the IATTC SAC and EBWG, shall **continue** to develop, taking into account the practicability for fishing vessels, and recommend to the Commission a comprehensive set of best handling and release practices for the safe release of sharks for inclusion in this measure in 2025. In the meantime, CPCs may elect to use the safe handling and release guidelines described in Annex 3 and as appropriate, the tools identified in Annex 3.1 of this Resolution”.*

The process proceeded during 2024-2025 where document SAC-16-10 was created in response to the above request to continue developing BHRP guidelines for sharks. To this end a follow-up Memorandum (Reference: 0601-410) was sent to all CPCs in November 2024, inviting CPCs to provide the Secretariat with:

1. Their existing guidelines or regulations on BHRP for sharks as well as seabird, sea turtles and rays for fisheries under the purview of the IATTC.
2. Existing data that elucidates the post release fate of sharks and other vulnerable species.
3. Subject matter experts that could potentially assist with the development of the guidelines referred to above for each taxa.
4. Designated industry representatives that can provide guidance on implementation and practicality of BHRP guidelines and other mitigation actions in fisheries operations to also address the SAC-15 recommendation that, *“a program of dialogue be established between the scientific staff, managers, and captains of tuna fleets across CPCs with respect to the implementation of new methods for BHRPs”.*

Several CPCs responded to the Memorandum and provided the information requested to assist in the development of an updated set of shark BHRP guidelines. The content provided was reviewed, circulated for comment and integrated into the second version of the shark BHRP guideline recommendations in SAC-16-10 and presented to the EBWG-3 and SAC-16 meetings. During the 103rd Commission Meeting an updated shark Resolution was adopted, Resolution C-25-08, that maintained the request for the staff to continue to develop a set of comprehensive BHRP guidelines (paragraph 12).

This document and the resultant BHRP recommendations are a synthesis of: i) all available scientific evidence and data (reviewed in EB-01-01 and SAC-15-11) supporting the recommended practices herein and or identifying those practices that should be avoided; ii) the BHRP guidelines adopted and recommended in Resolution C-25-08; iii) the information provided by CPCs in response to Memorandums 0473-410 and 610-410; iv) the feedback received during the EBWG meetings (2024 and 2025), the SAC-16 and those subject matter experts providing reviews to the draft circulated for review; v) taking into account crew safety and the practicality of the recommended practices for widespread adoption and use in fisheries settings as suggested by industry representatives and personnel that reviewed earlier versions of the shark BHRP guidelines documents; and vi) the feedback and comments received during the 1st IATTC Workshop to Advance Shark, Sea turtle and Seabird BHRP Guidelines that took place on December 15, 2025 (sharks) and continued for Sea turtles and Seabirds on January 26, 2026.

Earlier versions of the shark BHRP guidelines (documents SAC-15-11 and SAC-16-10) provided extensive background information and scientific justifications for all of the BHRP recommendations for each fishing gear and readers are encouraged to refer to these prior to and or during reviewing the recommendations below. In this version, and to adhere to requests from the CPCs to condense the quantity of content for review during the working group and SAC meetings, the shark BHRP guidelines below are streamlined and presented without the extensive background justifications underpinning the recommendations (see SAC-15-11 and SAC-16-10 for details). In addition, as the scientific staff endeavors to develop BHRP guidelines for all vulnerable taxa interacting with the major fishing gears under the IATTC purview-the format for each set of guidelines will follow the same structure (outlined in Section 2.1).

2. ADDITIONAL CONSIDERATIONS FOR THE UPDATED SHARK BHRP GUIDELINES

2.1. Clarification on application of BHRPs

Some CPCs have raised the question on when the use of BHRPs might be required. Resolution C-25-08 in paragraph 11 states, ‘CPCs shall require their vessels to promptly release unharmed all sharks (alive or dead) that are not retained to the extent practicable’. According to Paragraph 11 the following guidelines will apply to all sharks that are not retained. Some CPCs have suggested that the first paragraph of Annex 3 be amended so that they would specify when the guidelines established in that Annex should apply.

The current text reads:

Bearing in mind that the primary aim of release processes is to ensure the highest level of survival of sharks and that, whenever possible, prompt, and effective action will be taken to return the shark to the sea and prioritizing that the life and safety of the crew is not compromised and that crew members shall endeavor to avoid hazards in the safe handling and release operations for sharks.

To maximize the efficacy and utility of adopted BHRPs, CPCs should ensure crew are educated and trained by qualified staff on these practices regularly. Illustrated best handling and release practices should be available on the vessels.

It is suggested that it be modified as follows – modifications in bold – :

*Bearing in mind **that the Resolution states, In its paragraph 11, that ‘CPCs shall require their vessels to promptly release unharmed all sharks (alive or dead) that are not retained to the extent practicable’**, and that the primary aim of **BHRP** is to ensure the highest level of post release survival while ensuring the safety of crew members, **the guidelines below are provided to assist them to take prompt, and effective action** to return the shark to the sea **while prioritizing their life and safety.***

To maximize the efficacy and utility of adopted BHRPs, CPCs should ensure crew are educated and trained by qualified staff on these practices regularly. Illustrated best handling and release practices should be available on the vessels.

2.2. Structure and format

As the IATTC endeavors to generate and adopt BHRP guidelines for all vulnerable taxa ([EB-02-03](#)) the staff is attempting to generate guidance that maintains a consistent format and structure for each taxa. Whereby practices that are applicable across all IATTC fisheries will be provided in the beginning of the document, which also serves to reduce redundancy and simplifies the sections that are specific to different fishing gears. The second section is applicable to purse seine fisheries and may be further delineated by stage of the purse seine fishing operation. The next section will include BHRP recommendations for hook and line (i.e. longline, troll, handline, pole and line) fisheries where some of

the guidance might be further refined by the height of the vessels' freeboard² for an individual vessel since this will determine the best methods and tools required for bringing an animal on board for safe gear removal. Following the hook and line guidelines are also recommendations for those fisheries using other net gears, seasonally used by some coastal mixed fisheries (e.g. gillnet and set net).

The staff strongly believes that using the 'Do' and 'Do not' subheadings in the guidance is the best option, as this is consistent with other RFMO formats, BHRP guidelines already widely in use (e.g., Poisson et al. 2014) and for clarity in the generation of graphics for training materials for use across the Pacific Ocean basin. The 'Do' or 'Do not' guidance will also improve accuracy in interpretation for enforcement agencies across CPCs that elect for the guidance to be mandatory.

Throughout the current BHRP Guidelines in Annex 3 of Resolution C-25-08 sometimes the 'Should' recommendations come first while in other sections the 'Should not' comes first. The staff suggests that the do or do not recommendations, or should and should not, whatever the commission agrees upon, ought to also decide which is described first to improve consistency and flow of the document and reduce opportunities for confusion between the recommended practices and those that are discouraged.

2.3. Training

For BHRPs to be an effective vulnerable species mortality mitigation tool they must be integrated into fishing operations. Thus, it is imperative that fishers are made aware of the approved practices and trained in their correct implementation and usage. Accordingly, fishers must also be made aware of practices that are banned and or practices that must be avoided. Several IATTC Resolutions (C-04-05 Rev 2, C-04-07 [C], C-19-04; C-25-08) call for training of fishers on BHRPs. Resolution C-04-05 Rev 2 [8.b. & c.] requests the IATTC staff and CPCs *'educate fishermen through information dissemination activities, including distributing informational materials and organizing seminars on, inter alia, reducing bycatches of sea turtles and safe handling of incidentally caught sea turtles to improve their survivability'*. Resolution C-24-05 Annex 3 also states, *'To maximize the efficacy and utility of adopted BHRPs, CPCs should ensure crew are educated and trained by qualified staff on these practices regularly. Illustrated best handling and release practice guidelines should be available on the vessels.'*

To address these requirements, we propose that the IATTC staff generate outreach, education, and training materials. This will include the creation of infographics to accompany adopted practices and the formulation of BHRP guideline 'posters' that can be posted visibly on all vessels in areas where crew are able to review them and videos or interactive applications for all vulnerable taxa in all fisheries (where appropriate). The material could also be posted on the IATTC website, under a specific BHRPs section. The timeline for development of these materials is proposed to begin immediately after the adoption of official BHRP guidelines. The timeframe for content creation is estimated to be one year from BHRP guideline adoption to posting and circulation, provided that funds are made available. Training of the fishing crew, fishing authorities, and fishing organizations will need to be continuous, with updated training material created as needed. IATTC staff could support CPCs with training by creating training materials and by supporting, coordinating, (co)organizing and participating in training workshops and courses, as required. These workshops are also an excellent opportunity to learn directly from fishers and industry representatives on potential techniques and strategies for either mitigating interactions or devising new BHRPs and bycatch mortality reduction devices. This activity will require a dedicated budget for infographics, content creation and the organization and delivery of training workshops.

²Freeboard refers to the distance between the waterline and the main deck of a ship and the waterline to the rail of a small boat.

3. STAFF RECOMMENDATIONS

Currently there are no single or combined mitigation measures that are 100% effective in eliminating shark bycatch in purse seine, longline or gillnet fisheries. Therefore, on those occasions when sharks are captured it is important that crews are aware of, and correctly implement, the approved BHRP guidelines to improve the post release survival outcomes of shark bycatch. As requested by the Commission at its 103rd meeting in Panama that the IATTC scientific staff, in collaboration with the SAC and EBWG, continue to develop, taking into account the practicability for fishing vessels, and recommend to the Commission a comprehensive set of BHRP guidelines for the safe release of sharks for inclusion in Resolution C-25-08 in 2026, this document, prepared by the IATTC staff in consultation with CPCs, industry personnel and external experts has compiled BHRP guidance and the required tools for safely removing sharks from fishing gears used under the purview of the IATTC. Therefore, the IATTC staff recommends:

The Commission consider updating Resolution C-25-08 with the inclusion of the BHRP guidelines outlined herein (SAC-17-08) for all IATTC fisheries.

Because training fishers and fisheries agents is an integral component to the effective implementation of BHRPs across fleets, it is necessary to develop clear, accessible educational materials tailored to diverse audiences, including infographics, posters, videos, interactive applications and placards for display on vessels and in port facilities, as well as associated training activities. Thus, the IATTC staff believes that support to create and deliver standardized “train-the-trainer” curricula is desirable. These programs can empower regional trainers, fisheries observers, and enforcement personnel with the knowledge and tools to ensure proper training on shark and other vulnerable bycatch species BHRP to fishing crews and vessel operators, further enhancing capacity building and promoting ownership and understanding of existing conservation measures. Therefore, the IATTC staff recommends that:

The Commission ensures the necessary funding to support capacity building, the development of training materials and a range of education and outreach activities (unfunded project Q.3a).

3.1. Shark Best Handling and Release Practice (BHRP) Guidelines

In the following sections, recommendations for updating the shark BHRP text in C-25-08, both in the body of the Resolution [mandatory provisions] and those in Annex 3 and 3.1 are provided for CPC consideration. Based on the language in paragraph 12, the comments and amended text recommendations below are in line with the intent for all BHRP guidelines in C-25-08 to be improved. The updated and recommended BHRP text in Tables of section 3.1.1 are provided to ease comparisons across what is already in the Resolution (column 1) to what updates are suggested (column 2), along with the rationale for the suggested changes (column 3).

3.1.1. Shark BHRP Comparison Tables

The following section contains three tables which provide comparisons of the adopted language in the Resolution text (first column) to the updated recommended language (second column) and the rationale and justifications for the suggested revisions (third column). Table 1 reviews the language adopted in Paragraph 11 within the Resolution. Table 2 reviews the full suite of BHRP guidelines that were adopted in Annex 3 of the Resolution. Table 3 reviews the list of recommended tools for each fishery.

TABLE 1. Comparisons of the shark BHRP recommendations adopted in the body of Resolution C-25-08 (column 1) to the updated staff’s recommendations from this document (column 2). If changes or updates to the text are recommended, these are identified and the rationale behind the suggested changes are provided in column 3.

Language in Resolution C-25-08	Recommended updates	Rational
<u>BYCATCH and RELEASE</u>		
<u>All fisheries</u>		
<p>Paragraph 11. CPCs shall require their vessels to promptly release unharmed all sharks (alive or dead) that are not retained, the extent practicable [sic], as soon as they are seen on the line, entangled in the net, or brailed on the deck, taking due consideration the safety of any person on board, using the following procedures.</p>	<p>CPCs shall require their vessels to promptly release unharmed all sharks (alive or dead) that are not retained, to the extent practicable, as soon as they are seen on the line, entangled in the net, or brailed onboard, taking due consideration for the safety of any person on board, using the following procedures.</p>	<p>Minor changes to improve language</p>
	<p>a. prohibit the use of gaffs, hooks, or similar instruments for the handling of sharks.</p>	<p>This was moved from the purse seine section since it is applicable to all fisheries</p>
	<p>b. prohibit the lifting of sharks by the tail, gill slits, or spiracles, or by using bind wire against or inserted through the body. Prohibit the punching of holes through the bodies of sharks (e.g., to pass a cable through for lifting the shark).</p>	<p>This was moved here from the purse seine section since it is applicable to all fisheries. One small edit is suggested, to delete the prohibition of lifting by the head – the only safe way to lift the head is by grabbing the gills and that is already prohibited here. Attention should be paid to that line since it would ban lifting small sharks that are hooked – which seems to be a safe method of bringing small sharks onboard for gear removal.</p>
<u>For purse seine vessels:</u>		
<p>a. when seen entangled in the net, disentangle the sharks and release them into the ocean as soon as possible.</p>	<p>a. when seen entangled in the net, during hauling, disentangle the sharks and release them into the ocean as soon as possible.</p>	

<p>b. sharks brailed on deck must be returned to the water as soon as possible, either utilizing a ramp from the deck connecting to an opening on the side of the vessel, or through escape hatches. If ramps or escape hatches are not available, the sharks must be lowered with a sling or cargo net, using a crane or similar equipment, or as indicated in Annex 3 or any future revisions, as identified pursuant to paragraph 12.</p>	<p>b. sharks brailed on deck must be returned to the water as soon as possible, either manually following best practices guidelines, using a stretcher or cradle or by utilizing a ramp from the deck connecting to an opening on the side of the vessel, or through escape hatches in the well deck. If ramps or escape hatches are not available, the sharks must be released as indicated in Annex 3 or any future revisions, as identified pursuant to paragraphs 10 and 12.</p>	<p><i>'If ramps or escape hatches are not available, the sharks must be lowered with a sling or cargo net, using a crane or similar equipment'</i></p> <p>The above requirement to lower with a sling or cargo net in the Resolution text is not practical nor realistic operationally. A potential amendment to this text is provided in column 2 and removes the requirement to 'lower sharks with a sling or cargo net using a crane'</p> <p>The paragraph numbers have also changed between Resolution C-24-05 and C-25-08 so they need to be updated as well.</p>
	<p>c. Prohibit passing sharks through the power block.</p>	<p>EBWG-2 and SAC-14 recommended identifying and banning harmful practices. Rolling sharks through the block is considered a harmful and deadly practice and those that do go through the power block alive, do not survive.</p>
<p>c. prohibit the use of gaffs, hooks, or similar instruments for the handling of sharks.</p>		<p>Moved to the All Fisheries section since it is applicable across fishing gears</p>
<p>d. prohibit the lifting of sharks by the head, tail, gill slits, or spiracles, or by using bind wire against or inserted through the body. Prohibit the punching of holes through the bodies of sharks (e.g., to pass a cable through for lifting the shark).</p>		<p>Moved to the All Fisheries section since it is applicable across fishing gears</p>
<p>e. Prohibit the lifting of whale sharks (<i>Rhincodon typus</i>) onboard the vessel and prohibit the towing of whale sharks out of a purse-seine net, e.g., using towing ropes.</p>	<p>d. Prohibit the lifting of whale sharks (<i>Rhincodon typus</i>) onboard the vessel and prohibit the towing of whale sharks out of a purse-seine net, e.g., using towing ropes.</p>	
<p>For longline vessels:</p>		
<p>f. leave the shark in the water, where possible.</p>	<p>e. leave the shark in the water for gear removal, where possible.</p>	
<p>g. use a line cutter to cut the branchline as close to the hook as possible, and so that less</p>	<p>f. use a line cutter to cut the branchline as close to the hook as possible, and so that less than 1 meter remains on the animal, to the extent practicable.</p>	

<p>than 1 meter remains on the animal, to the extent practicable.</p>		
	<p>g. Avoid using drag or lazy lines.</p>	<p>Several CPCs have suggested adding a ban to drag and lazy lines. This is a practice whereby branchlines with sharks on them are attached to a line at the side or stern of the vessel-and left on the line until the hook rips out, the animal dies and or is easier to handle or the vessel slows and allocates time to removing the shark from the gear. Studies show that this practice negatively impacts PRS rates. We suggest the following addition here, 'Do not use drag or lazy lines'.</p>
	<p>h.When attempting to remove hooks, do not damage the jaw.</p>	<p>Some fleet segments use a practice where they rip the whole jaw out or cut into the cartilage of the jaw and permanently mutilate when removing hooks. Thus, the inclusion of a statement deterring these injurious practices is warranted. Example text is provided in column 2 for consideration.</p>

TABLE 2. Comparisons of the shark BHRP recommendations adopted in C-25-08 Annex 3 (column 1), to the updated recommendations (column 2) and the rationale behind the suggested changes (column 3).

Resolution C-25-08 Annex 3 Shark BHRP Text	Recommended Updated Text	Rational
<u>All Fisheries</u>		
<i>SHOULD:</i>	<i>Do:</i>	
Release the shark in the water, if possible	Release sharks from fishing gear as soon as possible and while they are still in the water, if possible	If the intention is to suggest that sharks should be left in the water for gear removal, slight changes to the text are suggested for clarity.
Encourage the immediate release of sharks	Encourage the immediate release of sharks	
<i>SHOULD NOT:</i>	<i>Do Not:</i>	
Attach sharks to vessel and drag while vessel operations are underway		This situation doesn't apply in purse seine fisheries, and should be moved to the hook and line fisheries (eg longline, pole and line) section.
Hit or kick the shark	Hit or kick the shark	
Leave sharks laying on the deck, exposed to sun or air, except to the extent necessary to carry out these practices	Leave sharks laying on the deck, exposed to sun or air, except to the extent necessary to carry out these practices	
Insert hands into gill slits.	Insert hands into gill slits.	
	Use gaffs or hooks or similar instruments to manipulate or maneuver sharks	A statement banning the use of harmful tools like gaffs or similar instruments to maneuver sharks is recommended for comprehensiveness in the Annex. Potential text is provided in Column 2.
	Lift sharks by the tail, gill slits, or spiracles, or by using binding materials against or inserted through the body	This is in the body of the Resolution (in the purse seine section – but applies across fisheries), recommend to add it here for comprehensiveness with the deletion of 'the head' as justified in Table 1
	Do not drag sharks across the deck by the tail	This is a fairly common practice and should be avoided. It increases bite risks for crew members and is injurious to sharks.
<u>Purse Seine Fisheries</u>		
<i>SHOULD NOT:</i>		Ideally there is consistency to which comes first, 'Do' / 'Should' or 'Do not' / 'Should not'. Above

Resolution C-25-08 Annex 3 Shark BHRP Text	Recommended Updated Text	Rational
		the 'Should' section is first and here 'Should not' is first.
Roll sharks through the power block		In the Recommended updated text (column 2) this statement is included below in the 'Do not' section.
<i>For sharks entangled in the net and brought onboard during net hauling/stacking:</i>		
SHOULD:	Do:	
	Release the shark from the net by dropping the net so the entangled shark can be lowered to the deck to allow the crew to safely cut the net away from the animal and return it to the sea.	Crew members may be injured while removing sharks from the net directly, particularly when the animal and the entanglement location is above the head of the crew member. Instructing the net operator to lower the net where the animal is entangled to the deck for removal will ensure operators are conscientious of their role in the safety of the crew when removing entangled sharks. Some suggested text to this point is provided in column 2.
	Release the shark from the net, always preventing it from ascending to the power block	May not be necessary if the above text is adopted and the prohibition on rolling sharks through the power block also remains in the 'Do not' section.
Maneuver the animal into a stretcher/cradle or ramp and release it on the opposite side of the vessel.	Maneuver sharks into a stretcher/cradle or ramp immediately and take them to the opposite side of the vessel (from the net) for release. Small sharks can be carried by hand (without the use of a stretcher/cradle) if it is safe to do so.	Recommended edits that improve clarity and avoid situations where sharks might get 're-entangled' in the netting if they are released on the same side of the vessel as the purse seine net. Small sharks can safely be carried by hand and it is often much easier and faster to return small animals to the water manually.
	Do not:	This section is moved to here and below the 'Do' section for consistency with format in other sections.

Resolution C-25-08 Annex 3 Shark BHRP Text	Recommended Updated Text	Rational
	Roll sharks through the power block.	Moved from the 'should not' section that was out of order above and placed here for consistency of organization of the document.
	Drag sharks across the deck by the tail.	This is in the Do Not for all fisheries section above so if it remains above it can be removed here
<i>When brailing sharks on board:</i>		
SHOULD:	Do:	
	Prioritize the release of sharks that are visible on top of the sack.	Sharks that are on the top of the sack have higher survival rates than those that are deeper in the sack. Prioritizing their release during brailing operations will help improve post release survival.
According to the vessel's conditions, to the extent possible, use bycatch reduction devices (BRDs; e.g., hoppers or ramps) to ensure sharks are sorted on the main deck and do not go down the loading hatch.	Ensure sharks are sorted on the main/work deck and do not go down the loading hatch. According to the vessel's conditions, to the extent possible, use bycatch release devices, e.g., hoppers with doors and ramps.	Studies show that survival is further compromised if they are released from the well/wet decks versus the main/working deck. The suggested edited text in column 2 reflects the desire to disallow sharks from going down the chutes, if that was the intention of the original text in the Resolution. Additionally, ramps are easier to implement if there is also a hopper with a door. Therefore, when referencing a ramp the text should read, 'hoppers and ramps'.
Release the shark as soon as possible. The recommended practice is to remove the shark from the brailer, hopper or ramps by grabbing it, without suspending it, by the caudal peduncle to place it on deck. This should be done manually whenever possible.	Release the shark as soon as possible.	This statement requires amending as it is inaccurate in its present form. If the intended practice is to release sharks as soon as possible, fishers should not remove the sharks from the ramp nor should they be placed on deck. The recommended handling practice in the row below is more accurate, so the staff recommends deleting the last two sentences as reflected in column 2, or the whole point altogether (since the relevant statement is included in the All Fisheries section) and edit the text in the next point to help

Resolution C-25-08 Annex 3 Shark BHRP Text	Recommended Updated Text	Rational
		elucidate the preferred points of contact with sharks.
Maneuver sharks into a stretcher/cradle or ramp immediately when possible and release it on the opposite side of the vessel from the net.	Maneuver sharks into a stretcher/cradle or ramp immediately, by grabbing it by the caudal peduncle and pectorals or dorsal fin, and release it on the opposite side of the vessel from the net.	Here we have provided some additional text to reflect the preferred points of contact on a shark as noted above, providing accurate guidance on preferred handling practices.
Consider the use of a bycatch/waste ramp on the lower decks to facilitate fast and safe release of sharks that were not sighted on the main/working deck.	In cases when the passage of sharks through the loading hatch cannot be avoided, sharks should be released as quickly as possible (e.g. via a bycatch waste chute/escape hatch, or using stretchers).	If the intention is to ensure sharks are released as quickly as possible from the lower decks, the edits in column 2 more accurately reflect this for vessels that can accommodate a bycatch/waste chute.
	<i>Do not:</i>	
	Allow sharks to pass through the loading hatch intentionally	Studies show very low survival rates for sharks that go down the chutes and are released from the lower/well decks. Ensuring that this practice is discouraged is important to maximize PRS of sharks and thus, the staff added some suggested text here for consideration.
	Do not hang sharks by the tail using a rope or cable	Because of their cartilagenous skeleton, sharks are sensitive to tail pulls, and may die as a consequence of these practices. This is a fairly common practice and should be avoided.
<u>Whale sharks captured in purse seine fisheries</u>		
<i>SHOULD:</i>	<i>Do:</i>	
Leave whale sharks in the water for release.	Leave whale sharks in the water for release.	
Release of [sic] whale sharks prior to brailing.	Release whale sharks prior to brailing if it has been detected.	Improved edits to the grammar in column 2 for consideration.
If the whale shark is at the side of the vessel and its head is pointed towards the stern of the vessel, the shark should be released (by opening or cutting the net in front of the sharks mouth)	If the whale shark is at the side of the vessel and its head is pointed towards the stern of the vessel, the shark should be released by opening the net or cutting the net in front of the shark's mouth.	Improved edits to the grammar in column 2 for consideration.

Resolution C-25-08 Annex 3 Shark BHRP Text	Recommended Updated Text	Rational
If the head of the whale shark is pointed towards the bow of the boat, the crew in charge of the net hauling operation can maneuver the winch and the capstan to bring the whale shark close to the hull, then stand the animal on the net and roll it outside the bunt.	If the head of the whale shark is pointed towards the bow of the boat, the crew in charge of the net hauling operation can maneuver the winch and the capstan to bring the whale shark close to the hull, then stand the animal on the net and roll it outside the bunt.	
	For small whale sharks (< 3 m) the brailer may be used to move the animal up and over the purse seine corks to release it.	Per some SMEs this simple practice is used for very small whale sharks in other RFMOs, and shown to be practical and efficient.
SHOULD NOT:	Do not:	
Land a whale shark on deck regardless of size.	Land a whale shark on deck regardless of size.	
Start a brailing process if it endangers the survival of the whale shark.	Start a brailing process if the whale shark has been detected in the sack.	
Pull or drag whale sharks out of the net by the tail or caudal peduncle	Pull or drag whale sharks out of the net by the head, tail or caudal peduncle.	
Hook and Line Fisheries		
<i>For sharks caught by high freeboard vessels (> 2 m):</i>		The updated BHRP guidelines in this section apply to all vessel sizes. So it is no longer necessary to sort the guidance by freeboard height. If the preference is to retain different guidance by freeboard height, the staff recommends changing the height from 2 meters to 1 meter. 1 meter is used in the BHRP guidelines for other taxa and also reflects a height where a fisher will be able to reach the waterline from the deck without any tools to bring vulnerable bycatch species on board manually for gear removal.
		One CPC suggested adding a clause here that specifies when these guidelines apply (e.g. all

Resolution C-25-08 Annex 3 Shark BHRP Text	Recommended Updated Text	Rational
		sharks or only live sharks?). In the body of the Resolution in paragraph 11 it states, 'CPCs shall require their vessels to promptly release unharmed all sharks (alive or dead) that are not retained to the extent practicable'. According to Para 11 the following guidelines will apply to all sharks that are not retained. Perhaps a statement or prelude to the Recommendations could be written to point to this paragraph to ensure clarity on when the Recommendations apply (see section 2.1 for recommendations)
SHOULD:	Do:	
Slow the vessel to bring the sharks alongside for identification and removal of gear.	Slow the vessel and line hauling rate (if applicable) to bring the sharks alongside for identification and removal of gear.	On vessels with winch operated longlines, slowing the line hauling rate reduces the risk of injury to the crew (from fly-backs) and the animals. Some recommended text addressing this is provided for consideration in column 2.
Avoid removing hooks from sharks. If attempting to remove hooks use long-handled de-hookers for vessels with high freeboards.		Directing fishers not to remove hooks is contraindicated, it is suggested this recommendation be removed. The second component of this recommendation is retained in column 2 below and in the recommendations for tools required for hook removal.
	Leave sharks in the water for gear removal, if possible.	Taken from below and moved here to follow the natural progression of the operation, with updates to the text for consideration.
	When removing gear from sharks in the water: <ul style="list-style-type: none"> o If attempting to remove hooks <ul style="list-style-type: none"> -For hooks that are visible – make a small cut in the skin to remove hooks in the corner of the mouth or use pliers or dehookers, or long-handled de-hookers for vessels with 	The intention here is to give guidance for gear removal when sharks remain in the water for vessels of all sizes.

Resolution C-25-08 Annex 3 Shark BHRP Text	Recommended Updated Text	Rational
	<p>high freeboards (i.e. > 1 meter)</p> <ul style="list-style-type: none"> -For hooks that are not visible – cut the line as close to the mouth as possible o When hooks are not removed, use line cutters to cut the line as close to the hook or mouth as possible, leaving no more than 1 meter of gear attached to the animal and ensuring that weights and swivels are removed 	
<p>To the extent practicable, ensure that weights are removed, when cutting the line</p>		<p>If the intention here is to ensure that as much trailing gear is removed as possible, we provided some updated text that complies with the text in the main body of the resolution and more comprehensively addressed this as a sub-bullet, in the second point above.</p>
<p>Avoid bringing sharks on board for gear removal if possible. If sharks are brought on board for gear removal:</p> <ul style="list-style-type: none"> o Use a net or lasso to help lift them onboard o Use a stretcher or cradle for handling and restraint for the safety of the crew and to reduce injury to the animal. o Maneuver shark using manual restraint of the pectoral fins and the caudal peduncle (this may require two crew members depending on the size of the animals) 	<p>If sharks are brought on board for gear removal:</p> <ul style="list-style-type: none"> o Use a net or lasso to help lift large sharks horizontally, with the help of the branchline o Use a stretcher or cradle for handling and restraint, for the safety of the crew and to reduce injury to the animal. o Maneuver shark using manual restraint of the pectoral fins and the caudal peduncle (this may require two crew members depending on the size of the animals). o Return the animals to the sea as quickly as possible. 	<p>The edits provided for consideration here, are intended to clarify the guidance for situations when sharks are brought onboard and broadly apply to all vessel sizes, with an additional point to return sharks to the sea as quickly as possible.</p>
<p><i>Should not:</i></p>	<p><i>Do not:</i></p>	
<p>Drag sharks behind the vessel until the hook rips free of the jaw.</p>	<p>Use drag lines or lazy lines or drag sharks behind the vessel until the hook rips free of the jaw or until the animal is easier to handle.</p>	<p>Some updates to the text are provided here for accuracy and comprehensiveness. This point was moved from the ‘All Fisheries’ section and is more appropriate to list here, as these are never employed in purse seine fisheries.</p>
	<p>Electrocute or stun sharks prior to release.</p>	<p>Some fleets use metal prods to electrocute and stun sharks into submission prior to handling –</p>

Resolution C-25-08 Annex 3 Shark BHRP Text	Recommended Updated Text	Rational
		there is no evidence that suggests these animals survive post release so it is recommended that this practice be banned for sharks that are not retained.
Lift sharks onboard without the use of a dipnet and or second point of attachment to support the weight of the animal, noting it is not recommended to lift sharks onboard the vessel.	Lift large sharks and or any shark that has swallowed the hook onboard without the use of a net and or second point of attachment to support the weight of the animal, noting it is not recommended to lift sharks onboard the vessel.	It is suggested to remove the word 'dip' prior to 'net', as many vessels don't carry dipnets but do have netting that can meet this need.
Attempt to remove a hook from a live shark if the hook is not visible.	Attempt to remove a hook from a live shark if the hook has been swallowed and or is not visible in the corner of the mouth.	
Insert gaffs, hooks, or similar instruments into the bodies of live sharks	Insert gaffs, hooks, or similar instruments to manipulate sharks	
Cut into the jaw for removal of the hook	Cut into or damage the cartilage of the jaw to remove hooks.	Most of the time a small cut in the skin is sufficient to remove a hook. But on some occasions the hooks are embedded in the cartilage of the jaw and these hooks should be left in place. In some longline fisheries the whole jaw is ripped out to remove the hooks. Here we added some text for consideration to address harmful practices.
Lift sharks onto the deck if possible		Not necessary if the above points are retained.
	Lift or maneuver sharks by the gill slits, or spiracles.	Manipulation by the respiratory apparatus is injurious and is a common practice that should be avoided.
	Lift and drop sharks from the vessel height to rip the hook from the shark's jaw.	This practice is used in some industrial fleets. This additional text is provided here for consideration of inclusion and to address this harmful practice.
Gillnet Fisheries		
	Do:	There is no specified guidance for gillnet fisheries in C-25-08. Below we added some text for consideration. There is no need for a 'Do not'

Resolution C-25-08 Annex 3 Shark BHRP Text	Recommended Updated Text	Rational
		section as all the relevant practices are covered in the 'all fisheries' section.
	Prioritize the release of live non-retained sharks.	
	Leave sharks in the water for gear removal, where possible.	
	Carefully cut the net away from the animal, allowing it to swim away from the gear.	
	Ensure the weight of the net below the entangled animal is supported during gear removal.	

TABLE 3. Recommended tools for shark best handling and release practices across IATTC fisheries.

Resolution C-25-08 Annex 3.1	Updated Recommendations	Rationale
<u>Purse Seine Fisheries</u>		
Bycatch separation/release devices for main/working deck (e.g., hopper with a door, ramp).	Hopper with a door	the ramp alone is different from the hopper, as the former helps transport sharks to the water with minimal contact but does not prevent them from going to the lower deck (that can only be done with a hopper with a door).
Ramp		
Stretcher/cradle	Stretcher/cradle	
<u>Hook and line Fisheries</u>		
Dipnet Short de-hooker (for sharks brought on board)	Net (equal or greater in length than the vessel’s freeboard height) Short handled de-hooker (for sharks brought on board)	Several SMEs and CPCs have suggested using the word ‘net’ as opposed to ‘dipnet’.
Line cutter Short handled de-hooker (vessels with low [<2m] freeboard)	Line cutter – capable of cutting through all lines used in the gear Long-handled line cutter (equal or greater in length than the vessel’s freeboard), capable of cutting through all lines used in the gear	Most fishers use knives to cut the lines, if wire leaders are used it is important that cutters are readily available to cut through these, therefore, some clarifying content has been added for consideration.
Long-handled de-hooker (equal or greater in length than the vessel’s freeboard)	Long-handled de-hooker (equal or greater in length than the vessel’s freeboard) Stretcher/cradle (for sharks brought on board) Wire/bolt cutter capable of cutting all hooks used on the vessel	Redundant – suggest deleting
<u>Gillnet Fisheries</u>		
	Line cutter (equal or greater in length to the vessel’s freeboard) capable of cutting through all materials used in the gillnet	

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