UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

MEMORANDUM FOR: FILE

FROM: Christy Fellas, DWH Environmental Compliance Coordinator
NOAA Restoration Center

DATE: October 31, 2022

SUBJECT: Open Ocean TIG Vessel Surveys for Abundance and Distribution of Marine Mammals and Seabirds: NMFS ESA and MMPA

Based on my review of project materials including the Biological Evaluation forms (Fall 2022), and in coordination with representatives from NOAA's Protected Resource Division (PRD) in the Southeast Regional Office, the NOAA Restoration Center (RC) determined that the proposed project has existing coverage from previous compliance efforts for the Endangered Species Act and the Marine Mammal Protection Act under the jurisdiction of National Marine Fisheries Service (NMFS).

As detailed in the monitoring and adaptive management activity implementation plan (MAIP), the NMFS Southeast Fisheries Science Center holds an existing permit authorizing take from the proposed survey and sampling methods (Permit #21938-03).

During project development, additional conversations took place with PRD in regards to Rice's whales in the Gulf of Mexico and whether additional best management practices (BMPs) needed to be in place, such as restricting work at night. PRD determined that nighttime work should not be prohibited because it is necessary to collect the information needed to help conserve Rice's whales, and therefore is beneficial to the species in the long term. Thus, no further review under ESA is necessary for the proposed project.

For more detail on the existing compliance documents refer to the Biological Evaluation form for each project listed above and the DWH administrative record. This project will not require further evaluation under ESA or MMPA for species or habitats under the jurisdiction of NMFS. If the project is modified in a way that may not be covered by existing permits, it will be reevaluated as appropriate.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
1315 East-West Highway
Silver Spring, Maryland 20910

March 17, 2021

Mridula Srinivasan, Ph.D.
Southeast Fisheries Science Center
National Marine Fisheries Service
75 Virginia Beach Drive
Miami, FL 33149

Dear Dr. Srinivasan:

The National Marine Fisheries Service (NMFS) has issued Permit No. 21938-03 to the Southeast Fisheries Science Center for research activities on marine mammals. The changes to specific Terms and Conditions are reflected in bold font, including your designation as the Responsible Party. Upon issuance of this permit, please be aware that Permit No. 21938-02 is no longer valid. This permit is effective upon your signature and is valid through May 31, 2024. To use your permit:

1. Read the permit, including attachments. If you have questions, email your permit analyst – Shasta McClenahan, Ph.D. (shasta.mcclenahan@noaa.gov) or Jennifer Skidmore (jennifer.skidmore@noaa.gov) before signing the permit.
2. Sign and date the signature page.
3. Keep the original signature page with your permit.
4. Return a copy of the signature page to our office by email to your permit analyst.
5. Provide a copy of this letter and the amended permit to each Co-Investigator.

Please note the following guidance for specific areas and activities:

North Atlantic right whales (NARW): As of May 21, 2019, we temporarily suspended dart tagging of reproductive-age female NARW, and this remains a condition of Permit No. 21938-03. Before attempting to tag an individual NARW, you must take reasonable measures to identify the individual (e.g., compare photo-identifications) to avoid tagging reproductive-age females. We understand that there is the potential for human error, even when using your best efforts and expertise to identify NARW in the field. If an adult female is inadvertently tagged after using reasonable efforts to identify individuals, we will not consider this a violation of your permit. You must receive written authorization from the Permits Division before tagging reproductive-age female NARW.

Gulf of Mexico Bryde's whales: Your authorized take numbers and activities for this species, are conditional and must be authorized annually. Please note the specific conditions including: annual authorization (Condition A.2); additional annual reporting (Condition E.6); and research coordination and data sharing (Condition F.4).

Data Sharing: We recommend that you:

- Share photos and videos with researchers who maintain catalogs or databases for purposes such as photo-ID, population monitoring, and post-biopsy monitoring. In addition to your catalogs, other Researchers who maintain catalogs or databases in your area include:

  - Ocean Biogeographic Information System Spatial Ecological Analysis of Megavertebrate Populations (OBIS-SEAMAP); see here for more information or contact Patrick Halpin, Ph.D., phalpin@duke.edu;
  - Gulf of Mexico Dolphin Identification System (GoMDIS). See here for more information or contact Randall Wells, Ph.D., rwells@mote.org; and
  - Mid-Atlantic Bottlenose Dolphin Photo-ID Catalog (MABDC); for more information contact Kim Urian, kim.urian@gmail.com.
- Share data if requested by the NMFS Southeast Regional Office, such as for inclusion in a database of genetic identification of individuals.
- Share telemetry data with the research community in a database such as the Animal Telemetry Network (ATN; https://ioos.noaa.gov/project/atn/); contact Bill Woodward, U.S. ATN Coordinator at bill.woodward@noaa.gov.

Additional data and/or sample sharing requirements for protected species may be added at the discretion of the Permits and Conservation Division as data needs are identified. These may include, but are not limited to, data needs related to current population status, disease outbreaks, or unusual mortality events.

Activities including close proximity to animals: We are providing guidance to remind permitted personnel who work with live animals to follow the appropriate procedures to minimize disease transmission. We recommend the following routine practices be followed:

- All personnel should refer to local, State, and national requirements and public health guidance for their activities.
- All personnel should wear appropriate personal protective equipment (PPE) when performing close-contact activities (e.g., instrument attachment).
- Work clothes, including footwear and dedicated PPE, should be worn only at work.
- Indirect contact between pets kept at home and wild animals should not occur including contact via footwear, equipment, and clothes.
- Individuals who are ill should not work with live animals until cleared by their health care provider.

For more information on specific pathogens and additional guidance see the Centers for Disease Control and Prevention www.cdc.gov, the United States Department of Agriculture https://www.usda.gov, the World Organization for Animal Health https://www.oie.int, the American Veterinary Medical Association www.avma.org, and the World Health Organization www.who.int.

Please keep your contact information current in our online database (https://apps.nmfs.noaa.gov). You will receive automated email reminders of due dates for annual and final reports and a notice prior to expiration of your permit.

Sincerely,

HARRISON.JULIA.MARIE.1365843380

Digitally signed by HARRISON.JULIA.MARIE.1365843380
Date: 2021.03.17 16:03:30 -04'00'

Jolie Harrison
Chief, Permits and Conservation Division
Office of Protected Resources

Enclosure

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
1315 East-West Highway
Silver Spring, Maryland 20910

Permit No. 21938-03
Expiration Date: May 31, 2024
Reports Due: March 31st, annually

PERMIT TO TAKE PROTECTED SPECIES[1] FOR SCIENTIFIC PURPOSES
Amendment No. 03

I. Authorization

This permit is issued to National Marine Fisheries Service (NMFS) Southeast Fisheries Science Center (SEFSC), 75 Virginia Beach Drive, Miami, Florida 33149, (hereinafter "Permit Holder"), [Responsible Party: **Mridula Srinivasan, Ph.D.**], pursuant to the provisions of the Marine Mammal Protection Act of 1972 as amended (MMPA; 16 U.S.C. 1361 *et seq.*); the regulations governing the taking and importing of marine mammals (50 CFR Part 216); the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*); and the regulations governing the taking, importing, and exporting of endangered and threatened species (50 CFR Parts 222-226). **This permit amends and replaces Permit No. 21938-02.**

II. Abstract

The objectives of the permitted activity, as described in the application, are to meet the mandates of the MMPA and ESA through the study of marine mammals: 1) stock structure, size estimates, habitat, and geographic range; 2) movement, ranging patterns, and diving behavior; 3) vocalization patterns and the ambient acoustic environment; 4) reproductive and health status; 5) types and origin of prey; 6) levels of anthropogenic chemical contaminants; and 7) behaviors to certain anthropogenic activities.

III. Terms and Conditions

The activities authorized herein must occur by the means, in the areas, and for the purposes set forth in the permit application, and as limited by the Terms and Conditions specified in this permit, including appendices and attachments. Permit noncompliance constitutes a violation and is grounds for permit modification, suspension, or revocation, and for enforcement action.

A. Duration of Permit

1. Personnel listed in Condition C.1 of this permit (hereinafter "Researchers") may conduct activities authorized by this permit through May 31, 2024. This permit may be extended by the Director, National Marine Fisheries Service (NMFS) Office of Protected Resources or the Chief, Permits and Conservation Division (hereinafter Permits Division), pursuant to applicable regulations and the requirements of the MMPA and ESA.

[1]"Protected species" include species listed as threatened or endangered under the ESA, and marine mammals.

2. Researchers must immediately stop permitted activities and the Permit Holder or Principal Investigator must contact the Chief, Permits Division for written permission to resume:

   a. If serious injury or mortality[2] of protected species occurs.

   b. If authorized take[3] is exceeded in any of the following ways:

      i. More animals are taken than allowed in Tables 1-3 of Appendix 1.

      ii. Animals are taken in a manner not authorized by this permit.

      iii. Protected species other than those authorized by this permit are taken.

   c. Following incident reporting requirements at Condition E.2.

   d. For Gulf of Mexico Bryde's whale research, annual authorization must be obtained in writing from the Permits Division prior to each year's research activities.

      i. Authorization may include modifying the number of takes and types of research activities you are authorized. Authorization will be based on evaluating the following:

         A. All submitted Gulf of Mexico Bryde's whale annual research reports including all research proposed on Gulf of Mexico Bryde's whales by authorized permit holders for the upcoming year (January – December) (see Condition E.6);

         B. Findings from annual coordination meetings (see Condition F.4); and

         C. Recovery priorities and status updates.

[2]This permit does not allow for unintentional serious injury and mortality caused by the presence or actions of researchers as authorized in Tables 1-3 of Appendix 1. This includes, but is not limited to: deaths of dependent young by starvation following research-related death of a lactating female; deaths resulting from infections related to sampling procedures or invasive tagging; and deaths or injuries sustained by animals attempting to avoid researchers. Note that for marine mammals, a serious injury is defined by regulation as any injury that will likely result in mortality.

[3]By regulation, a take under the MMPA means to harass, hunt, capture, collect, or kill, or attempt to harass, hunt, capture, collect, or kill any marine mammal. This includes, without limitation, any of the following: The collection of dead animals, or parts thereof; the restraint or detention of a marine mammal, no matter how temporary; tagging a marine mammal; the negligent or intentional operation of an aircraft or vessel, or the doing of any other negligent or intentional act which results in disturbing or molesting a marine mammal; and feeding or attempting to feed a marine mammal in the wild. Under the ESA, a take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to do any of the preceding.

ii. Authorization may be denied or delayed if the Gulf of Mexico Bryde's whale research annual report has not been received by December 31st and approved as complete by January 31st.

iii. Authorization does not guarantee or imply that NMFS will authorize subsequent years' activities or the same take numbers and activities.

3. The Permit Holder may continue to possess biological samples[4] acquired[5] under this permit after permit expiration without additional written authorization provided a copy of this permit is kept with the samples and they are maintained as specified in this permit.

B. Number and Kinds of Protected Species, Locations and Manner of Taking

1. The tables in Appendix 1 outline the authorized species and stock or distinct population segment (DPS) authorized; number of animals to be taken; number of animals from which parts may be received, imported and exported; and the manner of take, locations, and time period.

2. Researchers working under this permit may collect images (e.g., photographs, video) and audio recordings in addition to the photo-identification or behavioral photo-documentation authorized in Appendix 1 as needed to document the permitted activities, provided the collection of such images or recordings does not result in takes.

3. The Permit Holder may use visual images and audio recordings collected under this permit, including those authorized in Tables 1-3 of Appendix 1, in printed materials (including commercial or scientific publications) and presentations provided the images and recordings are accompanied by a statement indicating that the activity was conducted pursuant to NMFS ESA/MMPA Permit No. 21938. This statement must accompany the images and recordings in all subsequent uses or sales.

4. The Chief, Permits Division may grant written approval for personnel performing activities not essential to achieving the research objectives (e.g., a documentary film crew) to be present, provided:

a. The Permit Holder submits a request to the Permits Division specifying the purpose and nature of the activity, location, approximate dates, and number and roles of individuals for which permission is sought.

[4]Biological samples include, but are not limited to: carcasses (whole or parts); and any tissues, fluids, or other specimens from live or dead protected species; except feces, urine, and spew collected from the water or ground.
[5]Authorized methods of sample acquisition are specified in Appendix 1.

b. Non-essential personnel/activities will not influence the conduct of permitted activities or result in takes of protected species.

c. Persons authorized to accompany the Researchers for the purpose of such non-essential activities will not be allowed to participate in the permitted activities.

d. The Permit Holder and Researchers do not require compensation from the individuals in return for allowing them to accompany Researchers.

5. Researchers must comply with the following conditions related to the manner of taking:

Counting and Reporting Takes

a. Count and report a take of a cetacean following the guidance below regardless of whether you observe a behavioral response to the permitted activity.

b. During unmanned aircraft system (UAS) and manned aerial surveys flown at an altitude lower than 1,000 feet, count and report 1 take per cetacean observed per day, regardless of the number of passes.

c. For all cetacean approaches[6] in water and attempts to remotely biopsy and tag, count and report 1 take per cetacean per day.

i. If all Level A harassment biopsy or tagging attempts on a single day are unsuccessful and do not make contact with the animal, count the take against your Level B harassment take row.

ii. If any Level A harassment attempts on a single day are unsuccessful but do make contact with the animal, count the take for the day against your sampling or tagging take row.

General Mitigation

d. Approach animals cautiously and retreat if behaviors indicate that the approach may interfere with reproduction, feeding, or other vital functions.

e. Where females with calves are authorized to be taken:

[6] An "approach" is defined as a continuous sequence of maneuvers involving a vessel, equipment, or researcher's body, including drifting, directed toward a cetacean or group of cetaceans closer than 100 yards for baleen and sperm whales and 50 yards for all other cetaceans.

i. Immediately terminate efforts if animals exhibit signs that the activity may be interfering with pair-bonding or other vital functions;

ii. Do not position the research vessel between the mother and calf;

iii. Approach mothers and calves gradually to minimize or avoid any startle response;

iv. Discontinue an approach if a calf is actively nursing; and

v. Whenever possible, sample the calf first to minimize the mother's reaction when sampling mother/calf pairs.

Aerial Surveys

f. Aerial flights must not be conducted over pinnipeds on land.

Manned Aerial Surveys

g. Researchers must conduct manned aerial surveys at an altitude of 600 feet or higher. The aircraft may descend to no lower than 500 feet for detailed images and photo-identification.

Unmanned Aerial Surveys

h. Researchers may use a vertical take-off and landing UAS.

i. Researchers must operate UAS at an altitude of 100 feet or higher. The UAS may descend to no lower than 30 feet for detailed images and 6 feet for breath sampling.

Underwater Filming or Photography

j. Underwater filming may occur via pole cameras or divers.

k. No more than 2 divers may be in the water at one time during research. Contact the NMFS Permits Division for approval of additional diver(s).

l. Research Assistants may be divers and conduct underwater activities only if they are trained photographers, videographers, or safety divers.

m. Terminate an underwater approach if a cetacean exhibits adverse or evasive changes in behavior.

General Conditions for Remote Procedures (Biopsy sampling, Breath Collection, and Tagging)

n. Researchers may attempt (deploy or discharge/fire) each procedure (biopsy, breath sample, or tag) on an animal 3 times a day.

o. Discontinue an attempt to biopsy sample, breath sample, or tag if an animal exhibits repetitive, strong, adverse reactions to the activity or vessel.

p. Researchers may biopsy sample and tag an individual on the same day where authorized in Appendix 1.

Data Collection and Sharing

q. To the maximum extent possible, Researchers must collect photos or high-resolution video simultaneously when biopsy sampling, and tagging to identify the individual and the sampling or tagging location on each individual.

    i. In the event that other permitted researchers are working in the same location at the same time, in accordance with Condition F.1 below, the NMFS Southeast Regional Office may require you to share images or other data with those Researchers. The purpose of such collaboration is to report which animals have already been sampled, avoid unnecessary duplication of effort, and reduce impacts to individual animals.

Protocol Modifications

r. The Permit Holder or Principal Investigator (PI) must notify the Permits Division before implementing any change to protocols to determine if additional authorization is required. This may include, but is not limited to:

    i. Modifications to sterilization or Institutional Animal Care and Use Committee (IACUC) requirements;

    ii. Increases in a biopsy tip's size or depth of penetration; or

    iii. Increases in a tag's mass, footprint, or number of anchors.

Biopsy Sampling

Biopsy Sterilization and Disinfection

s. Biopsy tips must be sterile[7] before every use. Sterilization must follow your IACUC approved protocol.

i. As a last resort during the same field trip, Researchers can reuse contaminated[8] biopsy tips that are cleaned and high-level disinfected[9] (versus sterile). High level disinfection[10] may include soaking in 10% bleach for 10 - 20 minutes or soaking in a similar high-level disinfection solution[7,11,12] (e.g., 6% hydrogen peroxide or 2% glutaraldehyde) following the manufacturer's directions.

Biopsy Target Animals and Age-classes

t. Researchers may biopsy sample adults and juveniles greater than approximately 1 year old and females accompanied by these juveniles. However, Researchers must not biopsy sample any calf less than approximately 1 year old or a female accompanied by a calf less than 1 year old.

u. Before attempting to biopsy sample an individual, Researchers must take reasonable measures (e.g., compare photo-identifications) to avoid unintentional repeated takes of any individual.

Biopsy Sampling Location and Frequency

v. Do not attempt to biopsy sample a cetacean in the dorsal fin (i.e., above [distal to] the dorsal fin/body junction) or anywhere forward (cranial) of the pectoral fin.

w. Animals may be biopsy sampled up to 2 times over the course of a year where authorized in Appendix 1. During each event, two biopsy samples may be collected, for a total of four biopsy samples per year.

[7]Sterilization = destroys or eliminates all forms of microbial life and is carried out by physical or chemical methods (Centers for Disease Control [CDC] 2008). These methods must follow the IACUC-approved protocol for sterilization (e.g., gas).
[8]Contaminated = e.g., missed attempt, contacts seawater, physical contact, etc. CDC 2008 available online here: https://www.cdc.gov/infectioncontrol/pdf/guidelines/disinfection-guidelines-H.pdf
[9]Disinfection = eliminates many or all pathogenic microorganisms, except bacterial spores, on inanimate objects usually by liquid chemicals (CDC 2008).
[10]High level disinfection can destroy all microbes, with the exception of some bacterial spores.
[11]FDA 2015. FDA-Cleared Sterilants and High Level Disinfectants with General Claims for Processing Reusable Medical and Dental Devices - March 2015. Available online here: https://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/ReprocessingofReusableMedicalDevices/ucm437347.htm
[12]World Health Organization, 2016. Decontamination and Reprocessing of Medical Devices for Health-care Facilities. Available online here: https://apps.who.int/iris/bitstream/handle/10665/250232/9789241549851-eng.pdf?sequence=1.

Post-biopsy Monitoring of Dorsal Fin Hits of Bottlenose Dolphin Stocks from Bay, Sound, and Estuary (BSE) and Coastal Areas

x. Dorsal fin hits may be determined by direct observation or photo review. Photos or videos collected during biopsy sampling must be reviewed in a timely manner during a field season to help identify dorsal fin hits.

y. Once you determine that a dorsal fin hit occurred, notify the Permits Division and the NMFS Marine Mammal Health and Stranding Response Program (MMHSRP) within 2 business days (see Condition E.3 for requirements).

z. Researchers must make reasonable efforts to conduct post-biopsy monitoring until the biopsy wound is healed through tracking and resightings (photographic/video or genetic), as feasible, to assess:

i. Location of the biopsy wound site in the dorsal fin;

ii. Biopsy wound reaction and healing (e.g., coloration, swelling, open wounds, signs of infection or necrosis);

iii. Animal body condition, apparent health, and behavior; and

iv. Fecundity (presence and survival of calf).

aa. Results of post-biopsy monitoring of these dolphins must be provided in annual reports as indicated in Conditions at E.4.e.

Tagging

Tagging Sterilization

bb. Invasive tag anchors (darts, pins, bolts, etc.), and fully-implantable tags must be sterile[13] before every use. Sterilization must follow your IACUC approved protocol.

i. Researchers must cease tagging efforts if all sterile tag anchors or fully-implantable tags are contaminated[14].

cc. Handling or manipulation of the sterile tag anchors or deep-implant tags before deployment should be performed with sterile surgical gloves or other sterilized equipment.

[13]Sterilization = destroys or eliminates all forms of microbial life and is carried out by physical or chemical methods (CDC 2008). These methods must follow the IACUC-approved protocol for sterilization (e.g., gas).
[14]Contaminated = e.g., missed attempt, contacts seawater, physical contact, etc.

Tagging Target Animals and Age-classes

dd. Fully-implantable tags are not authorized for Gulf of Mexico Bryde's whales, North Atlantic right whales, or sei whales.

ee. Where authorized in Appendix 1, Researchers may tag adults and juveniles greater than approximately 1 year old and females accompanied by these juveniles. However, Researchers must not tag a calf less than approximately 1 year old or a female accompanied by a calf less than 1 year old.

ff. Before attempting to tag an individual, Researchers must take reasonable measures (e.g., compare photo-identifications) to avoid unintentional repeated takes of any individual.

gg. Avoid invasive tagging of animals in obviously poor health or exhibiting species-specific body condition parameters indicating compromised health such as, but not limited to:

i. Noticeable reductions in body mass in the post-cranial region (i.e., exhibiting a nuchal fat pad depression);

ii. Prominent vertebral column;

iii. Visible ribs;

iv. Excessive skin lesions, parasites or cyamids;

v. Behaving abnormally;

vi. Obviously pregnant; or

vii. Immunocompromised populations or otherwise compromised individuals.

Tagging Location and Frequency

hh. Avoid tagging a cetacean anywhere forward (cranial) of the pectoral fin or below (ventral) the lateral vertebral processes.

ii. Researchers may deploy up to 2 tags at one time on the same animal with the exception that only one unit is invasive (dart/barb or fully-implantable).

jj. Researchers must not intentionally re-tag an individual animal within the same permit year.

Post-tag Monitoring

kk. Researchers must make reasonable efforts to opportunistically monitor animals instrumented with invasive tags (dart/barb and fully-implantable) through tracking and resightings (photographic/video or genetic) to assess:

i. The location on the body and condition of the tag (including breakage);

ii. Tag wound reaction and healing (e.g., severity of swelling, depressions, and coloration);

iii. Animal health and behavior;

iv. Fecundity (presence of calf); and

v. Survival.

ll. Results of post-tag monitoring must be provided in annual reports as indicated in Conditions at E.3.

For Gulf of Mexico Bryde's Whales

mm. The Permit Holder must receive written authorization from the Permits Division prior to conducting research activities that will result in take of Gulf of Mexico Bryde's whales (see Condition A.2.d).

nn. Researchers must attempt to collect photos or high-resolution video simultaneously when biopsy sampling or tagging to identify the individual and the sampling location on each individual. Also see Condition F.4 for data sharing requirements to include photos and video in the SEFSC photo-ID database.

oo. Before attempting to biopsy sample or tag an individual Gulf of Mexico Bryde's whale, Researchers must take reasonable measures (e.g., compare photographs, when possible) to avoid unintentional repeated sampling/tagging of any individual, unless specifically authorized.

pp. For biopsy sampling, each individual Gulf of Mexico Bryde's whale may be biopsy sampled during two biopsy events per year. During each event, two biopsy samples may be collected, for a total of four biopsy samples per year.

qq. For tagging, each individual Gulf of Mexico Bryde's whale may receive no more than two tags (one dart/barb tag and one suction-cup tag) per year.

i. Both tags may be attached at the same time or during separate events.

ii. Known individuals that have been dart tagged must not be intentionally dart tagged a second time within the same calendar year.

rr. Researchers may biopsy sample and tag an individual on the same day.

For North Atlantic right whales

ss. Researchers must report information on tagged whales to the Permits Division and the MMHSRP following Permit Condition E.7.

Non-target Species

tt. This permit does not authorize takes of any protected species not identified in Appendix 1, including those species under the jurisdiction of the U.S. Fish and Wildlife Service. Should Researchers encounter other protected species during the activities authorized under this permit, exercise caution and remain a safe distance from the animal(s) to avoid take, including harassment.

6. The Permit Holder must comply with the following conditions and the regulations at 50 CFR 216.37, for biological samples acquired or possessed under authority of this permit.

a. The Permit Holder is ultimately responsible for compliance with this permit and applicable regulations related to the samples unless the samples are permanently transferred according to NMFS regulations governing the taking and importing of marine mammals (50 CFR 216.37) and the regulations governing the taking, importing, and exporting of endangered and threatened species (50 CFR 222.308).

b. Samples must be maintained according to accepted curatorial standards and must be labeled with a unique identifier (e.g., alphanumeric code) that is connected to on-site records with information identifying the following:

i. Species and, where known, age and sex;

ii. Date of collection, acquisition, or import;

iii. Type of sample (e.g., blood, skin, bone);

iv. Origin (i.e., where collected or imported from); and
v. Legal authorization for original sample collection or import.

c. Biological samples belong to the Permit Holder and may be temporarily transferred to Authorized Recipients identified in Appendix 2 without additional written authorization, for analysis or curation related to the objectives of this permit. The Permit Holder remains responsible for the samples, including any reporting requirements.

d. The Permit Holder may grant written approval to additional Authorized Recipients for analysis and curation of samples related to the permit objectives. The Permit Holder must maintain a record of the transfer including the following:

i. Name and affiliation of the recipient;

ii. Address of the recipient;

iii. Types of samples sent (species, tissue type); and

iv. Type of analysis or whether samples will be curated.

e. Sample recipients must have authorization pursuant to 50 CFR 216.37 prior to permanent transfer of samples and transfers for purposes not related to the objectives of this permit.

f. Samples cannot be bought or sold, including parts transferred pursuant to 50 CFR 216.37.

g. After meeting the permitted objectives, the Permit Holder may continue to possess and use samples acquired under this permit, without additional written authorization, provided the samples are maintained as specified in the permit and findings are discussed in the annual reports (See Condition E.3).

C. Qualifications, Responsibilities, and Designation of Personnel

1. At the discretion of the Permit Holder, the following Researchers may participate in the conduct of the permitted activities in accordance with their qualifications and the limitations specified herein:

a. Principal Investigator – Keith Mullin, Ph.D.

b. Co-Investigators – See Appendix 2 for list of names and corresponding activities.

c. Research Assistants – Personnel identified by the Permit Holder or Principal Investigator and qualified to act pursuant to Conditions C.2, C.3, and C.4 of this permit.

2. Individuals conducting permitted activities must possess qualifications commensurate with their roles and responsibilities. The roles and responsibilities of personnel operating under this permit are as follows:

   a. The Permit Holder is ultimately responsible for activities of individuals operating under the authority of this permit. Where the Permit Holder is an institution/facility, the Responsible Party is the person at the institution/facility who is responsible for the supervision of the Principal Investigator.

   b. The Principal Investigator (PI) is the individual primarily responsible for the taking, import, export and related activities conducted under the permit. This includes coordination of field activities of all personnel working under the permit. The PI must be on site during activities conducted under this permit unless a Co-Investigator named in Condition C.1 is present to act in place of the PI.

   c. Co-Investigators (CIs) are individuals who are qualified to conduct activities authorized by the permit, for the objectives described in the application, without the on-site supervision of the PI. CIs assume the role and responsibility of the PI in the PI's absence.

   d. Research Assistants (RAs) are individuals who work under the direct and on-site supervision of the PI or a CI. RAs cannot conduct permitted activities in the absence of the PI or a CI.

3. Personnel involved in permitted activities must be reasonable in number and essential to conduct of the permitted activities. Essential personnel are limited to:

   a. Individuals who perform a function directly supportive of and necessary to the permitted activity (including operation of vessels or aircraft essential to conduct of the activity),

   b. Individuals included as backup for those personnel essential to the conduct of the permitted activity, and

   c. Individuals included for training purposes.

4. Persons who require state or Federal licenses or authorizations (e.g., pilots – including UAS operators) to conduct activities under the permit must be duly licensed/authorized and follow all applicable requirements when undertaking such activities.

5. Permitted activities may be conducted aboard vessels or aircraft, or in cooperation with individuals or organizations, engaged in commercial activities, provided the commercial activities are not conducted simultaneously with the permitted activities.

6. The Permit Holder cannot require or receive direct or indirect compensation from a person approved to act as PI, CI, or RA under this permit in return for requesting such approval from the Permits Division.

7. The Permit Holder or PI may designate additional CIs without prior approval from the Chief, Permits Division provided:

   a. A copy of the letter designating the individual and specifying their duties under the permit is forwarded to the Permits Division on the day of designation by facsimile, email, or the online system at https://apps.nmfs.noaa.gov.

   b. The copy of the letter is accompanied by a summary of the individual's qualifications to conduct and supervise the permitted activities.

   c. The Permit Holder acknowledges that the designation is subject to review and revocation by the Chief, Permits Division.

8. Where the Permit Holder is an institution/facility, the Responsible Party may request a change of PI by submitting a request to the Chief, Permits Division that includes a description of the individual's qualifications to conduct and oversee the activities authorized under this permit.

9. Submit requests to add CIs or change the PI by one of the following:

   a. The online system at https://apps.nmfs.noaa.gov;

   b. An email attachment to the permit analyst for this permit; or

   c. A hard copy mailed or faxed to the Chief, Permits Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13705, Silver Spring, MD 20910; phone (301)427-8401; fax (301)713-0376.

D. Possession of Permit

1. This permit cannot be transferred or assigned to any other person.

2. The Permit Holder and persons operating under the authority of this permit must possess a copy of this permit when:

   a. Engaged in a permitted activity.

b. A protected species is in transit incidental to a permitted activity.

c. A protected species taken under the permit is in the possession of such persons.

3. A duplicate copy of this permit must accompany or be attached to the container, package, enclosure, or other means of containment in which a protected species or protected species part is placed for purposes of storage, transit, supervision or care.

E. Reporting

1. The Permit Holder must submit incident and annual reports containing the information and in the format specified by the Permits Division.

a. Reports must be submitted to the Permits Division by one of the following:

i. The online system at https://apps.nmfs.noaa.gov;

ii. An email attachment to the permit analyst for this permit; or

iii. A hard copy mailed or faxed to the Chief, Permits Division.

b. You must contact your permit analyst for a reporting form if you do not submit reports through the online system.

2. Incident Reporting

a. If a serious injury or mortality occurs, or authorized takes have been exceeded as specified in Condition A.2, the Permit Holder must:

i. Contact the Permits Division by phone (301-427-8401) as soon as possible, but no later than 2 business days of the incident;

ii. Submit a written report within 2 weeks of the incident as specified below; and

iii. Receive approval from the Permits Division before resuming work. The Permits Division may grant authorization to resume permitted activities based on review of the incident report and in consideration of the Terms and Conditions of this permit.

b. The incident report must include 1) a complete description of the events, and 2) identification of steps that will be taken to reduce the potential for

additional serious injury and research-related mortality or exceeding authorized take.

3. For bottlenose dolphin stocks from BSE and coastal areas accidentally sampled in the dorsal fin, report each event within two business days as indicated in Condition B.5.y to the Permits Division (See E.1 above) and the MMHSRP (nmfs.mmhsrp.hq@noaa.gov).

   a. The notification must include:

      i. Date biopsy sampling occurred;

      ii. Geographic location of sampling (latitude and longitude);

      iii. Photographic identification of the individual (if available);

      iv. Sampling location on the dorsal fin, including photographs or drawings (if available);

      v. Age-class and group size of the individual;

      vi. Biopsy sampler and their experience[15];

      vii. Deployment device (e.g., crossbow, pole);

      viii. Environmental conditions that were recorded at the time of sampling, as available and if known (e.g., Beaufort sea state, salinity, depth, water quality[16], water clarity[17], water temperature, in-air visibility[18]);

      ix. The total number of bottlenose dolphin biopsy samples collected from these stocks during the current annual reporting period (January 1st to December 31st); and

      x. Identification of steps that will be taken to reduce the potential for additional dorsal fin hits.

   b. The Permits Division may notify you to stop biopsy sampling activities and/or modify these permitted activities based on review of the event, consultation with the MMHSRP and applicable NMFS Regional Office, and in consideration of the Terms and Conditions of this permit.

[15]E.g., experience level (trainee/less than 1 year, 1-2 years, 3-5 years, or more than 5 years); number of animals successfully sampled; and species sampled.
[16]Water quality = the condition of the water, such as the chemical, physical, or biological characteristics.
[17]Water clarity = a measure of how far down light can penetrate through the water column.
[18]In-air visibility = a measure of how far an object can be seen.

4. Annual reports describing activities conducted during the previous permit year (from January 1st to December 31st) must:

    a. Be submitted by March 31st each year for which the permit is valid, and

    b. Include a tabular accounting of takes and a narrative description of activities and their effects.

    c. Include data on disturbance rates of marine mammals specific to UAS operations. Details should include, but not be limited to: species, altitude and angle of approach, context of exposure (e.g., behavioral states), and observed behavioral responses to the UAS.

    d. Include results of post-tag monitoring as described in B.5.ll.

    e. For bottlenose dolphin stocks from BSE and coastal areas accidentally biopsy sampled in the dorsal fin, the Permit Holder must provide results of post-biopsy monitoring including details outlined in B.5.z and E.3.a and the following:

        i. Coordination with the MMHSRP or any other Researchers for post-biopsy monitoring until the wound is healed;

        ii. The total number of dorsal fin hits and total number of biopsy samples collected from these stocks of bottlenose dolphins during the current annual reporting period (January 1st to December 31st); and

        iii. Results of efforts to reduce the potential for additional dorsal fin hits.

4. A joint annual/final report including a discussion of whether the objectives were achieved must be submitted by August 31, 2024, or, if the research concludes prior to permit expiration, within 90 days of completion of the research.

5. Research results must be published or otherwise made available to the scientific community in a reasonable period of time. Copies of technical reports, conference abstracts, papers, or publications resulting from permitted research must be submitted to the Permits Division upon request.

6. For the purposes of monitoring and annual reauthorization of Gulf of Mexico Bryde's whale research, the Permit Holder must submit a separate annual report to the Permits Division on research conducted on this species for January – December, by December 31st of each year. Details should include, but are not limited to:

a. Date, location, number, and type of takes;

b. Identification of individuals when possible;

c. Status and disposition of biopsy samples including field number and dates samples were entered in the genetics database;

d. Success rate of biopsy and tagging attempts;

e. Post-tag monitoring (See Condition B.5.ll) and retention time of any tags;

f. Progress made toward meeting your objectives, including a narrative summary, citing any reports, publications, and presentations that resulted;

g. Future field plans (including proposed dates, number and type of takes, and objectives) and funding levels for the next 3 years; and

h. Descriptions of opportunistically observed human interactions or other observations (e.g., health, behavior, etc.) that may be of management interest or concern.

7. To assist in monitoring the NARW population and current 2017 unusual mortality event (https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2019-north-atlantic-right-whale-unusual-mortality-event), any time Researchers dart tag a NARW, they must report the tagging to the Permits Division and the MMHSRP (nmfs.mmhsrp.hq@noaa.gov) within 24 hours. The notification must include:

a. Date tagging occurred;

b. Location tagging took place (latitude and longitude);

c. Identification of the individual NARW (if known at the time, or provide within 1 week of individual identification);

d. Location of the tag on the body; and

e. Photograph(s) of the tag placement.

F. Notification and Coordination

1. NMFS Regional Offices are responsible for ensuring coordination of the timing and location of all research activities in their areas to minimize unnecessary duplication, harassment, or other adverse impacts from multiple researchers. Researchers must comply with recommendations provided by the NMFS Southeast Regional Office to coordinate research, including any additional measures necessary to minimize impacts from multiple permit holders working on

the same stocks. This may include but is not limited to data sharing (see Condition B.5.q).

2. The Permit Holder must ensure written notification of planned field work for each project is provided to the NMFS Regional Offices listed below at least two weeks prior to initiation of each field trip/season.

   a. Notification must include the following:

      i. Locations of the intended field study and/or survey routes;

      ii. Estimated dates of activities; and

      iii. Number and roles of participants (for example: PI, CI, boat driver, Research Assistant "in training").

   b. Notification must be sent to the following Assistant Regional Administrators for Protected Resources as applicable to the location of your activity:

      For activities in NC, SC, GA, FL, AL, MS, LA, TX, PR, and USVI:
      Southeast Region, NMFS, 263 13th Ave South, St. Petersburg, FL 33701; phone (727)824-5312; fax (727)824-5309
      Email (*preferred*): nmfs.ser.research.notification@noaa.gov; and

      For activities in NJ, DE, MD, and VA: Greater Atlantic Region, NMFS, 55 Great Republic Drive, Gloucester, MA 01930; phone (978)281-9328; fax (978)281-9394
      Email (*preferred*): NMFS.GAR.permit.notification@noaa.gov

3. Researchers must coordinate their activities with other permitted researchers to avoid unnecessary disturbance of animals or duplication of efforts. Contact the applicable Regional Offices listed above for information about coordinating with other Permit Holders.

4. In addition, for Gulf of Mexico Bryde's whale research:

   a. For all research permits authorizing takes of Gulf of Mexico Bryde's whales combined, no more than the entire population (currently estimated at 33 whales) may be intentionally taken twice per calendar year by each biopsy sampling and tagging if granted approval.

      i. Individuals may only be intentionally biopsy sampled a maximum of twice per year.

ii. No more than 2 tags (1 suction-cup and 1 dart/barb tag) may be attached at one time to an animal in the same calendar year.

b. Researchers must therefore comply with recommendations provided by the SERO to coordinate research, including additional measures deemed necessary to minimize unnecessary duplication, harassment, or other adverse impacts from multiple permit holders.

c. Researchers (including the Responsible Party, PI, and/or CIs) proposing to conduct research on Gulf of Mexico Bryde's whales must also participate in that year's Bryde's whale annual research coordination meeting convened by the SERO and the Permits Division.

d. The Gulf of Mexico Bryde's whale research coordination meetings will include, but are not limited to, discussions regarding the following aspects of the research:

i. Geographic location and seasonality of sampling sites;

ii. Type of takes (e.g., UAS surveys, biopsy sampling, tagging);

iii. Numbers of takes, by type;

iv. Takes of known individuals through photo-identification or genetics;

v. Laboratory analyses; and

vi. Final disposition and repository of samples.

vii. Annual authorization for research activities may be subsequently provided following the annual research coordination meeting (see Condition A.2.d).

e. The Permit Holder must coordinate their activities with other permitted researchers before and during Gulf of Mexico Bryde's whale field research to avoid unnecessary disturbance of these animals and duplication of efforts. Collaboration and coordination are mandatory to ensure that only one group of researchers is targeting the same animals in the course of a day for procedures that may result in take.

f. Collected photographs or video of Gulf of Mexico Bryde's whales must be used by the SEFSC for development of a photo-identification catalog as a shared resource among managers and Permit Holders.

g. A skin sub-sample from each biopsy collected from Gulf of Mexico Bryde's whales must be included in the SEFSC's database of genetic identification of individuals in the population.

G. Observers and Inspections

1. NMFS may review activities conducted under this permit. At the request of NMFS, the Permit Holder must cooperate with any such review by:

a. Allowing an employee of NOAA or other person designated by the Director, NMFS Office of Protected Resources to observe and document permitted activities; and

b. Providing all documents or other information relating to the permitted activities.

H. Modification, Suspension, and Revocation

1. Permits are subject to suspension, revocation, modification, and denial in accordance with the provisions of subpart D [Permit Sanctions and Denials] of 15 CFR Part 904.

2. The Director, NMFS Office of Protected Resources may modify, suspend, or revoke this permit in whole or in part:

a. In order to make the permit consistent with a change made after the date of permit issuance with respect to applicable regulations prescribed under Section 103 of the MMPA and Section 4 of the ESA;

b. In a case in which a violation of the terms and conditions of the permit is found;

c. In response to a written request[19] from the Permit Holder;

d. If NMFS determines that the application or other information pertaining to the permitted activities (including, but not limited to, reports pursuant to Section E of this permit and information provided to NOAA personnel pursuant to Section G of this permit) includes false information; and

e. If NMFS determines that the authorized activities will operate to the disadvantage of threatened or endangered species or are otherwise no longer consistent with the purposes and policy in Section 2 of the ESA.

[19]The Permit Holder may request changes to the permit related to: the objectives or purposes of the permitted activities; the species or number of animals taken; and the location, time, or manner of taking or importing protected species. Such requests must be submitted in writing to the Permits Division in the format specified in the application instructions.

3. Issuance of this permit does not guarantee or imply that NMFS will issue or approve subsequent permits or amendments for the same or similar activities requested by the Permit Holder, including those of a continuing nature.

I. Penalties and Permit Sanctions

1. A person who violates a provision of this permit, the MMPA, ESA, or the regulations at 50 CFR Part 216 and 50 CFR Parts 222-226 is subject to civil and criminal penalties, permit sanctions, and forfeiture as authorized under the MMPA, ESA, and 15 CFR Part 904.

2. The NMFS Office of Protected Resources shall be the sole arbiter of whether a given activity is within the scope and bounds of the authorization granted in this permit.

   a. The Permit Holder must contact the Permits Division for verification before conducting the activity if they are unsure whether an activity is within the scope of the permit.

   b. Failure to verify, where the NMFS Office of Protected Resources subsequently determines that an activity was outside the scope of the permit, may be used as evidence of a violation of the permit, the MMPA, the ESA, and applicable regulations in any enforcement actions.

J. Acceptance of Permit

1. In signing this permit, the Permit Holder:

   a. Agrees to abide by all terms and conditions set forth in the permit, all restrictions and relevant regulations under 50 CFR Parts 216, and 222-226, and all restrictions and requirements under the MMPA, and the ESA;

   b. Acknowledges that the authority to conduct certain activities specified in the permit is conditional and subject to authorization by the Office Director; and

c. Acknowledges that this permit does not relieve the Permit Holder of the responsibility to obtain any other permits, or comply with any other Federal, State, local, or international laws or regulations.

MARZIN.CATHERINE.G.1365836082 Digitally signed by MARZIN.CATHERINE.G.1365836082 Date: 2021.03.17 12:11:11 -04'00'

FOR Donna S. Wieting
Director, Office of Protected Resources
National Marine Fisheries Service

Date Issued

SRINIVASAN.MRIDULA.1384435862 Digitally signed by SRINIVASAN.MRIDULA.1384435862 Date: 2021.03.18 11:10:30 -04'00'

Mridula Srinivasan, Ph.D.
Director, Marine Mammal and Turtle Division
Southeast Fisheries Science Center
National Marine Fisheries Service
Responsible Party

Date Effective

Appendix 1: Tables Specifying the Kinds of Protected Species, Locations, and Manner of Taking.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.

Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
1	Cetacean, unidentified	All	500	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
2	Dolphin, Atlantic spotted; Range-wide	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
3		Adult/ Juvenile	450	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
4		All	15,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
5	Dolphin, bottlenose; Range-wide	Adult/ Juvenile	1,500	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
6		All	25,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys. Large-scale surveys.

[20] Takes = the maximum number of animals, not necessarily individuals, that may be targeted for research annually for the suite of procedures in each row of the table.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
7	Dolphin, bottlenose; Range-wide	All	20,000	30	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys. Localized, small boat, photo-ID effort in Gulf of Mexico, Atlantic Ocean, and Caribbean bays, sounds, estuaries and coastal waters.
8		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
9	Dolphin, clymene; Range-wide	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
10		Adult/ Juvenile	75	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
11		All	5,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
12	Dolphin, common, short-beaked; Range-wide	Adult/ Juvenile	150	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
13		All	20,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
14		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
15	Dolphin, Fraser's; Range-wide	Adult/ Juvenile	75	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
16		All	3,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
17		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
18	Dolphin, pantropical spotted; Range-wide	Adult/ Juvenile	450	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
19		All	30,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
20		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
21	Dolphin, Risso's; Range-wide	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
22		Adult/ Juvenile	300	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
23		All	6,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
24	Dolphin, rough-toothed; Range-wide	Adult/ Juvenile	75	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
25		All	4,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
26		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
27	Dolphin, spinner; Range-wide	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag)
28		Adult/ Juvenile	250	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
29		All	10,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
30	Dolphin, striped; Range-wide	Adult/ Juvenile	150	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
31		All	15,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
32		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
33	Dolphin, unidentified	All	5,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
34	Porpoise, harbor; Range-wide	Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
35		All	2,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
36		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
37	Whale, Blainville's beaked; Range-wide	Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
38		All	2,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
39		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
40	Whale, blue; Range-wide (NMFS Endangered)	Adult/ Juvenile	10	2	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling. 2 biopsy samples may be collected per event for a total of 2 biopsy samples per individual per year.
41		All	20	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
42		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, implantable (e.g., satellite tag); Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb or implantable tag and 1 suction-cup tag).

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
43	Whale, Bryde's; Range-wide, <u>Excludes</u> Gulf of Mexico subspecies	Adult/ Juvenile	60	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 20 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
44		Adult/ Juvenile	75	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
45		All	300	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
46	Whale, Cuvier's beaked; Range-wide	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
47		Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
48		All	2,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
49	Whale, dwarf sperm; Range-wide	Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
50		All	1,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
51		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
52	Whale, false killer; Range-wide	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
53		Adult/ Juvenile	150	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
54		All	2,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
55	Whale, fin; Range-wide (NMFS Endangered)	Adult/ Juvenile	15	2	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling. 2 biopsy samples may be collected per event for a total of 2 biopsy samples per individual per year.
56		All	500	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
57		Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, implantable (e.g., satellite tag); Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 10 successfully tagged animals with up to 2 tags maximum (1 dart/barb or implantable tag and 1 suction-cup tag).
58	Whale, Gervais' beaked; Range-wide	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
59		Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
60		All	2,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
61	Whale, humpback; Range-wide Includes: West Indies DPS, and Cape Verde/ Northwest Africa DPS (NMFS Endangered)	Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, implantable (e.g., satellite tag); Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 10 successfully tagged animals with up to 2 tags maximum (1 dart/barb or implantable tag and 1 suction-cup tag).
62		Adult/ Juvenile	75	2	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling. 2 biopsy samples may be collected per event for a total of 2 biopsy samples per individual per year
63		All	1,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
64	Whale, killer; Range-wide	Adult/ Juvenile	75	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
65		All	1,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
66		Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 10 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
67	Whale, melon-headed; Range-wide	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
68		Adult/ Juvenile	150	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
69		All	5,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
70	Whale, minke; Range-wide	Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
71		All	200	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
72		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
73	Whale, pygmy killer; Range-wide	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
74		Adult/ Juvenile	75	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
75		All	1,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
76	Whale, pygmy sperm; Range-wide	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
77		Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
78		All	1,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
79	Whale, right, North Atlantic; Range-wide (NMFS Endangered)	Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Dart/barb and suction-cup tagging. 10 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
80		All	50	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
81	Whale, sei; Range-wide (NMFS Endangered)	Adult/ Juvenile	15	2	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling. 2 biopsy samples may be collected per event for a total of 2 biopsy samples per individual per year.
82		All	10	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
83		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb and 1 suction-cup tag).

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
84	Whale, sperm; Range-wide (NMFS Endangered)	Adult/ Juvenile	60	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, implantable (e.g., satellite tag); Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 20 successfully tagged animals with up to 2 tags maximum (1 dart/barb or implantable tag and 1 suction-cup tag).
85		Adult/ Juvenile	150	2	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling. 2 biopsy samples may be collected per event for a total of 2 biopsy samples per individual per year.
86		All	4,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
87	Whale, True's beaked; Range-wide	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
88		Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
89		All	2,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
90	Whale, unidentified baleen	All	500	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
91		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
92	Whale, unidentified beaked	Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
93		All	2,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
94	Whale, unidentified Kogia (dwarf/ pygmy sperm)	Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
95		All	1,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
96	Whale, unidentified Mesoplodon	Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 5 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
97		Adult/ Juvenile	30	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
98		All	1,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
99	Whale, unidentified pilot	Adult/ Juvenile	60	1	Survey, aerial/ vessel	Collect, sloughed skin; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Underwater photo/videography	Tagging. 20 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag).
100		Adult/ Juvenile	300	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.
101		All	10,000	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.

Table 1. Annual take Information for Atlantic Ocean, Gulf of Mexico, Caribbean Sea, U.S. territorial seas, and international waters. Some animals may be taken multiple times per year for Level B activities. DPS = Distinct Population Segment.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [20]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
102	Whale, unidentified toothed	All	500	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Aerial and vessel surveys.
103		Adult/ Juvenile	15	1	Survey, aerial/ vessel	Collect, sloughed skin; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling.

Table 2. Annual take information for the Gulf of Mexico (GOMx) Bryde's whale. Annual take numbers and activities are contingent upon annual authorization per Condition A.2.c., and must have a separate authorization accompanying this permit each year. See additional Permit Conditions starting at F.4 for research coordination requirements for this subspecies.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes [21]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
1	Whale, Bryde's; Northern Gulf of Mexico Stock (NMFS Endangered)	All	Up to 300	5	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Vessel and aerial surveys.
2		Adult/ Juvenile	Up to 40	2	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling. 20 individual animals may be biopsy sampled twice per year. Two samples per event for a total of four biopsy samples per individual per year. Maximum of 3 attempts to biopsy sample per day.
3		Adult/ Juvenile	Up to 40	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Suction-cup and dart tagging. 20 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag) attached at one time. Maximum of 3 attempts to tag per day.

[21] Takes = the maximum number of animals, not necessarily individuals, that may be targeted for research annually for the suite of procedures in each row of the table.

Table 3. Annual import, export, and receipt of cetacean parts.							
Line	Species	Life stage	Sex	No. Animals per Year	No. Samples per Animal	Procedures	Details
1	Cetacean, unidentified	All	Male and Female	400	100	Import/ export/ receive, parts	Includes samples collected under other authorizations and samples collected under this permit in international waters.

Appendix 2: NMFS-Approved Personnel and Authorized Recipients for **Permit No. 21938-03**. **Updated March 2021.**

The following individuals are approved personnel pursuant to the terms and conditions under Section C (Qualifications, Responsibilities, and Designation of Personnel) of this permit.

Name	Level B Harassment Activities[22]	Biopsy	Tagging	Laboratory/ Affiliation
Mullin, Keith, Principal Investigator	Y	Y	N	Pascagoula
Co-Investigators				
Aichinger Dias, Laura	Y	N	N	Miami
Andrews, Russel	N	N	Y [a,b]	Marine Ecology and Telemetry Research
Barry, Kevin	Y	Y	N	Pascagoula
Contillo, Joseph	Y	N	N	Miami
Engleby, Laura	Y	N	N	NMFS Southeast Regional Office
Gazda, Stefanie	Y	N	N	Univ. Massachusetts Dartmouth
Gorgone, Antoinette	Y	Y	N	Beaufort
Hamilton, Rebecca	Y	N	N	University of Massachusetts- Dartmouth
Hendon, Michael	Y	Y	N	Pascagoula
Hohn, Aleta	Y	N	N	Beaufort
Levine, Norman	Y	N	N	College of Charleston
Litz, Jenny	Y	N	N	Miami
Martinez, Anthony	Y	Y	Y [a,b,c]	Miami
Ninke, Tom	Y	Y	N	Beaufort
Powell, Jessica	Y	N	N	NMFS Southeast Regional Office
Principe, Nicole	Y	N	N	College of Charleston
Quigley, Brian	Y	N	N	National Marine Mammal Foundation
Rittmaster, Keith	Y	N	N	North Carolina Maritime Museum
Rodriguez-Ferrer, Grisel	Y	N	N	Department of Natural Resources, Puerto Rico
Sinclair, Carrie	Y	Y	N	Pascagoula
Speakman, Todd	Y	Y	N	National Marine Mammal Foundation
Thayer, Victoria	Y	N	N	North Carolina Division of Marine Fisheries
Wicker, Jesse	Y	Y	N	Miami
Young, Robert	Y	Y	N	Coastal Carolina University
Zolman, Eric	Y	Y	N	National Marine Mammal Foundation

[22] Level B Harassment activities have the potential to disturb, but not injure, a marine mammal or stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.

[a] Authorized for suction-cup tagging.

[b] Authorized for dart tagging.

[c] Authorized for implantable tagging.

Biological samples authorized for collection or acquisition in Tables 1-3 of Appendix 1 may be transferred to the following Authorized Recipients (ARs), **or additional ARs designated by the Permit Holder under separate authorization letters**, for the specified disposition, consistent with Condition B.6 of the permit.

Authorized Recipient	Sample Type	Disposition
National Institute of Standards (NIST), Charleston, SC	Skin and blubber	Analysis
National Marine Mammal Tissue Bank, Charleston, SC	Skin and blubber	Curation
SEFSC NMFS Molecular Genetics Lab, Lafayette, LA	Skin samples	Analysis/Curation
IsoForensics Inc., Salt Lake City, UT	Skin and blubber	Analysis
Florida International University, Miami, FL	Skin and blubber	Analysis
Stable Isotope Laboratory, Cornell University, Ithaca, NY	Skin	Analysis
University of California- Davis, Davis, CA	Skin	Analysis
University of Virginia, Charlottesville, VA	Skin	Analysis
Dauphin Island Sea Lab, Dauphin Island, AL	Skin and blubber	Analysis/Curation

Appendix 3. NOAA Office of National Marine Sanctuaries (ONMS) Sanctuary and Monument Permit Contact Information.

Site	Mailing Address	Contact Numbers	Permit Contact(s)
ONMS Headquarters Office Silver Spring, Maryland	NOAA Office of National Marine Sanctuaries 1305 East-West Highway (N/NMS2) SSMC4 Silver Spring, MD 20910	wk 240-533-0605 fax 301-713-0404 wk 240-533-0679 fax 301-713-0404	Vicki Wedell Vicki.Wedell@noaa.gov
Florida Keys National Marine Sanctuary	Florida Keys National Marine Sanctuary 33 East Quay Road Key West, FL 33040	wk 305-809-4714 fax 305-293-5011	Joanne Delaney Joanne.Delaney@noaa.gov
Flower Garden Banks National Marine Sanctuary	Flower Garden Banks National Marine Sanctuary 4700 Avenue U, Building 216 Galveston, TX 77551	wk 409-621-5151 x 111 fax 409-621-1316	Emma Hickerson (Research permits) Emma.Hickerson@noaa.gov
Gray's Reef National Marine Sanctuary	Gray's Reef National Marine Sanctuary 10 Ocean Science Circle Savannah, GA 31411	wk 912-598-2382 fax 912-598-2367	Kimberly Roberson Kimberly.Roberson@noaa.gov
Monitor National Marine Sanctuary	*Monitor* National Marine Sanctuary c/o The Mariners' Museum 100 Museum Drive Newport News, VA 23606	wk 757-591-7333	Tane Casserley Tane.Casserley@noaa.gov
Stellwagen Bank National Marine Sanctuary	Stellwagen Bank National Marine Sanctuary 175 Edward Foster Road Scituate, MA 02066	wk 203-882-6515 fax 203-882-6572 wk 781-545-8026 x 207 fax 781-545-8036	Alice Stratton Alice.Stratton@noaa.gov Ben Cowie-Haskell (Alternate contact) Ben.Haskell@noaa.gov

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
1315 East-West Highway
Silver Spring, Maryland 20910

March 9, 2021

Lisa Desfosse, Ph.D.
Southeast Fisheries Science Center
National Marine Fisheries Service
75 Virginia Beach Drive
Miami, FL 33149

Dear Dr. Desfosse:

Thank you for submitting your annual report of activities conducted on Gulf of Mexico (GOMx) Bryde's whales (*Balaenoptera edeni*) under Permit No. 21938-02 and your staff's participation in the research coordination call on March 1, 2021. After reviewing the permit requests, coordination plans, and the status of the population, you are hereby authorized to take GOMx Bryde's whales in 2021 as indicated in Table 2 (enclosed) of your permit. All terms and conditions of the permit remain in full force and effect. As a reminder, Permit No. 21938-02 includes the following specific conditions for GOMx Bryde's whales:

- Annual authorization (See Condition A.2): Your 2021 authorization is provided by this letter.
- Additional annual reporting (See Condition E.6): Your next GOMx Bryde's whale report is due **December 31, 2021**.
- Research coordination (See Condition F.4): The Principal Investigator must participate in an annual meeting to discuss research plans and ensure that no more than the estimated population (currently estimated at 33 individuals) will be taken by Level A harassment activities twice annually. We plan to hold the next annual GOMx Bryde's whale research coordination meeting in January 2022.

As a reminder, the Southeast Regional Office has an online spreadsheet to track takes of GOMx Bryde's whales as they occur during the field season. Researchers must record their takes of the population into the spreadsheet at the end of each field day, or as soon as possible if working in remote locations. This real-time monitoring will help ensure that permit holders collectively do not exceed our program's take limits for this population. Please contact Barb Zoodsma (barb.zoodsma@noaa.gov) for access to the spreadsheet.

If you have any questions regarding this authorization, please contact Shasta McClenahan, Ph.D. (shasta.mcclenahan@noaa.gov) or Jennifer Skidmore (jennifer.skidmore@noaa.gov) via email or at (301) 427-8401.

Sincerely,

HARRISON.JULIA.MARIE.1365843380
Digitally signed by HARRISON.JULIA.MARIE.1365843380
Date: 2021.03.09 14:11:57 -05'00'

Jolie Harrison
Chief, Permits and Conservation Division
Office of Protected Resources
(phone: 301-427-8401)

Permit No. 21938-02 Table 2. Authorized takes for the Gulf of Mexico Bryde's whale for 2021. Annual take numbers and activities are contingent upon annual authorization per Condition A.2.c., and must have a separate authorization accompanying this permit each year. See additional Permit Conditions starting at F.4 for research coordination requirements for this subspecies.							
Line	Species; Stock/ Listing Unit	Life stage	No. Takes[1]	Takes Per Animal	Observe/ Collect Method	Procedures	Details
1	Whale, Bryde's; Northern Gulf of Mexico Stock (NMFS Endangered)	All	300	5	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, exhaled air; Sample, fecal; Underwater photo/videography	Vessel and aerial surveys.
2		Adult/ Juvenile	40	2	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Observation, monitoring; Observations, behavioral; Photo-id; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Biopsy sampling. 20 individual animals may be biopsy sampled twice per year. Two samples per event for a total of four biopsy samples per individual per year. Maximum of 3 attempts to biopsy sample per day.
3		Adult/ Juvenile	40	1	Survey, aerial/ vessel	Acoustic, passive recording; Collect, sloughed skin; Count/survey; Incidental harassment; Instrument, dart/barb tag; Instrument, suction-cup (e.g., VHF, TDR); Observation, monitoring; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Remote vehicle, aerial (VTOL); Sample, skin and blubber biopsy; Underwater photo/videography	Suction-cup and dart tagging. 20 successfully tagged animals with up to 2 tags maximum (1 dart/barb tag and 1 suction-cup tag) attached at one time. Maximum of 3 attempts to tag per day.

[1] Takes = the maximum number of animals, not necessarily individuals, that may be targeted for research annually for the suite of procedures in each row of the table.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southeast Fisheries Science Center
75 Virginia Beach Drive
Miami, Florida 33149 U.S.A.

August 14, 2020

Dr. Keith Mullin
Southeast Fisheries Science Center
National Marine Fisheries Service
3209 Frederic Street,
Pascagoula, MS 39567

Dear Dr. Mullin,

The National Marine Fisheries Service (NMFS) Atlantic Institutional Animal Care and Use Committee (IACUC) has reviewed and approved an amendment to your IACUC protocols associated with permit No. 21938 for the project titled "Cetacean Stock Assessment Research in the Northwest North Atlantic, Gulf of Mexico, and Caribbean Sea by the Southeast Fisheries Science Center."

For tracking purposes, this is Protocol # **Atlantic IACUC-2020-002.**

Thank you for incorporating our suggestions and providing additional information in the protocol. After evaluating the protocols and amended application, the IACUC recommends that the researchers aim for minimum biopsy target distances of 4m or more when using a cross-bow. Wenzel et al. (2010) suggested a 4m distance to address safety concerns for the biopsy crew on the small boats during biopsy operations (NMFS researchers reported observations of "biopsy hits on marine mammals, where the bolt then rebounded back towards the vessel and staff." Wenzel pers. comm.)

Also, based on the test results (Table 2, SEFSC 2020 Cetacean Biopsy Protocol), it appears there isn't a significant difference at 3m, 5m, or 10m. Therefore, we recommend maintaining the target ranges between 4-10m, as previously stated in Sinclair et al. 2013, which seems reasonable to minimize any injury risks to both operator and animal.

In suggesting this minimum target distance, the IACUC also considered reduced blubber thickness in summer (~ 13 mm on average) compared to winter in Gulf of Mexico bottlenose dolphins (Noren & Wells 2009; Wells 2009; 2010) — this could increase the risk of muscle penetration/trauma resulting in muscle in the sample given the size of the biopsy tips being used (10 x 25-30 mm). The IACUC could potentially elevate the pain category for biopsy sampling based on dolphin reactions and the regular presence of muscle in the sample.

Additionally, the IACUC recommends that the researchers continue to take photos of the measured plug and identify tissue composition (thickness of skin, blubber, and any muscle tissue present) of the collected sample as part of routine data collection. At the end of this field season, we request a report on sampling results, dolphin reactions, and any accidental dorsal fin hits.

There are two signature pages enclosed. You must return one copy with your dated signature as proof of acceptance. Please sign and date both pages. Keep one original signature page as proof of your authorization.

The IACUC permit approval is effective upon signature on the signature page and will be valid for five years unless there are modifications requested or any deviations from established protocols. Please report any deviations to the protocol or incidents to the IACUC promptly.

Good luck with the research activity.

Sincerely,

SRINIVASAN.MRIDULA.1384435862

Digitally signed by SRINIVASAN.MRIDULA.1384435862
Date: 2020.08.14 11:55:48 -04'00'

Mridula Srinivasan, Ph.D.
Atlantic IACUC Chair
+1.404.993.0428
mridula.srinivasan@noaa.gov

Enclosure

cc:

Donna Wieting, Director, Office of Protected Resources

Dr. Clay Porch, Science and Research Director, SEFSC

Dr. Jon Hare, Science and Research Director, NEFSC

Amy Sloan, Deputy Chief, Permits and Conservation Division, Office of Protected Resources

NMFS Atlantic Institutional Animal Care and Use Committee

Signature Page

PI: Dr. Keith Mullin

Project: "Cetacean Stock Assessment Research in the Northwest North Atlantic, Gulf of Mexico, and Caribbean Sea by the Southeast Fisheries Science Center"

Protocol Number: **Atlantic IACUC-2020-002**

In signing this letter, the Principal Investigator:

1. Agrees to abide by all terms and conditions outlined in this approval, and all restrictions and relevant regulations under 9 CFR Part 2 and NMFS Animal Care and Use Policy,

2. Acknowledges that the authority to conduct certain activities specified in this letter is conditional and subject to authorization and reviews by the NMFS Atlantic IACUC, and

3. Acknowledges that this approval does not relieve Permit Holders of the responsibility to comply with any other federal, state, local, or international laws or regulations.

MULLIN.KEITH.D.1365856504 Digitally signed by MULLIN.KEITH.D.1365856504 Date: 2020.08.14 12:03:34 -05'00'

_____ _____

Keith Mullin Date

Principal Investigator

NMFS Atlantic Institutional Animal Care and Use Committee

Signature Page

PI: Dr. Keith Mullin

Project: "Cetacean Stock Assessment Research in the Northwest North Atlantic, Gulf of Mexico, and Caribbean Sea by the Southeast Fisheries Science Center"

Protocol Number: **Atlantic IACUC-2020-002**

In signing this letter, the Principal Investigator:

1. Agrees to abide by all terms and conditions outlined in this approval, and all restrictions and relevant regulations under 9 CFR Part 2 and NMFS Animal Care and Use Policy,

2. Acknowledges that the authority to conduct certain activities specified in this letter is conditional and subject to authorization and reviews by the NMFS Atlantic IACUC, and

3. Acknowledges that this approval does not relieve Permit Holders of the responsibility to comply with any other federal, state, local, or international laws or regulations.

MULLIN.KEITH.D.1365856504 Digitally signed by MULLIN.KEITH.D.1365856504 Date: 2020.08.14 12:03:57 -05'00'

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Keith Mullin Date

Principal Investigator

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

MAY 21 2019

MEMORANDUM FOR: The Record

FROM: for Amy Sloan
F/PR1 – Jolie Harrison
Chief, Permits and Conservation Division

SUBJECT: Categorical Exclusion for the Issuance of Scientific Research Permit No. 21938

ENCLOSURE: Status of the Species

NOAA Administrative Order (NAO) 216-6A requires all proposed projects to be reviewed with respect to environmental consequences on the human environment. This memorandum addresses the determination that the issuance of a scientific research permit qualifies to be categorically excluded from further National Environmental Policy Act (NEPA) review.

Proposed Federal Action

The National Marine Fisheries Service (NMFS) proposes to issue a scientific research permit under Section 10(a)(1)(A) of the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*); and Section 104 of the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1361 *et seq.*).

Description of Applicant's Scientific Research

1. The permit applicant is the NMFS Southeast Fisheries Science Center (SEFSC), Miami, Florida (Theophilus Brainerd, Ph.D., Responsible Party).

2. The permit will be valid for five years.

3. Target species and stocks: Up to 33 species of cetaceans may be taken during research (see Enclosure for complete list).

4. Location: Research may occur in U.S. and international waters of the western North Atlantic Ocean, Gulf of Mexico, and Caribbean Sea.

5. Duration: Research may occur year-round.

6. Objectives: The objectives of the research are to meet the mandates of the MMPA and ESA through the study of cetaceans to determine: (1) stock structure, size estimates, habitat, and geographic range; (2) movement, ranging patterns, and diving behavior; (3) vocalization patterns and the ambient acoustic environment; (4) reproductive status; (5)

types and origin of prey; (6) levels of anthropogenic chemical contaminants, and (7) behaviors to certain anthropogenic activities.

7. Methods: Cetaceans may be taken during vessel and aerial surveys, including manned and unmanned aircraft systems, for photo-identification, photogrammetry, above water and underwater photography and videography, behavioral observations, passive acoustic recordings, biological sampling (exhaled air, feces, sloughed skin, and skin and blubber biopsies), and tagging (suction-cup, dart/barb, and fully-implantable tags).

Applicable Categorical Exclusion

Based on the information presented in this document and the application, the issuance of a scientific research permit to the SEFSC for the taking of cetaceans is consistent with activities identified in categorical exclusion (CE) B1 and B2 and there are no extraordinary circumstances with the potential for significant environmental effects that would preclude the issuance of this scientific research permit from being categorically excluded. The following summarizes the relevant factors supporting a CE determination for this action.

Determination Summary

In determining whether a CE is appropriate for a given permit, NMFS considers the applicant's specified activity (applicant's action) and the potential extent and magnitude of "takes," including shifts at the population or species level, along with the extraordinary circumstances listed in the Companion Manual for the NAO 216-6A. The evaluation of whether extraordinary circumstances (if present) have the potential for significant environmental effects is limited to the decision NMFS is responsible for, which is issuance of a scientific research permit (NMFS' action). While there may be environmental effects associated with the underlying action, potential effects of NMFS' action are limited to those that would occur due to the authorization of "take" of animals[1]. NMFS prepared numerous Environmental Assessments (EAs) analyzing the environmental impacts of the categories of activities encompassed by CEs B1 and B2 which resulted in Findings of No Significant Impacts. These EAs demonstrate the issuance of a given permit does not affect other aspects of the human environment because the action only affects animals that are the subject of the permit. These EAs also addressed factors in 40 CFR 1508.27 regarding the potential for significant impacts and demonstrate the issuance of permits for the categories of activities encompassed by CEs B1 and B2 do not individually or cumulatively have a significant effect on the human environment. For these reasons, only circumstances which are present and relevant to the issuance of this scientific research permit are evaluated here.

1. <u>Extent and Magnitude of Directed Take</u>

The issuance of this scientific research permit authorizes take, by Level A and B harassment, of 33 cetacean species. The proposed research activities are expected to result in effects ranging

[1] In some cases, animals not intended as part of the proposed scientific research activities for which "take" will be authorized may have the potential to be present in a given research area. Therefore, NMFS considers target and non-target species or stocks and assesses potential effects associated with the scientific research for both target and non-target species or stocks.

from minor, short-term (recoverable) behavioral effects, to moderate effects on the individual animals that are the subject of the permit. For example, during vessel and aerial surveys cetaceans may exhibit signs of temporary disturbance, such as diving or moving away from the aircraft or vessel, but these behaviors would dissipate within minutes after the encounter.

Biopsy sampling cetaceans involves piercing the skin and would result in minor injury at the wound site with wounds healing within days to weeks of the event. Invasive tagging (including dart/barb and fully-implantable tags) of cetaceans may result in swelling, likely inflammation as part of a normal response to the presence of a foreign body, at the tag site during attachment. Dart/barb and fully-implantable tags are typically lost days to months to years after attachment. Transmitters may result in a minimal amount of increased drag while attached to the animal.

Fully-implantable tags that are longer than the blubber layer of the target species have the potential to penetrate deeply into the muscle layer and potentially into the body cavity. Even if the body cavity is not penetrated, fully-implantable tags embedded deeply in muscle tissue can cause trauma due to shearing forces (Moore and Zerbini 2017). The effects of fully-implantable tags that are longer than necessary could result in more severe impacts such as serious injury to a vital organ, increased risk of tag breakage, swelling, and an increased risk of infection in more vascularized tissues. Thus, PR1 will only authorize fully-implantable tags for species with a thick blubber layer and appropriate sized tags. PR1 will not authorize fully-implantable tags that penetrate deep into muscle tissue for species with thinner blubber layers such as Bryde's, minke, killer, and sei whales at this time. Previous design flaws of some types of fully-implantable tags for cetaceans have resulted in tag breakages after deployment. In some cases long term swelling and/or reduced calving rates for females are potential effects of fully-implantable tags, most likely as a result of tag breakage of obsolete tags (Gendron et al., 2015; Norman et al., 2017; Robbins et al., 2016). The fully-implantable tags proposed for use by the applicant have been redesigned to prevent tag breakage and the current designs have not been reported to break and cause long-term swelling or reproductive effects described above.

In 2016, a Southern Resident killer whale (L95) was determined upon expert review to have died as a result of a fungal infection secondary to a dart/barb tag. Several factors are suspected to have contributed to the death including the immunosuppressed state of animals in this population, the location of tag attachment, and improper field sterilization of the tag unit after a missed tag attempt. Due to past tag breakage and the L95 incident, permit conditions for invasive procedures have been revised and improved based on input from NMFS Office of Protected Resources scientists and veterinary medical officers to minimize the chance of a future occurrence. These include requirements for 1) post-tag monitoring to observe any adverse impacts or evidence of tag breakage, 2) sterilization of invasive equipment, and 3) the use of aseptic protocols. Because the permit would include these improved mitigation measures, NMFS does not expect the proposed tagging to result in serious injury or death of any target cetacean species. In addition, all the mitigation measures required by this permit are designed to minimize the potential for adverse impacts to the target species, including unintended consequences, such as mortality or serious injury to the individual animals. Therefore, authorizing take by Level A and B harassment is not expected to have adverse impacts to individual animals or the populations or species that are the subject of this permit.

The proposed research will take place in in U.S. and international waters of the western North Atlantic Ocean, Gulf of Mexico, and Caribbean Sea. Research would not occur in properties listed or eligible for listing on the National Register Historic Places or National Historic Landmarks. The study area includes the following National Marine Sanctuaries and Marine National Monuments:

- Florida Keys National Marine Sanctuary;
- Flower Garden Banks National Marine Sanctuary;
- Gray's Reef National Marine Sanctuary;
- NOAA's Monitor National Marine Sanctuary; and
- Buck Island Reef National Monument;
- Virgin Island Coral Reef National Monument.

The study area overlaps with critical habitat for North Atlantic right whales; green, hawksbill, leatherback, and loggerhead sea turtles; Atlantic and gulf sturgeon; smalltooth sawfish; elkhorn and staghorn coral; and Johnson's seagrass. However, cetacean research activities are only expected to impact the marine mammal species that are the subject of the permit. The presence of vessels for photography, behavioral observations, passive acoustic recordings, sampling, and tagging is only expected to affect individual animals. The research does not use nets that could alter, damage, or destroy physical habitat or cultural or historical resources. The action does not involve the consumptive use of any resources. We expect no adverse impacts to any of the specific primary constituent elements of designated critical habitat areas, since the activities are focused on the target animals. In addition, permit conditions include mitigation measures for how to avoid or minimize impacts to animals and habitat.

Interactions with other protected species in these areas, such as ESA-listed fishes and sea turtles are not expected because the permit includes mitigation measures to avoid or minimize effects to all protected species that may occur in the study area. Likewise, no effects to animals or habitats protected by the Magnuson-Stevens Conservation and Fisheries Management Act or the Migratory Bird Treaty Act are expected since the research is focused on marine mammals that are the subject of the permit.

Finally, the applicant is required to submit annual reports in which they must provide an accounting of the numbers of animals taken and NMFS tracks take numbers via the Authorizations and Permits for Protected Species database. Therefore, NMFS can modify this permit if there is reason to believe the aerial and vessel surveys involving behavioral observations, photography, biopsy sampling, and tagging is having or has the potential to have an adverse effect on the species or stock.

A summary of the status of the marine mammal species or stocks are listed in Enclosure 1 and additional information can be found in NMFS' Stock Assessment Reports, which are available at: http://www.nmfs.noaa.gov/pr/sars.

2. Other Relevant Factors

The issuance of this scientific research permit will not result in highly controversial environmental effects or result in environmental effects that are uncertain, unique or unknown because scientific research permits have been issued for similar research activities in the same location, for the same species using methods and procedures that employ generally accepted research standards and best management practices that have been tested, verified and approved. In addition, the type of proposed research for cetaceans is well-understood and documented; prior analysis demonstrates issuance of a scientific research permit only affects the animals that are the subject of the permit.

The issuance of this scientific research permit will not establish a precedent for future actions or represent a decision in principle about future actions with potentially significant environmental effects because NMFS' actions under MMPA Section 104 and ESA Section 10(a)(1)(A) are considered individually and is based on the best available scientific information, which is continuously evolving. Therefore, issuance of a scientific research permit to a specific individual or organization for a given activity does not guarantee or imply NMFS will authorize others to conduct similar activities. Subsequent requests for permits are evaluated upon their own merits relative to the criteria established in the MMPA and its implementing regulations (50 CFR 216) and ESA and its implementing regulations (50 CFR Part 222) on a case-by-case basis.

NMFS' compliance with environmental laws and regulations and Executive Orders (EOs) is based on NMFS' proposed action and the nature of the applicant's proposed research activities. Therefore, the Permits and Conservation Division consulted under Section 7 of the ESA to determine if the issuance of this scientific research permit would likely jeopardize the continued existence of listed species or result in an adverse modification of critical habitat. The consultation concluded that issuance of this permit would not jeopardize any listed species or adversely modify critical habitat. It is the applicant's responsibility to secure the necessary Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) permits for import and export, Federal Aviation Administration permits to fly UAS, Institutional Animal Care and Use Committee approvals, National Park special use permits, and permits to operate within or near National Marine Sanctuaries. There are no other environmental laws, regulations, EOs, consultations, federal permits or licenses applicable to NMFS for issuance of this scientific research permit to the SEFSC.

Literature Cited

Gendron, D., I. Martinez Serrano, A. Ugalde de la Cruz, J. Calambokidis, and B. Mate. 2015. Long-term individual sighting history database: an effective tool to monitor satellite tag effects on cetaceans. Endangered Species Research. 26:235-241.

Moore, M.J., and A.N. Zerbini. 2017. Dolphin blubber/axial muscle shear: implications for rigid trans-dermal intramuscular tracking tag trauma in whales. Journal of Experimental Biology. doi: 10.1242/jeb.165282.

Norman, S.A., K.R. Flynn, A.N. Zerbini, F.M.D. Gulland, M.J. Moore, S. Raverty, D.S. Rotstein, B.R. Mate, C. Hayslip, D. Gendron, R. Sears, A.B. Douglas, and J. Calambokidis. 2017. Assessment of wound healing of tagged gray (*Eschrichtius robustus*) and blue (*Balaenoptera musculus*) whales in the eastern North Pacific using long-term series of photographs. Marine Mammal Science. 33. http://doi.wiley.com/10.1111/mms.12443

Robbins, J., Andrews-Goff, V., Clapham, P., Double, M., Gales, N., Gulland, F., Kennedy, A., Landry, S., Mattila, D., Sandilands, D., Tackaberry, J. and Zerbini, A.N. 2016. Evaluating Potential Effects of Satellite Tagging in Large Whales: A Case Study with Gulf of Maine Humpback Whales. 100pp. Report to the National Fish and Wildlife Foundation for Grant #23318.

Enclosure 1: Status of marine mammal stocks or distinct population segments (DPS), minimum population, and Potential for Biological Removal (PBR). MMPA status = depleted (D), strategic (S), not strategic (NS), or undetermined (undet).

No.	Common Name	Stock or DPS	MMPA[2] and ESA Status	Minimum Population	PBR[3]
1	Atlantic spotted dolphin	Western North Atlantic stock	MMPA: NS ESA: not listed	31,610	316
2	Atlantic white-sided dolphin	Western North Atlantic stock	MMPA: NS ESA: not listed	30,403	304
3	Bottlenose dolphin	Western North Atlantic, offshore stock	MMPA: NS ESA: not listed	77,532	39.4
		Western North Atlantic Southern migratory coastal		2,353	23
		Western North Atlantic, Central Florida coastal		913	9.1
4	Clymene dolphin	Western North Atlantic stock	MMPA: NS ESA: not listed	Unknown	Unknown
5	Common dolphin short-beaked	Western North Atlantic stock	MMPA: NS ESA: not listed	55,690	557
6	Fraser's dolphin	Western North Atlantic stock	MMPA: NS ESA: not listed	Unknown	Unknown
7	Pantropical spotted dolphin	Western North Atlantic stock	MMPA: NS ESA: not listed	1,733	17
8	Risso's dolphin	Western North Atlantic stock	MMPA: NS ESA: not-listed	12,619	126
9	Rough-toothed dolphin	Western North Atlantic stock	MMPA: NS ESA: not-listed	271	1.3
10	Spinner dolphin	Western North Atlantic stock	MMPA: NS ESA: not listed	Unknown	Unknown
11	Striped dolphin	Western North Atlantic stock	MMPA: NS ESA: not-listed	42,804	428
12	Narwhal	Unidentified	MMPA: NS ESA: not listed	Unknown	Unknown
13	Porpoise, harbor	Gulf of Maine/Bay of Fundy	MMPA: NS ESA: not-listed	61,415	706

[2] Under the MMPA, the term "depletion" or "depleted" means any case in which (A) the Secretary, after consultation with the Marine Mammal Commission and the Committee of Scientific Advisors on Marine Mammals determines that a species or population stock is below its optimum sustainable population; (B) a State, to which authority for the conservation and management of a species or population stock is transferred under section 1379 of this title, determines that such species or stock is below its optimum sustainable population; or (C) a species or population stock is listed as an endangered species or a threatened species under the ESA.
The term "strategic stock" means a marine mammal stock (A) for which the level of direct human-caused mortality exceeds the potential biological removal level; (B) which, based on the best available scientific information, is declining and is likely to be listed as a threatened species under the ESA within the foreseeable future; or (C) which is listed as a threatened or endangered species under the ESA, or is designated as depleted under the MMPA.

[3] Potential biological removal level is defined in the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population.

No.	Common Name	Stock or DPS	MMPA[2] and ESA Status	Minimum Population	PBR[3]
14	Blainville's beaked whale	Western North Atlantic stock	MMPA: NS ESA: not listed	4,632	46
15	Blue whale	Western North Atlantic stock	MMPA: D, S ESA: Endangered	440	0.9
16	Bryde's whale	Gulf of Mexico subspecies	MMPA: S ESA: Endangered	33	0.03
17	Cuvier's beaked whale	Western North Atlantic stock	MMPA: NS ESA: not listed	5,021	50
18	Dwarf sperm whale	Western North Atlantic stock	MMPA: NS ESA: not-listed	2,598	26.0
19	False killer whale	Gulf of Mexico stock	MMPA: NS ESA: not-listed	Unknown	Undet
		Western North Atlantic stock		212	2.1
20	Fin whale	Western North Atlantic stock	MMPA: D, S ESA: Endangered	1,234	2.5
21	Gervais' beaked whale	Western North Atlantic stock	MMPA: NS ESA: not listed	4,632	46
22	Humpback whale	Cape Verde Islands/Northwest Africa DPS	MMPA: N/A ESA: Endangered	88	Unknown
		West Indies DPS	MMPA: N/A ESA: Not listed	10,400	
23	Killer whale	Western North Atlantic stock	MMPA: NS ESA: not-listed	Unknown	Unknown
		Gulf of Mexico stock		28	0.1
24	Melon-headed whale	Western North Atlantic stock	MMPA: NS ESA: not-listed	Unknown	Unknown
25	Minke whale	Canadian East Coast stock	MMPA: NS ESA: not-listed	16,199	162
26	North Atlantic right whale	Western North Atlantic stock	MMPA: S, D ESA: Endangered	455	1.4
27	Pilot whale, long-finned	Western North Atlantic stock	MMPA: NS ESA: not listed	3,464	35
28	Pilot whale, short-finned	Western North Atlantic stock	MMPA: NS ESA: not listed	15,913	159
29	Pygmy killer whale	Western North Atlantic stock	MMPA: S ESA: not listed	Unknown	Unknown
30	Pygmy sperm whale	Western North Atlantic stock	MMPA: NS ESA: not-listed	2,598	3.4
31	Sei whale	Nova Scotia stock	MMPA: S, D ESA: Endangered	236	0.5
32	Sperm whale	North Atlantic stock	MMPA: S, D ESA: Endangered	1,815	3.6
		Gulf of Mexico stock		560	1.1
33	True's beaked whale	Western North Atlantic stock	MMPA: NS ESA: not listed	4,632	46