



BILLING CODE 3510-22-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648-XG500

Marine Mammals; Administration of the National Inventory of Marine Mammals

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; request for comments.

SUMMARY: The Marine Mammal Protection Act of 1972 (MMPA) requires the National Marine Fisheries Service (NMFS) to establish and maintain an inventory of marine mammals in zoos and aquariums. The Office of Protected Resources maintains the inventory for marine mammals under NMFS' jurisdiction including cetaceans and pinnipeds [excluding walrus (*Odobenus rosmarus*)]. The MMPA requires that the holders of marine mammals in human care provide the inventory data. We propose to make our current database, the National Inventory of Marine Mammals (NIMM), accessible to holders of marine mammals for inventory reporting and to the public for access to the inventory data, which is regularly requested through the Freedom of Information Act (FOIA). NMFS is requesting public comment on proposed policies and procedures for the administration and maintenance of the online inventory database, NIMM, including maintenance of historical information, reporting births and stillbirths, reporting cause of death, and other administrative procedures for NIMM.

DATES: Comments must be received by 11:59 p.m. Eastern on April 16, 2019.

ADDRESSES: You may submit comments, identified by NOAA-NMFS-2019-0012, by any of the following methods:

- **Electronic Submission:** Submit electronic public comments via the Federal e-Rulemaking Portal www.regulations.gov. To submit comments via the e-Rulemaking Portal, enter NOAA-NMFS-2019-0012 in the keyword search. Locate the document you wish to comment on from the resulting list and click on the “Comment Now” icon on the right of that line.
- **Mail:** Comments on the application should be addressed to: Permits and Conservation Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13705, Silver Spring, MD 20910; ATTN: Jolie Harrison, Chief, Permits and Conservation Division.
- **Fax:** (301) 713-0376; ATTN: Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources.

Instructions: Comments must be submitted by one of the above methods. All comments received are a part of the public record and will generally be posted for public viewing on www.regulations.gov without change. All personal identifying information (e.g., name, address, etc.) submitted voluntarily by the sender will be publicly accessible. Do not submit confidential business information, or otherwise sensitive or protected information. NMFS will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous).

Attachments to electronic comments will be accepted in Microsoft Word, Excel, or Adobe PDF file formats only.

FOR FURTHER INFORMATION CONTACT: Amy Sloan, Amy.Sloan@noaa.gov, (301) 427-8401.

SUPPLEMENTARY INFORMATION:

Statutory Authority

Prior to 1994, inventory reporting was required as part of special exception permits issued under Section 104 of the MMPA (16 U.S.C. 1361 *et seq.*). These permits incorporated conditions associated with maintenance of marine mammals and required animal-specific inventory reporting (e.g., animal identifiers, sex, transports, births of progeny, and death); and, permit-specific data (e.g., permit number, collector, and location of collection or import). In 1994, the MMPA was amended to remove NMFS' (and the U.S. Fish and Wildlife Service's, or USFWS) jurisdiction over the handling, care, transport, and related reporting requirements for marine mammals held for public display purposes; this is now under the sole jurisdiction of the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) under the Animal Welfare Act of 1966 (7 U.S.C. 2131 *et seq.*) and its implementing regulations (9 CFR 3.100 to 3.118). The 1994 amendments added the requirement for NMFS (and USFWS) to establish and maintain a marine mammal inventory that includes information on individual marine mammals in human care for public display, or those transferred from public display for scientific research or enhancement purposes. Section 104(c)(10) of the MMPA requires holders (i.e., Owners¹ and Facilities²) report the following inventory data for each individual marine mammal:

- Animal name or other identification,
- Sex,
- Estimated or actual birth date,
- Date animal enters and leaves a collection,
- Source of the animal,

¹ Person or institution with legal custody of the animal.

² Physical location of the animal.

- Name of recipient,
- Whether the animal is from a stranding, and
- Date and cause of death (when determined).

In addition, section 104(c)(8) of the MMPA (also established in the 1994 amendments) requires marine mammal holders to report the birth of a marine mammal within 30 days of the birth. Owners and Facilities must also give notice 15 days before transferring ownership or physically transporting a marine mammal to another facility [MMPA sections 104(c)(2)(E) and 104(c)(8)(B)(i)(II)], and must verify the transfer or transport within 30 days of the event.

Currently, owners and facilities submit a form to report inventory changes (OMB No. 0648-0084; <https://www.fisheries.noaa.gov/national/marine-mammal-protection/national-inventory-marine-mammals>), and NMFS' Office of Protected Resources staff enters the inventory information into a database. The current web based platform, NIMM, was developed in 2014 to replace an outdated DOS-based system; data from the old system was migrated to NIMM. From August to November 2017, we made NIMM available online to zoos and aquariums to review and correct existing inventory data and to enter new data. During that time we recognized the need to clarify policies and procedures, as presented in this notice, and decided to take NIMM offline until we finalized these policies.

NIMM serves as the current data repository containing data obtained since 1972 and reflects the inventory reporting requirements outlined as part of permit conditions (pre-1994) and the inventory requirements required as a result of the 1994 amendments to the MMPA. The inventory data maintained by NMFS since 1972 are public information accessible via FOIA (5 U.S.C. 552).

We propose to make NIMM an accessible online system to 1) give marine mammal Owners and Facilities access rights to verify and correct their data and report inventory changes (in lieu of submitting a form for NMFS staff to enter), and 2) allow members of the public read-only access and the ability to download inventory reports from NIMM (in lieu of requesting information via FOIA).

Below we outline proposed policies and procedures for the use and administration of NIMM. Input received from the public will be considered prior to making NIMM available to holders and the public, and for updating the OMB 0648-0084 instructions for inventory reporting, which expire December 31, 2019. A separate **Federal Register** notice will be available during the process for renewing and updating the OMB 0648-0084 instructions.

Maintenance of Historical Data

We propose to continue to maintain historical data in NIMM as well as contemporary data. Holders (i.e., Owners and Facilities) would be able to correct historical data if errors were identified, including existing animal names, animal identification numbers (IDs), and other data. Names and IDs would not be deleted but could be updated independently of other actions and a history of name and ID changes would be maintained. For new data (e.g., births, transfers, and transports), holders must provide either an animal ID or name, but could chose to report both.

As mentioned above, historical data prior to 1994 was provided to NMFS as part of reporting conditions associated with special exception permits issued under Section 104 of the MMPA (for public display, scientific research, or enhancement). Data after the 1994 amendments was provided as required by the added section 104(c)(10) inventory requirements. NIMM is NMFS' record for all inventory data – past, present, and future.

As set out by Congress, the inventory tracks the history of individual marine mammals over time (e.g., when they are captured or born, when and to where they are transported) up to and after the death of that animal (i.e., cause of death must be reported “when determined,” which may be months depending on analyses performed). NMFS maintains associated hard copy and electronic records separate from NIMM, and the goal is to eliminate those duplicative records so that NIMM can be the official record in one electronic format. If historical information were removed from NIMM, it would no longer provide a complete history of the marine mammals subject to the inventory over time, and would defeat the purpose of having a publicly accessible database, as NMFS would still be required to perform hard copy searches for inventory data to respond to FOIA inquires.

Reporting Births and Stillbirths

We propose to clarify the requirements for reporting births and stillbirths for purposes of the inventory. As noted above, the MMPA requires that Owners and Facilities report births of progeny within 30 days after the birth. The Act does not explicitly address stillbirths. We propose that any offspring alive at the time of birth must be reported to the inventory regardless of how long it survives. Similarly, the death of such offspring, no matter how long it lives, must be reported. We believe that the intent of the inventory is to track animals over their lifetime because the inventory requires both birth and death information. We recognize the need to clarify for the purposes of NIMM, and are seeking public comment on, whether only live births should be reported to the inventory or if stillbirths should also be reported; and, whether and how they should be distinguished.

The definition of stillbirth is not consistently defined within zoological or veterinary scientific literature. Some marine mammal holders define stillbirths as when the fetus or neonate

dies before (i.e., late-term miscarriage), during, or within 24–48 hours after birth (e.g., Bergfelt *et al.* 2011). Marine mammal holders have also noted, though, that the majority of neonatal deaths [of bottlenose dolphins (*Tursiops truncatus*)] within the first 24 hours of life are primarily attributed to trauma from maternal or conspecific aggression (Sweeney *et al.* 2010). Studies of domesticated animals such as pigs (Alonso-Spilsbury *et al.* 2005) and cattle (Philipsson *et al.* 1998) reflect the perinatal definition of stillbirth. In dogs and cats, conversely, stillbirth has been defined as a full term neonate born dead (Lamm *et al.* 2012). Similarly, captive polar bears have been labeled as stillborn if listed by the breeding studbook as living 0.00 years (i.e., never alive) (Curry *et al.* 2015). Fetal deaths can occur during distinct gestational periods. Early term pregnancies that fail are either naturally aborted (miscarried) or reabsorbed into the body. NMFS recognizes that miscarriages occur naturally across mammalian taxa, including marine mammals. However, late-term fetuses are more likely to be born alive, especially with monitoring and care of the mother throughout the pregnancy. Immature neonates can be anticipated by following fetal maturation and growth using diagnostic ultrasound, thus, husbandry intervention opportunities may increase neonate survivorship (Sweeney *et al.* 2010).

Stillbirths and neonatal deaths have been under-reported to some marine mammal zoological studbook keepers (e.g., Curry *et al.* 2015, Mason 2010). Until now, NMFS has not explicitly defined birth and/or stillbirth for purposes of the inventory, and both have been reported inconsistently (Temte 1993). To provide clarity in MMPA inventory reporting requirements, we propose to define a birth as “the emergence of a living marine mammal from the body of its mother, regardless of how long it survives,” and stillbirth as “the emergence of a dead fetus from the body of its mother including late-term miscarriages.” We are seeking public

comment on these definitions and propose to standardize guidance for such inventory reporting after consideration of public comment on this topic.

Reporting Cause of Death

We propose to standardize cause of death reporting in NIMM as described in Table 1 below. Owners and Facilities may update existing data already in NIMM to conform to the proposed, two-tiered standardized reporting.

Cause of death data has not been reported consistently nor have we provided Owners and Facilities with clear guidance in the past. The electronic database previous to NIMM included only four categories associated with cause of death: “Euthanasia (life-threatening condition involving pain/suffering),” “Euthanasia (other),” “Premature/Stillbirth,” and “Other Cause.” The majority of data include “Other Cause,” which were reported via filling out a text field (post-1994) or providing necropsy reports (pre-1994). As a result, causes of death reported by Owners and Facilities have historically included various levels of detail. In an effort to standardize the reporting of deaths, we propose categories in lieu of *ad libitum* reports of death as provided in the text field.

We propose these standard categories as a two-tier system (below) that reflects the body system or circumstance of the cause of death (Tier 1) with the significant findings underlying that body system or circumstance (Tier 2). The following categories were developed in consultation with NMFS and APHIS veterinarians and the U.S. Marine Mammal Commission, and are reflective of comparable research that examines animal mortality trends (e.g., Grieg *et al.* 2005, Colgrove *et al.* 2005).

Table 1. Proposed standardized NIMM tiered categories for reporting for marine mammal primary causes of death.

Tier 1: Body System or Circumstance	Tier 2: Significant Findings * = Details must be provided
Cardiovascular	Cancer/Neoplastic - Metastatic; Cancer/Neoplastic – Primary; Congenital; Degenerative; Euthanasia; Infectious – Bacterial; Infectious – Fungal; Infectious – Viral; Inflammatory; Metabolic; Infectious - Parasitic; Toxic; Vascular; Other*
Dermatologic	Cancer/Neoplastic - Metastatic; Cancer/Neoplastic – Primary; Congenital; Degenerative; Euthanasia; Infectious – Bacterial; Infectious – Fungal; Infectious – Parasitic; Infectious – Viral; Inflammatory; Metabolic; Toxic; Vascular; Other*
Endocrine	Cancer/Neoplastic - Metastatic; Cancer/Neoplastic – Primary; Congenital; Degenerative; Euthanasia; Infectious – Bacterial; Infectious – Fungal; Infectious – Parasitic; Infectious – Viral; Inflammatory; Metabolic; Toxic; Vascular; Other*
External Factor	Adverse Drug Reaction; Anesthetic/Sedation Death; Drowning; Euthanasia; Husbandry Related; Hypothermia; Hyperthermia; Indeterminate; Transport Related; Other*
Gastrointestinal	Cancer/Neoplastic - Metastatic; Cancer/Neoplastic – Primary; Congenital; Degenerative; Euthanasia; Infectious – Bacterial; Infectious – Fungal; Infectious – Viral; Inflammatory; Metabolic; Infectious – Parasitic; Toxic; Vascular; Malnutrition; Foreign Body Ingestion/Impaction; Other*
Geriatric/Age-Related Death	Euthanasia*; Other*
Liver	Cancer/Neoplastic - Metastatic; Cancer/Neoplastic – Primary; Congenital; Degenerative; Euthanasia; Infectious – Bacterial; Infectious – Fungal; Infectious – Viral; Inflammatory; Metabolic; Infectious – Parasitic; Toxic; Vascular; Other*
Lymphatic	Cancer/Neoplastic - Metastatic; Cancer/Neoplastic – Primary; Congenital; Degenerative; Euthanasia; Infectious – Bacterial; Infectious – Fungal; Infectious - Parasitic; Infectious – Viral; Inflammatory; Metabolic; Toxic; Vascular; Other*
Musculoskeletal	Cancer/Neoplastic - Metastatic; Cancer/Neoplastic – Primary; Congenital; Degenerative; Euthanasia; Infectious – Bacterial; Infectious – Fungal; Infectious - Parasitic; Infectious – Viral; Inflammatory; Metabolic; Toxic; Vascular; Trauma/Serious Injury; Other*
Neurological	Cancer/Neoplastic - Metastatic; Cancer/Neoplastic – Primary; Congenital; Degenerative; Euthanasia; Infectious – Bacterial; Infectious – Fungal; Infectious – Viral; Inflammatory; Metabolic; Infectious – Parasitic; Toxic; Vascular; Other*

Tier 1: Body System or Circumstance	Tier 2: Significant Findings * = Details must be provided
Perinatal	Dystocia; Euthanasia; Failure to Thrive; Premature Death; Parental Neglect; Spontaneous Abortion; Other*
Reproductive	Cancer/Neoplastic - Metastatic; Cancer/Neoplastic – Primary; Congenital; Degenerative; Infectious – Bacterial; Infectious – Fungal; Infectious – Viral; Inflammatory; Metabolic; Infectious – Parasitic; Toxic; Vascular; Other*
Respiratory	Cancer/Neoplastic - Metastatic; Cancer/Neoplastic – Primary; Congenital; Degenerative; Euthanasia; Infectious – Bacterial; Infectious – Fungal; Infectious - Parasitic; Infectious – Viral; Inflammatory; Metabolic; Toxic; Vascular; Other*
Sepsis	Bacterial; Fungal; Viral; Parasitic; Other*
Trauma/Serious Injury	Exhibit Related; Human Inflicted; Interspecific; Conspecific/ Intraspecific; Natural Event; Parental Behavior; Self-Inflicted; Other*
Undetermined*	No secondary tier categories provided; additional details are required
Urogenital	Cancer/Neoplastic - Metastatic; Cancer/Neoplastic – Primary; Congenital; Degenerative; Euthanasia; Infectious – Bacterial; Infectious – Fungal; Infectious – Viral; Inflammatory; Metabolic; Infectious – Parasitic; Toxic; Vascular; Other*

The categories identified under each tier are meant to be broad and encompass the primary, or leading, cause of death for the animal. For the categories denoted by an asterisk (*), additional information would be reported in a text box to clarify the cause of death. Definitions and guidance for each category would be included in a User Guide for both Owners/Facilities and the public. We seek public comment on each of the Tier 1 and Tier 2 cause of death categories within Table 1 and will consider comments prior to finalizing our guidance. Specifically, we are interested in knowing if categories in either tier are missing, and if key information should be included when defining the Tier 2 categories.

Consistent with the 1998 Memorandum of Understanding (MOU) established between NMFS, USFWS, and APHIS, inventory information is available to and shared with APHIS. NMFS notifies APHIS when any changes to marine mammal collections, including deaths and

underlying causes, are reported. APHIS has discretion to follow-up directly with marine mammal facilities based on mortality information provided to the inventory.

Pending Transfers and Transports

We propose to utilize NIMM as a mechanism for Owners and Facilities to notify NMFS of pending transfers (change in ownership) and transports (physical change in location). The MMPA requires a 15-day prior notification of such actions under sections 104(c)(2)(E) and 104(c)(8)(B)(i)(II).

In some cases, proposed transfers and transports are never carried out for various reasons including identification of multiple animals for transport (only a select number are actually shipped), medical or behavioral considerations, and collection planning changes. Because the inventory is intended to reflect actual ownership and location data, pending transfers and transports would not be viewable to the public in NIMM until after they occur and have been confirmed by the receiving Owner/Facility. As is the case currently, pending notifications for transfer or transport could be requested through FOIA.

Owner and Facility Data Review/Verification and Data Disclaimer

We propose to provide Owners and Facilities the ability in NIMM to indicate for each of their animal records whether their data has been reviewed, updated, and verified using records in their possession. These review fields would enable Owners and Facilities the option to provide additional assurances regarding the quality of their data. The proposed Owner/Facility review fields include:

- **Data certified correct**– data has been reviewed and is correct, and/or errors were found and corrected by the Owner or Facility;

- **Data reviewed with errors** – data has been reviewed and errors have been identified but not corrected;
- **Data cannot be certified correct** – data has been reviewed but data cannot be confirmed correct (e.g., because the original records are no longer available); and
- **Data not reviewed** – the Owner or Facility indicates the data has not been reviewed for that animal, and thus, the accuracy of the data cannot be confirmed.

The review field would be left blank if no action has been taken by an Owner or Facility. Data submitted for inventory purposes in NIMM could not be provided by third parties or entered by NMFS from sources other than the marine mammal holders (e.g., websites or media/news releases); a marine mammal Owner or Facility must provide the data. However, information provided by third parties or found in the public domain may be submitted to Owners and Facilities for their review and appropriate action in compliance with the MMPA.

The inventory has gone through numerous data migrations and we acknowledge errors may exist. This may be particularly true for historical data where data cannot be recovered or verified (e.g., for facilities that no longer exist). In addition to providing users an option to indicate the accuracy of their data, we propose a disclaimer regarding the integrity of the NIMM inventory data as follows: “The data in NIMM, going back to 1972, has gone through numerous database migrations and errors may exist. There may be data that cannot be recovered or verified. NMFS relies on data self-reported by marine mammal Owners and Facilities. NMFS cannot provide any guarantee as to the accuracy, reliability, or completeness of information.”

Request for Comments and Other Information

NMFS requests substantive comments and information regarding the above-proposed policies and procedures for implementing NIMM. We request that comments be specific and

supported by scientific literature where appropriate to inform our decision-making. Comments must be received by 11:59 p.m. on April 16, 2019, to be considered.

References

Agreement among the National Marine Fisheries Service, NOAA, U.S. Department of Commerce; Fish and Wildlife Service, U.S. Department of the Interior; and APHIS, USDA (July 21, 1998).

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Dated: February 12, 2019.

Donna S. Wieting,

Director,

Office of Protected Resources,

National Marine Fisheries Service.

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