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Virginia Sea Turtle & Marine Mammal Stranding Network 2024 Grant Report

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Virginia Sea Turtle and Marine Mammal Stranding Network 2024 Grant Report

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The mission of the Virginia Aquarium & Marine Science Center is to inspire conservation of the marine environment through education, research, and sustainable practices. The Aquarium is operated by the City of Virginia Beach in cooperation with the Virginia Aquarium Foundation (VAQF). With primary support from the VAQF, the Virginia Aquarium's Stranding Response Program is dedicated to conservation of marine animal species through stranding response, research, rehabilitation, and education.

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Introduction

All marine mammals and sea turtles are designated as protected species by the Marine Mammal Protection Act (1972) and/or the Endangered Species Act (1973). The Virginia Aquarium & Marine Science Center's Stranding Response Program (VAQS) holds permits and authorizations from state and federal agencies for all activities in this report related to marine mammal and sea turtle stranding response, rehabilitation, and research. VAQS has been documenting marine mammal and sea turtle strandings (more than 10,500) in Virginia since 1987. The Virginia Aquarium facilities are located in Virginia Beach, VA, and include the Darden Marine Animal Conservation Center that houses the Stranding Response Program facilities and rehabilitation area. As of 2024, VAQS documents all marine mammal and sea turtle strandings throughout Virginia and coordinates the Virginia Sea Turtle Stranding and Salvage Network (STSSN). All state sea turtle and marine mammal stranding data are maintained by VAQS in the state database and contribute to national stranding databases. For the purposes of this report, VAQS defines stranding events as any time a marine mammal or sea turtle washes ashore sick, injured, or dead, and/or any time they become entrapped or entangled and are unable to return to their natural habitats without assistance.

The Stranding Response Program was formalized in 1991, and utilizes staff, volunteers, and cooperating organizations to report, record, document, recover, examine, and/or rehabilitate stranded animals. The organization and training of primary responders is crucial to the stranding network. Rapid response to strandings can result in the rescue of live animals and the collection of valuable data from dead animals that may otherwise be lost due to decomposition and/or scavenging. VAQS staff provide training programs for approximately 80 volunteers and personnel from cooperating agencies and organizations. Instruction in biology, ecology, and both live and dead stranding response protocols are provided for marine mammal and sea turtle species found in Virginia. These cooperative training efforts have included the U.S. Coast Guard, The Nature Conservancy, Virginia Marine Resources Commission, Virginia Department of Wildlife Resources (VDWR), Virginia Institute of Marine Science (VIMS), state parks, national wildlife refuges, regional law enforcement authorities, and lifeguards. As a result of these long-standing efforts, VAQS maintains and strives to continually improve the statewide marine animal stranding response network.

Marine mammal groups and species found in Virginia include cetaceans (dolphins, porpoises, and whales), phocids (seals), and sirenians (manatees) (Appendix III: List of Species Stranded in Virginia). Marine mammal strandings occur in all months of the year. During the 1990s, Virginia averaged 63 marine mammal strandings per year with a high of 106 in 1994. Since then, stranding numbers have increased dramatically. For the years 2000-2024, Virginia has averaged ~100 marine mammal strandings per year (Figure 1). This increased stranding rate

could represent increased marine mammal mortalities but may also reflect the increased efforts and public familiarity of the state-wide stranding response program and data collection. The historic record total of 427 strandings in 2013 resulted from a bottlenose dolphin unusual mortality event (UME) caused by a morbillivirus outbreak and was not included in the averages described above.

It is important for organizations such as VAQS to examine stranded marine mammals because these species are very challenging to study in the wild. Incident and mortality rates, probable causes of mortalities, human interactions, and other trends, are often monitored through stranding records. Strandings also provide a rare opportunity to thoroughly examine many marine mammal species for which there is little known about their natural history and physiology, or the diseases and pathologies present within populations over space and time. In some species, such as pygmy/dwarf sperm whales and beaked whales, data collected from stranded animals provides the best or only information available on their natural history. Stranding records can represent viable measures of the biological diversity and the spatial and temporal changes that are occurring in adjacent waters, especially when long-term datasets are developed and maintained. In addition, stranding data can indicate seasonal trends in presence and suggest areas of high concentrations of marine mammal species. Spatial and temporal trends in marine mammal mortalities, such as those caused by unusual mortality events and/or fisheries interactions, can also be monitored from stranding records, and these records are often used in federal stock assessment reports and take reduction planning.

Five species of sea turtles (loggerhead, Kemp's ridley, leatherback, green, and hawksbill) have been recorded in Virginia (Appendix III: List of Species Stranded in Virginia). Sea turtle strandings occur primarily in the late spring, summer, and fall. VAQS responded to an average of 86 sea turtle strandings per year during the 1990s. Since then, sea turtle strandings have also increased dramatically. From 2000 to present, Virginia has recorded nearly 7,000 live and dead sea turtle strandings, with an average of 277 per year for the last ten years (2015-2024). Data are recorded for all strandings, and necropsies are performed on many stranded carcasses. When applicable, live stranded sea turtles recovered by VAQS rehabilitated at the Darden Marine Animal Conservation Center (DMACC). Sea turtle stranding trends, including probable causes of mortalities, are monitored through stranding records. Similarly to marine mammals, sea turtle stranding data, such as demographic trends and instances of human interaction, are reported to inform stock assessment reports and state and federal regulatory actions.

In addition to strandings, a small number of sea turtles nest on Virginia beaches each year. These are primarily loggerheads, though green and Kemp's ridley sea turtles have been recorded nesting in Virginia. VAQS participates in the nesting beach monitoring program in the city of Virginia Beach with the U.S. Fish and Wildlife Service, Back Bay National Wildlife Refuge,

and Virginia Department of Wildlife Resources. In 2024, there were no sea turtle nests in VAQS' monitoring regions.

In addition to day-to-day stranding response, necropsy, and rehabilitation efforts, VAQS conducts and contributes to marine mammal and sea turtle research projects. Examples include, participation in photo-identification programs, providing archived and recent samples for genetic testing, infectious diseases screening, biotoxin analysis, and other biological testing. Marine mammal and sea turtle entanglement and human interaction-based research continues at VAQS and with external collaborators. VAQS is also conducting ongoing research regarding surveillance of diseases in local marine mammal and sea turtle populations, as well as wound vitality in marine mammals.

VAQS staff present the results of their research and data collection efforts at national and regional workshops, at professional meetings, and in numerous publications (Appendix I: Professional and Education Activities). In addition, VAQS activities have been presented to more than 16 million people through innovative Aquarium exhibits and public programs. Staff and volunteers present educational programs for the public related to stranding events and provide outreach throughout the year during active stranding response efforts. On a continual basis, staff both gain and provide valuable experience in rehabilitation, response, and necropsy by cross-training and working with staff from other stranding network organizations. Finally, public and private organizations conducting natural resource surveys and environmental assessments routinely utilize the VAQS stranding database and expertise for information regarding protected species in Virginia.

Stranding Response Methods

When examining dead stranded marine mammals and sea turtles, VAQS follows data collection protocols developed by NMFS (Appendix II: Stranding Network Datasheets) and by VAQS staff. For marine mammals, Level A data are collected on all strandings and recorded in the state and national marine mammal stranding databases. Level A data include:

- observer
- date
- location
- species
- total body length
- sex
- condition
- weight
- findings of human interaction*
- sample collection and dissemination
- carcass disposition

*Findings of human interaction consist of signs on a carcass that the animal had previously interacted with humans or human activities, sometimes resulting in injuries and/or the death of the animal. The most common types of human interactions identified in Virginia

are fishery entanglements, vessel strikes, and marine debris ingestion. Special data collection protocols and forms have been developed by VAQS for assessing human interactions in marine mammal and sea turtle strandings.

More involved level B and C data are also recorded when appropriate. The information is collected utilizing specialized data sheets and are often shared with other collaborating research organizations. These higher-level data sets can include:

- age class
- extensive body measurements
- descriptions and photographs of external & internal appearance
- parasite and pathology occurrence
- stomach contents
- reproductive status
- genetic information
- tissue contaminant levels
- information for specific research projects

Sea turtle data are collected similarly to marine mammals, using forms created by the STSSN (See STSSN data sheet in Appendix II: Stranding Network Datasheets) and VAQS staff. In addition to the Level A, B, and C data listed above, VAQS also examines sea turtle carcasses for several types of tags, including flipper, PIT, satellite, and acoustic tags, some of which require specialized equipment to be detected. If tags are found, they are regularly reported to NMFS and the Cooperative Marine Turtle Tagging Program.

In order to provide timely, accurate, and usable information, VAQS compiles and curates these data in a relational database. The available computer system, database, and software allow for analytical study of the data, including GIS mapping. When combined with the extensive VAQS photo and video catalogs, the long-term marine mammal stranding database can be an invaluable tool for scientists, natural resource managers, and other state and federal agencies.

In addition to dead strandings, VAQS responds to live marine mammals and sea turtles each year. Live stranding response is quite different from responding to dead animals. While time is important when responding to a fresh dead stranding, timely response is crucial to the welfare and survivability of live stranded animals. The level and type of response depends on the animal and circumstance; however, once a live stranding is confirmed, staff and volunteers mobilize and respond as quickly as possible.

Sick, injured, or single stranded cetaceans (whales, dolphins, porpoises) in this region are generally either logistically impossible to translocate or are unsuitable candidates for

refloating or rehabilitation and humane euthanasia is indicated. Stranded phocids (seals), that are candidates for rehabilitation may be transported in dry containers to the DMACC where VAQS currently operates a seal triage room. Seals are admitted for assessment and short-term stabilization before being transported to a longer-term rehabilitation facility. VAQS also responds to or assists with live marine mammal emergencies in neighboring states.

Similarly, to marine mammals, once a live sea turtle stranding is confirmed, staff and volunteers respond as quickly as possible. Live stranded sea turtles that are candidates for rehabilitation are brought to the DMACC where they are treated for life-threatening conditions. This facility includes a specialized sea turtle rehabilitation hospital that accommodates a current annual average of >70 turtles for rehabilitation. Turtles are also transferred from organizations in other states to the DMACC for care or for specialized procedures in which VAQS staff are experienced. At the peak of the 2024 stranding season, the DMACC hospital housed over 20 critically ill sea turtles at one time.

Discussion of 2024 Stranding Data

Marine Mammals

A total of 109 marine mammal strandings were recorded during 2024 (Table 1). In the past ten years, the number of marine mammal strandings has varied from a low of 77 (2021) to a high of 116 (2019) (Figure 1). Temporally, marine mammal strandings occur in all months of the year, but numbers typically decrease in late fall and winter. In 2024, only nine of the 109 marine mammal strandings occurred after September. Some marine mammal species (*i.e.* large whales, harbor porpoises, common dolphins and seals) tend to strand seasonally, while others (*i.e.* bottlenose dolphins) can occur at any time of the year (Figure 2), with peaks occurring in spring and summer. Spatially, marine mammal strandings tend to occur throughout Virginia's ocean and bay waters, but most commonly along Virginia's Eastern Shore, the southern shore of the Chesapeake Bay, and the southern Atlantic coast. Strandings in 2024 followed those patterns with the majority of strandings occurring in Virginia Beach and Norfolk counties. (Figure 3). The Virginia stranding database is very diverse and now includes 32 species (Appendix III: List of Species Stranded in Virginia). Bottlenose dolphins, however, are the most commonly sighted marine mammal in Virginia waters, as well as the most commonly stranded species. In 2024, bottlenose dolphin strandings occurred in every month of the year except March and December, and comprised 75% of total marine mammal strandings, which is on par with recent averages. Sex was determined for 44 bottlenose dolphins with a ratio of 16 females and 28 males. The male bias may be explained by the fact that male reproductive organs can often be visualized more easily in photographs from reporting parties in cases when an external examination is not possible.

Marine mammals are divided into data groups based on species/taxonomy for analyses and total stranding numbers include both live and dead stranded animals. These data groups for 2024 include: 1 – bottlenose dolphins, 2 – large whales (represented this year by minke, humpback, unidentified balaenopterid, and North Atlantic right whales), 3 – common dolphins, 4 – Kogiid/Ziphiids (represented this year by a dwarf sperm whale), 5 – delphinids that could not be identified to species, 6 – phocids (represented this year by harp and gray seals), 7 – small cetaceans that could not be identified to species, and 8 – harbor porpoises. Unique, less common marine mammal species that stranded in 2024 included a dwarf sperm whale, of which only 16 have been documented in Virginia since 1990. Also in this category is a single harbor porpoise stranding. Harbor porpoise strandings were documented yearly since the VAQS program began operating in 1988 until 2019. Since then, harbor porpoise strandings have dwindled, with one documented stranding in 2022 and one in 2024.

In 2024, Virginia had 11 documented live marine mammal strandings (Table 2). These included a free-swimming entangled humpback whale, five bottlenose dolphins, a common dolphin, a juvenile harp seal, and three gray seals. Two live seals were recovered and admitted for medical assessment. The first was a juvenile gray seal that was treated and stabilized at the DMACC. The animal was transported to the National Aquarium for rehabilitation and was subsequently released. The second was the juvenile harp seal that was humanely euthanized due to rapidly declining condition and moribund state.

Of the deceased marine mammals that were moderately decomposed or fresher (n=79), signs of human interaction were positively documented in 13% (n=10), were not present in 1% (n=1), and could not be determined in 86% (n=68). Four additional live marine mammal cases were positive for human interaction. Of the 14 human interaction cases, nine showed evidence of either chronic or acute entanglement, one showed evidence of post-stranding mutilation, one experienced harassment by members of the public, one was entrapped in a pound net head, one had evidence of a lethal vessel strike, and one had a postmortem interaction with a fishing hook.

Large whales

Large whales strand in Virginia on an annual basis. With the exception of the sperm whale, large whales are typically baleen whales such as humpback and minke whales, and include endangered species such as the fin, sei, and North Atlantic right whales. Large whale strandings often bear a heavy logistical burden and require extensive collaboration, often with law enforcement, municipalities, stranding network partners from other regions, and natural resource organizations. In the event of a large whale stranding, VAQS follows protocols for

euthanasia and post-mortem examination, whenever applicable, developed in part by previous VAQS staff.

An average of two large whale strandings occurred in Virginia between 1991 and 2015. Starting in 2016, Unusual Mortality Events (UMEs) were declared by NOAA Fisheries for multiple species due to the high number of strandings throughout the northeast region. Since then, an average of 7 large whales have stranded each year (Figure 4) in Virginia, with eight large whale strandings occurring in 2024. These included a species diversity of humpback (n=4), minke (n=2), and North Atlantic right (n=1) whales, and one baleen whale that could not be identified to species. The most notable large whale stranding in 2024 was a critically endangered North Atlantic right whale, which exhibited evidence of blunt trauma, consistent with a vessel interaction. This was a particularly impactful to the dwindling population, as this whale was a reproductively active female with a maternally dependent calf. The logistics associated with the examination and necropsy of these animals requires specialized equipment, extensive hours, and a large work force of volunteers, staff, and collaborators. High level skill, experience, and personnel expertise is needed to manage and safely conduct the landing, towing, and necropsy of large whales.

Sea Turtles

There was an above average number of sea turtle strandings (352) in Virginia in 2024 (preliminary data; Table 2, Table 3, Figure 5). Since 2000, Virginia has experienced both extremely high (531 in 2003) and relatively low (173 in 2011) numbers of sea turtle strandings, with an average of 277 strandings per year over the previous ten years. The number of sea turtle strandings in 2024 was the highest since 2004. Sea turtle strandings typically peak in the late spring/early summer, as was the case in 2024 (Figure 6). The month of May saw more strandings than any other month with 74 (21% of the yearly total) strandings. During 2024, 5 sea turtle strandings were documented by stranding network cooperators from the Virginia Department of Wildlife Resources, Chincoteague National Wildlife Refuge, The Nature Conservancy, and the US Army Corp of Engineers.

Loggerheads (n=120 in 2024) are historically the most common sea turtle species to strand in Virginia. However, Kemp's ridleys had the highest species stranding number (n= 123) in 2024. Green turtles continued to strand in Virginia in higher numbers than historic averages. The most recent ten-year average (2014-2023) of stranded green turtles in Virginia was 30 per year, whereas the previous ten-year average (2004-2013) was only eight. The number of stranded green turtles in 2024 was the highest ever recorded in Virginia (n=88). Sea turtle strandings in 2024 also included six leatherback turtles and 15 turtles that could not be identified to species. The distribution of strandings was primarily along the southern eastern

shore, southern ocean-facing beaches, and lower bay shorelines, as has been typical in previous years (Figure 7).

VAQS has continued to prioritize the recognition and documentation of human interaction in dead stranded sea turtles. In 2024, signs of human interaction were positively documented in 41% of cases (n=145), were not present in 9% (n=32), and could not be determined in 50% (n=175). These proportions are similar to recent years' data. Documentation of some types of human interaction, most notably evidence of entanglements, can be more challenging to assess in sea turtles due to their hard shells and keratinized skin. Additionally, decomposition often precludes a thorough human interaction evaluation, and some carcasses are inaccessible for examination. For carcasses that are fresh and/or intact enough to conduct thorough necropsies, anthropogenic injuries such as vessel, dredge, or entanglement lesions are thoroughly investigated. Necropsies of stranded turtles sometimes reveal internal signs of human interaction in the form of fishing lures, hooks, line and plastic debris in the gastrointestinal tract. In 2024, two turtles had ingested plastic that was discovered upon necropsy.

Cause of stranding/death could be determined in 214 turtles (61% of total turtle strandings), with 140 (66%) of those as human induced strandings and 73 (34%) as naturally caused strandings. Human induced strandings were primarily incidental captures via recreational hook and line gear (n=73, 52%) and turtles with acute anthropogenic trauma from watercraft vessel strike (n=57), dredge (n=1), or unknown source (n=3). Other human causes of stranding included entanglement in pot/buoy gear (n=3), gillnet gear (n=2), and unknown thin line material (n=1). Naturally caused strandings consisted primarily of cold stunning cases (n= 64, 88%), but also included cases of infection/disease (n=3), chronic debilitation (n=2), tidal stranding (n=1), and unknown mechanism (n=3). This year brought the highest number of cold stunned turtles in Virginia to date. Performance of high-quality necropsy examinations continues to aid in the determination of cause of stranding/death in many cases.

Live Strandings and Rehabilitation

This year's number of live stranded sea turtles (n=118) was the highest ever recorded in Virginia since this record-keeping began in 1988 (Figure 8). This is an almost 30% increase from the previous highest live strandings record in 2022 (n=93). These turtles included 61 Kemp's ridleys, 24 greens, 19 loggerheads, 2 leatherbacks, and 12 of unidentified species (Table 4). The most common cause of stranding for live stranded turtles was incidental capture via recreational hook and line (n=73).

Of the 118 turtles that stranded alive, 93 (79%) were able to be recovered for rehabilitation. This included: 69 rehabilitated and released by VAQS, 13 still undergoing

rehabilitation at VAQS (all of which are cold stunned turtles from the end of 2024), and 11 that died during rehabilitation. Several of the turtles that died during rehabilitation were moribund, nonresponsive, cold stunned turtles who did not respond to emergency intervention. In addition, 4 sea turtles that stranded in Virginia or were transferred to VAQS in 2023 for rehabilitation were released in 2024 after successful rehabilitation.

VAQS Activities During 2024

Throughout 2024, VAQS staff participated in numerous educational and professional activities. One of the largest of these endeavors was centered on training volunteers and cooperators. VAQS continued to grow a robust volunteer program, with approximately 80 program volunteers involved in tasks such as daily husbandry, stranding response, sea turtle nest patrols, and after-hours responses. This year, volunteers logged almost 16,000 hours supporting VAQS' operations. Many of these hours were served as on-call shifts in the effort to be prepared for a variety of response scenarios throughout the year. Training participants for these roles within the program require both initial and ongoing trainings conducted by staff (see Appendix I: Professional and Education Activities for more details). Additionally, VAQS benefits from cooperators trained to gather information on their behalf and/or assist staff during stranding events. In 2024, emphasis was placed on developing communication streams and training materials for cooperators with on-water resources to assist with initial stranding verification, large whale events, and other logistically challenging field conditions.

In addition to volunteers and cooperators, VAQS maintains a robust intern and fellow program focused on training the next generations of undergraduate and graduate students. Trainings for students focused on sea turtle and marine mammal biology, ecology, and stranding response and rehabilitation protocols. In 2024, VAQS hosted one post-graduate fellow to complete a research project under the mentorship of VAQS staff for six months. The result of this project, utilizing diagnostic test results to assessing disease prevalence in stranded marine mammals, has been accepted for a poster presentation at an upcoming international veterinary conference.

Outreach and other education opportunities were also provided throughout the year by VAQS staff. In-person necropsy and rehabilitation demonstrations were held for undergraduate student groups. A veterinary student lecture was given by a VAQS veterinarian for a sea turtle medicine course. Outreach and public education also occur during every field response activity, where both staff and volunteers optimizing these interactions to share knowledge and increase awareness of marine animal strandings and conservation issues.

VAQS staff participated in regional conferences and meetings while gaining valuable experience and exposure to a wide range of topics. In April, one staff member attended the

Southeast and Mid-Atlantic Marine Mammal Conference. In September, four VAQS staff attended the annual Greater Atlantic Regional Stranding Consortium Conference, which was held virtually. This was a five-day event that included a regional Consortium meeting, regional marine mammal and sea turtle business meetings, and topic-specific business meetings with federal permitting agencies. Location of attendees ranged from Florida to Maine, including staff and volunteers from rehabilitation and response organizations, as well as staff from NOAA Fisheries and US Fish and Wildlife Service.

VAQS staff continue to provide valuable data and leadership roles to external working groups. Multiple team members participated in the monthly Greater Atlantic Regional Stranding (GARS) Consortium meetings. Two of the VAQS staff were active members in steering committees for the GARS Consortium and the AZA Sea Turtle SAFE Program. As the region remains involved in multiple federally managed marine mammal unusual mortality events (UME), VAQS staff participate as stranding network liaisons within UME teams. One staff member participated in a review panel for proposed changes to national documentation and data reporting requirements and forms. VAQS also contributed to and reviewed state-wide sea turtle and marine mammal conservation plans.

A complete list of all professional, educational, and training activities is included in Appendix I: Professional and Education Activities.

Summary

The total sea turtle strandings in 2022 and 2023 (325 and 284) were higher than the previous ten-year annual average (277), and 2024 brought the highest number of sea turtle strandings (352) in Virginia since 2004. The incident of live stranded sea turtles (118), especially those with stranding due to incidental capture via recreational fishing (73) were also higher than previous records. The Kemp's ridley stranding numbers were highest by species this year for both total strandings (123), and live stranded cases (61), which is notable as they are one of the most critically endangered sea turtles. Continued monitoring of Virginia sea turtle strandings in the future will provide valuable information to help understand the causes of these strandings and whether changing numbers represent a significant and predictable trend or fluctuating temporary changes.

The total number of marine mammal strandings in 2024 (109) was within normal limits. Overall temporal and geographic stranding trends were also similar to observed historic trends. However, since 2016 the number of large whale strandings has drastically increased, and 8 large whales were documented in Virginia during 2024. The associated examinations and necropsies of these animals, especially that of the critically endangered North Atlantic right whale, highlight the strong need for funding support. Proper investigation of large whale

strandings is often expensive to complete and requires highly skilled personnel and extensive logistical planning. Though bottlenose dolphins were the most commonly stranded species in 2024 (75% of strandings), other more rare species and age classes for this region were also documented, including a dwarf sperm whale and multiple adult seals. Eleven live-stranded marine mammals were documented throughout the year.

VAQS continues to expertly monitor stranded marine mammals and sea turtles for signs of human interaction. In 2024, 14 marine mammals and 145 sea turtles exhibited evidence of human interaction, the most common of which were interactions with fishing gear (8 marine mammals, 73 sea turtles).

Data collected and curated by VAQS continues to be critical to the long-term monitoring efforts for sea turtle and marine mammal populations in the mid-Atlantic region. Financial support from CZM and other federal grants is critically important for VAQS' continued operations; however, all combined state and federal funding sources represent significantly less than the actual cost of sea turtle and marine mammal stranding response activities in Virginia. The remainder is currently supplemented through private donations and institutional support from the Virginia Aquarium & Marine Science Center. Most funding sources are competitive in nature, require lengthy application and reporting mandates, and depend on unstable and variable annual appropriations. There is a strong need to secure consistent and dependable funding to continue operations and maintain the skilled and experienced staff vital to stranding response, rehabilitation, necropsy, data collection, and scientific investigation.

The Virginia Aquarium Stranding Response Program remains committed to providing the valuable service of documenting the strandings of protected marine mammals and sea turtles in Virginia. However, the scope and regional expanse of these efforts will likely need to be reduced in the future unless there is an increase in funding and operational support. We are hopeful that the value and importance of the data collected will be recognized and supported, so as to ensure it is available for use by state and federal agencies for the protection efforts of marine mammals and sea turtles.

Tables

Table 1: Marine mammal strandings in Virginia during 2024, n=109. Notes: length measured in centimeters and some lengths are estimated; F=female, M=male, U=unknown sex.

Field Number	Strand Date	Common Name	County	Latitude	Longitude	Condition	Sex	Length
VAQS20241001	1/2/2024	Dwarf sperm whale	Virginia Beach	36.91333	-76.0766	dead	M	185.20
VAQS20241002	1/10/2024	Bottlenose dolphin	Virginia Beach	36.92611	-76.0028	dead	U	ND
VAQS20241003	2/18/2024	Bottlenose dolphin	Virginia Beach	36.84354	-75.9717	live	U	ND
VAQS20241005	2/21/2024	Bottlenose dolphin	Virginia Beach	36.91028	-76.0872	dead	F	274.00
VAQS20241004	2/21/2024	Gray seal	Virginia Beach	36.73885	-75.9402	live	F	90.00
VAQS20241006	2/22/2024	Bottlenose dolphin	Virginia Beach	36.87575	-75.981	dead	M	214.00
VAQS20241007	2/24/2024	Bottlenose dolphin	Virginia Beach	36.90828	-75.9888	dead	U	ND
VAQS20241008	2/29/2024	Humpback whale	EEZ (Virginia Beach)	36.98733	-75.7794	dead	M	964.00
VAQS20241009	2/29/2024	Bottlenose dolphin	Mathews	37.42452	-76.2513	dead	U	ND
VAQS20241010	3/3/2024	Humpback whale	Virginia Beach	36.81912	-75.9058	dead	M	875.00
VAQS20241011	3/6/2024	Common dolphin (short-beaked)	Virginia Beach	36.60023	-75.8792	dead	U	180.00
VAQS20241012	3/11/2024	Common dolphin (short-beaked)	Virginia Beach	36.6062	-75.8807	live	F	203.00
VAQS20241013	3/16/2024	Minke whale	Accomack	37.85704	-75.4589	dead	F	556.00
VAQS20241014	3/30/2024	Northern right whale	EEZ (Virginia Beach)	36.65654	-75.0744	dead	F	ND
VAQS20241015	3/31/2024	Harp seal	Virginia Beach	36.91122	-76.1042	live	M	100.00
VAQS20241016	4/7/2024	Bottlenose dolphin	Accomack	37.21652	-76.0123	dead	U	ND
VAQS20241017	4/7/2024	Harbor porpoise	Virginia Beach	36.926	-76.002	dead	M	154.00
VAQS20241018	4/10/2024	Bottlenose dolphin	Accomack	37.82111	-75.4998	dead	M	204.50
VAQS20241019	4/12/2024	Bottlenose dolphin	Virginia Beach	36.89324	-75.9852	dead	M	189.60
VAQS20241020	4/15/2024	Bottlenose dolphin	Accomack	37.74689	-75.8133	dead	U	ND
VAQS20241021	4/15/2024	Gray seal	Northampton	37.18659	-75.8297	live	U	ND
VAQS20241022	4/15/2024	Bottlenose dolphin	Norfolk	36.927	-76.3379	dead	U	ND
VAQS20241023	4/17/2024	Unidentified delphinid	King William	37.57036	-76.9221	dead	U	ND

VAQS20241024	4/22/2024	Gray seal	Accomack	37.8568	-75.4001	dead	U	ND
VAQS20241025	4/22/2024	Harp seal	Accomack	37.86	-75.3997	dead	M	ND
VAQS20241026	4/23/2024	Bottlenose dolphin	Northampton	37.2656	-76.0267	dead	M	ND
VAQS20241027	4/23/2024	Gray seal	Accomack	37.87457	-75.3543	dead	U	ND
VAQS20241028	4/24/2024	Bottlenose dolphin	Northampton	37.25592	-76.0245	dead	F	247.00
VAQS20241029	4/27/2024	Bottlenose dolphin	Northumberland	37.82278	-76.2631	dead	F	ND
VAQS20241030	5/2/2024	Bottlenose dolphin	Hampton	37.00419	-76.3022	dead	F	173.00
VAQS20241035	5/3/2024	Gray seal	Accomack	37.85658	-75.4596	dead	U	ND
VAQS20241031	5/4/2024	Bottlenose dolphin	Norfolk	36.96822	-76.2775	dead	U	ND
VAQS20241032	5/6/2024	Common dolphin (short-beaked)	Accomack	37.92198	-75.3208	dead	M	213.00
VAQS20241033	5/7/2024	Bottlenose dolphin	Northampton	37.18088	-75.8368	dead	U	ND
VAQS20241034	5/7/2024	Bottlenose dolphin	Norfolk	36.90362	-76.323	dead	M	ND
VAQS20241037	5/7/2024	Bottlenose dolphin	Northampton	37.17719	-75.8445	dead	U	ND
VAQS20241036	5/8/2024	Bottlenose dolphin	Northampton	37.21845	-76.0115	dead	U	ND
VAQS20241038	5/11/2024	Bottlenose dolphin	Virginia Beach	36.74564	-75.9429	dead	U	ND
VAQS20241039	5/14/2024	Bottlenose dolphin	Accomack	37.6945	-75.5826	dead	M	ND
VAQS20241040	5/15/2024	Bottlenose dolphin	Virginia Beach	36.80402	-75.9632	dead	U	ND
VAQS20241041	5/15/2024	Gray seal	Northampton	37.20222	-75.819	dead	U	ND
VAQS20241042	5/17/2024	Bottlenose dolphin	Norfolk	36.95625	-76.3178	dead	U	ND
VAQS20241043	5/17/2024	Bottlenose dolphin	Accomack	37.75852	-75.5458	dead	U	ND
VAQS20241044	5/18/2024	Bottlenose dolphin	Virginia Beach	36.83692	-75.9704	dead	U	ND
VAQS20241045	5/19/2024	Bottlenose dolphin	Hampton	37.09241	-76.273	dead	U	ND
VAQS20241046	5/19/2024	Bottlenose dolphin	Virginia Beach	36.9142	-76.1151	dead	M	125.90
VAQS20241047	5/21/2024	Bottlenose dolphin	Northumberland	37.77917	-76.2869	dead	U	249.00
VAQS20241048	5/21/2024	Bottlenose dolphin	Accomack	37.61678	-75.6135	dead	M	184.00
VAQS20241049	5/22/2024	Bottlenose dolphin	Hampton	37.05723	-76.283	dead	F	260.00
VAQS20241050	5/22/2024	Bottlenose dolphin	Northampton	37.35817	-75.9933	dead	U	ND
VAQS20241051	5/24/2024	Bottlenose dolphin	Newport News	37.05798	-76.5358	dead	M	ND
VAQS20241052	5/26/2024	Bottlenose dolphin	Newport News	36.98766	-76.3901	dead	U	ND
VAQS20241053	5/26/2024	Gray seal	Accomack	37.86972	-76.2308	live	U	ND

VAQS20241054	5/29/2024	Bottlenose dolphin	Northampton	37.16634	-75.9935	dead	U	ND
VAQS20241055	5/30/2024	Bottlenose dolphin	Virginia Beach	36.91282	-76.1094	dead	M	ND
VAQS20241056	5/31/2024	Bottlenose dolphin	Norfolk	36.96413	-76.2661	dead	U	ND
VAQS20241057	6/1/2024	Bottlenose dolphin	Virginia Beach	36.8466	-75.9729	dead	U	ND
VAQS20241058	6/7/2024	Unidentified large whale	Northampton	37.2697	-75.7956	dead	U	ND
VAQS20241059	6/7/2024	Unidentified delphinid	Hampton	37.03495	-76.2944	dead	U	ND
VAQS20241062	6/11/2024	Bottlenose dolphin	Northumberland	37.91845	-76.2827	dead	M	ND
VAQS20241060	6/12/2024	Bottlenose dolphin	Norfolk	36.9686	-76.2895	dead	F	120.00
VAQS20241061	6/12/2024	Bottlenose dolphin	Northumberland	37.89011	-76.2368	dead	M	ND
VAQS20241065	6/13/2024	Bottlenose dolphin	Hampton	37.0973	-76.2767	dead	U	ND
VAQS20241067	6/14/2024	Bottlenose dolphin	Accomack	37.66556	-75.8711	dead	U	273.00
VAQS20241063	6/14/2024	Unidentified delphinid	Northumberland	37.82112	-76.2886	dead	U	ND
VAQS20241064	6/14/2024	Bottlenose dolphin	Accomack	37.6669	-75.87	dead	M	294.00
VAQS20241066	6/19/2024	Bottlenose dolphin	York	37.2395	-76.5078	dead	F	235.00
VAQS20241068	6/22/2024	Bottlenose dolphin	Lancaster	37.61614	-76.2945	dead	M	ND
VAQS20241069	6/23/2024	Bottlenose dolphin	Norfolk	36.94508	-76.329	dead	F	ND
VAQS20241070	6/25/2024	Bottlenose dolphin	Norfolk	36.95168	-76.245	dead	F	146.00
VAQS20241084	6/27/2024	Bottlenose dolphin	Suffolk	36.73909	-76.5834	live	F	204.10
VAQS20241071	6/27/2024	Bottlenose dolphin	Northumberland	37.8399	-76.2496	dead	M	ND
VAQS20241083	6/27/2024	Bottlenose dolphin	Suffolk	36.73909	-76.5834	live	U	ND
VAQS20241082	6/27/2024	Bottlenose dolphin	Suffolk	36.73909	-76.5834	live	M	178.80
VAQS20241072	6/28/2024	Bottlenose dolphin	Northumberland	37.81674	-76.2671	dead	M	ND
VAQS20241073	6/29/2024	Bottlenose dolphin	Northumberland	37.8885	-76.2408	dead	M	ND
VAQS20241074	7/3/2024	Bottlenose dolphin	Northumberland	37.85052	-76.2494	dead	M	ND
VAQS20241095	7/4/2024	Humpback whale	EEZ (Northampton)	37.0183	-74.205	dead	U	ND
VAQS20241075	7/14/2024	Bottlenose dolphin	Northampton	37.24657	-76.0201	dead	U	ND
VAQS20241076	7/27/2024	Bottlenose dolphin	Norfolk	36.94368	-76.2318	dead	M	ND
VAQS20241077	7/27/2024	Bottlenose dolphin	Isle of Wight	37.00354	-76.5631	dead	M	ND

VAQS20241078	7/27/2024	Bottlenose dolphin	York	37.30016	-76.5903	dead	M	ND
VAQS20241079	7/30/2024	Bottlenose dolphin	Northampton	37.26615	-76.0254	dead	U	ND
VAQS20241080	8/1/2024	Bottlenose dolphin	Poquoson	37.18742	-76.2596	dead	U	ND
VAQS20241081	8/2/2024	Bottlenose dolphin	Lancaster	37.78786	-76.6203	dead	U	ND
VAQS20241085	8/13/2024	Bottlenose dolphin	Virginia Beach	36.91839	-76.059	dead	U	ND
VAQS20241087	8/15/2024	Unidentified small cetacean	Northumberland	38.02587	-76.5365	dead	U	ND
VAQS20241086	8/15/2024	Bottlenose dolphin	Virginia Beach	36.91651	-76.0616	dead	M	186.00
VAQS20241088	8/16/2024	Bottlenose dolphin	Virginia Beach	36.92096	-76.1342	dead	M	264.00
VAQS20241089	8/16/2024	Bottlenose dolphin	Virginia Beach	36.74998	-75.9446	dead	M	185.00
VAQS20241090	8/22/2024	Bottlenose dolphin	Norfolk	36.93411	-76.2035	dead	F	226.00
VAQS20241091	8/24/2024	Bottlenose dolphin	Norfolk	36.96926	-76.2945	dead	M	ND
VAQS20241092	8/25/2024	Bottlenose dolphin	Virginia Beach	36.92317	-76.1052	dead	F	ND
VAQS20241094	8/27/2024	Bottlenose dolphin	Norfolk	36.97032	-76.2823	dead	F	176.00
VAQS20241093	8/27/2024	Bottlenose dolphin	Virginia Beach	36.74647	-75.9429	dead	U	262.00
VAQS20241097	9/4/2024	Bottlenose dolphin	Hampton	37.0162	-76.341	dead	U	ND
VAQS20241096	9/4/2024	Bottlenose dolphin	Norfolk	36.94196	-76.2282	dead	U	ND
VAQS20241098	9/9/2024	Bottlenose dolphin	Virginia Beach	36.91378	-76.1134	live	U	ND
VAQS20241099	9/13/2024	Bottlenose dolphin	Lancaster	37.61471	-76.2874	dead	U	ND
VAQS20241101	9/28/2024	Bottlenose dolphin	Gloucester	37.36342	-76.4438	dead	F	ND
VAQS20241102	10/2/2024	Bottlenose dolphin	Norfolk	36.95319	-76.2472	dead	U	ND
VAQS20241103	10/6/2024	Bottlenose dolphin	Virginia Beach	36.61056	-75.8828	dead	U	ND
VAQS20241100	10/23/2024	Bottlenose dolphin	Virginia Beach	36.83081	-75.9664	dead	F	205.80
VAQS20241104	11/1/2024	Bottlenose dolphin	Northampton	37.21233	-76.013	dead	M	ND
VAQS20241105	11/10/2024	Bottlenose dolphin	Virginia Beach	36.89873	-76.1019	dead	M	ND
VAQS20241106	11/12/2024	Bottlenose dolphin	Virginia Beach	36.81432	-75.9657	dead	F	ND
VAQS20241107	11/14/2024	Unidentified delphinid	Northampton	37.45114	-75.9707	dead	U	ND
VAQS20241108	11/20/2024	Humpback whale	EEZ (Virginia Beach)	36.85465	-75.8727	live	U	ND
VAQS20241109	12/30/2024	Minke whale	Northampton	37.23651	-75.8052	dead	F	1,092.00

Table 2: Live stranded marine mammals recorded by VAQS in Virginia in 2024, n=11.

Field Number	Species	Strand Date	Final Disposition
VAQS20241003	Bottlenose dolphin	2/18	Pushed back out by public 3x; not resighted
VAQS20241004	Gray seal	2/21	Transferred to network facility for long-term rehabilitation
VAQS20241012	Common dolphin	3/11	Euthanized; partial necropsy (samples contributed to research project)
VAQS20241015	Harp seal	3/31	Euthanized; frozen for later exam
VAQS20241021	Gray seal	4/15	Died naturally at site
VAQS20241053	Gray seal	5/26	Trapped in pound head; released alive
VAQS20241082	Bottlenose dolphin	6/27	Died at site; partial necropsy
VAQS20241083	Bottlenose dolphin	6/27	Lost sight of animal during monitor efforts; presumed died at site
VAQS20241084	Bottlenose dolphin	6/27	Died at site; partial necropsy
VAQS20241098	Bottlenose dolphin	9/9	Disentangled from haul seine by public without authorization
VAQS20241108	Humpback whale	11/20	Entangled, free swimming; not resighted

Table 3: Dead sea turtle strandings in Virginia during 2024, n=234. Notes: length measured in centimeters and some lengths are estimated; ND=not determined; F=female, M=male, U=unknown sex.

Field Number	Strand Date	Species	Location	Latitude	Longitude	Sex	Length
VAQS20242212	09/23/2024	Leatherback	Norfolk	36.965846	-76.270193	U	ND
VAQS20242004	01/08/2024	Kemp's ridley	Norfolk	36.857511	-76.30684	F	19.6
VAQS20242005	01/10/2024	Green	Hampton	37.00398	-76.30284	U	ND
VAQS20242006	01/13/2024	Kemp's ridley	Norfolk	36.885616	-76.317265	U	ND
VAQS20242007	01/15/2024	Loggerhead	Northampton	37.368685	-75.985876	U	53.3
VAQS20242008	01/24/2024	Loggerhead	Lancaster	37.62857	-76.32981	U	ND
VAQS20242009	01/22/2024	Loggerhead	Northampton	37.409347	-75.981852	F	66.5
VAQS20242010	02/01/2024	Green	Northampton	37.455037	-75.676485	U	ND
VAQS20242011	02/03/2024	Loggerhead	Virginia Beach	36.75719	-75.94728	U	55.6
VAQS20242012	02/19/2024	Green	Hampton	36.986064	-76.302766	U	ND
VAQS20242013	02/21/2024	Loggerhead	Norfolk	36.934536	-76.205178	U	ND
VAQS20242014	02/24/2024	Loggerhead	Northampton	37.313047	-76.01919	U	ND
VAQS20242016	04/25/2024	Green	Hampton	36.98261	-76.301309	U	ND
VAQS20242024	05/08/2024	Loggerhead	Accomack	37.852838	-75.398143	U	ND
VAQS20242032	05/13/2024	Loggerhead	Accomack	37.849273	-75.46987	M	ND
VAQS20242034	05/15/2024	Loggerhead	Lancaster	37.620052	-76.32217	U	ND
VAQS20242035	05/15/2024	Kemp's ridley	Virginia Beach	36.91417	-76.115029	F	47.2
VAQS20242036	05/16/2024	Loggerhead	Norfolk	36.937258	-76.214931	U	71.2
VAQS20242043	05/18/2024	Kemp's ridley	Hampton	37.013224	-76.299196	U	ND
VAQS20242045	05/19/2024	Kemp's ridley	Hampton	37.09893	-76.2782	U	ND
VAQS20242046	05/20/2024	Kemp's ridley	Virginia Beach	36.9172	-76.12451	U	31.3
VAQS20242044	05/19/2024	Loggerhead	Virginia Beach	36.89714	-75.98592	F	96.3
VAQS20242047	05/21/2024	Loggerhead	Virginia Beach	36.929722	-76.174167	U	ND
VAQS20242048	05/21/2024	Loggerhead	Virginia Beach	36.911044	-76.102483	U	69.5
VAQS20242050	05/21/2024	Loggerhead	Norfolk	36.954665	-76.249	U	62
VAQS20242055	05/24/2024	Kemp's ridley	Mathews	37.51034	-76.283503	U	ND
VAQS20242056	05/24/2024	Loggerhead	Hampton	37.0503	-76.2842	U	ND
VAQS20242057	05/24/2024	Loggerhead	Accomack	37.855785	-75.400021	U	ND
VAQS20242058	05/24/2024	Loggerhead	Virginia Beach	36.8301	-75.96852	U	ND
VAQS20242070	05/26/2024	Loggerhead	Northampton	37.188417	-75.998351	U	ND
VAQS20242066	05/25/2024	Loggerhead	Hampton	37.00888	-76.3001	U	ND
VAQS20242069	05/28/2024	Loggerhead	Northampton	37.08792	-75.97826	U	ND

VAQS20242072	05/28/2024	Loggerhead	Accomack	37.807409	-75.512444	U	ND
VAQS20242073	05/28/2024	Kemp's ridley	Virginia Beach	36.855567	-75.975345	U	ND
VAQS20242074	05/28/2024	Loggerhead	Northampton	37.149352	-75.97499	U	ND
VAQS20242075	05/28/2024	Kemp's ridley	Northampton	37.16586	-75.98697	U	ND
VAQS20242076	05/28/2024	Kemp's ridley	Northampton	37.16574	-75.98636	U	ND
VAQS20242078	05/28/2024	Kemp's ridley	Northampton	37.16744	-75.98833	U	ND
VAQS20242079	05/29/2024	Loggerhead	Newport News	36.983555	-76.440431	M	ND
VAQS20242082	05/30/2024	Loggerhead	Norfolk	36.94825	-76.240083	U	ND
VAQS20242083	05/30/2024	Kemp's ridley	Virginia Beach	36.915228	-76.065961	U	38.5
VAQS20242085	05/30/2024	Loggerhead	Northampton	37.197685	-76.008747	U	ND
VAQS20242086	05/31/2024	Kemp's ridley	Virginia Beach	37.08263	-75.95779	U	ND
VAQS20242088	05/31/2024	Leatherback	Virginia Beach	36.855732	-75.975438	F	136
VAQS20242093	06/02/2024	Loggerhead	Accomack	37.863153	-75.390648	U	ND
VAQS20242094	06/04/2024	Loggerhead	Norfolk	36.94147	-76.22712	F	53.2
VAQS20242095	06/04/2024	Kemp's ridley	Norfolk	36.935784	-76.211099	U	ND
VAQS20242097	06/06/2024	Kemp's ridley	Virginia Beach	36.892033	-75.985069	U	31.4
VAQS20242100	06/07/2024	Kemp's ridley	Gloucester	37.24217	-76.4998	U	ND
VAQS20242101	06/07/2024	Loggerhead	Norfolk	36.937778	-76.330282	M	ND
VAQS20242098	06/06/2024	Kemp's ridley	Northampton	37.16192	-75.98052	U	ND
VAQS20242103	06/08/2024	Kemp's ridley	Newport News	37.095	-76.545833	U	ND
VAQS20242104	06/08/2024	Loggerhead	York	37.22721	-76.38863	U	ND
VAQS20242105	06/10/2024	Loggerhead	Virginia Beach	36.91561	-76.06485	U	ND
VAQS20242106	06/10/2024	Kemp's ridley	Norfolk	36.96033	-76.25934	U	46.7
VAQS20242107	06/10/2024	Kemp's ridley	Norfolk	36.944449	-76.333908	U	ND
VAQS20242108	06/10/2024	Loggerhead	Northampton	37.248265	-76.021125	F	ND
VAQS20242110	06/11/2024	Loggerhead	Norfolk	36.922833	-76.176883	U	ND
VAQS20242112	06/11/2024	Kemp's ridley	Virginia Beach	36.81978	-75.9676	U	ND
VAQS20242111	06/11/2024	Unknown	Virginia Beach	36.869306	-75.866556	U	ND
VAQS20242114	06/11/2024	Kemp's ridley	Virginia Beach	36.930386	-76.185359	U	ND
VAQS20242118	06/12/2024	Unknown	Virginia Beach	36.88735	-76.088896	U	ND
VAQS20242119	06/14/2024	Kemp's ridley	Gloucester	37.372248	-76.410268	U	ND
VAQS20242120	06/14/2024	Kemp's ridley	Hampton	37.086306	-76.27188	U	ND
VAQS20242121	06/15/2024	Loggerhead	Accomack	37.863331	-75.444546	U	ND
VAQS20242122	06/15/2024	Loggerhead	Northumberland	38.021901	-76.504867	U	ND
VAQS20242124	06/16/2024	Loggerhead	Mathews	37.290946	-76.310477	U	ND
VAQS20242125	06/17/2024	Kemp's ridley	Newport News	36.985393	-76.442404	U	ND
VAQS20242126	06/17/2024	Loggerhead	Norfolk	36.962617	-76.322045	U	ND
VAQS20242130	06/20/2024	Loggerhead	Virginia Beach	36.921389	-76.070556	U	ND
VAQS20242132	06/22/2024	Kemp's ridley	Virginia Beach	37.996449	-76.472189	U	ND
VAQS20242134	06/23/2024	Leatherback	Northampton	37.136899	-75.972081	U	ND
VAQS20242135	06/26/2024	Kemp's ridley	Northampton	37.162737	-75.852489	U	ND
VAQS20242136	06/25/2024	Loggerhead	Virginia Beach	36.898964	-76.02437	U	ND
VAQS20242137	06/25/2024	Loggerhead	Accomack	37.893331	-75.378682	U	ND
VAQS20242138	06/28/2024	Unknown	Virginia Beach	36.928056	-76.0075	U	ND
VAQS20242140	06/29/2024	Loggerhead	Accomack	37.939877	-75.309521	U	ND
VAQS20242146	07/02/2024	Kemp's ridley	Hampton	37.1022	-76.28395	U	ND
VAQS20242143	07/01/2024	Loggerhead	Accomack	37.856147	-75.400401	U	ND
VAQS20242149	07/04/2024	Loggerhead	York	37.233714	-76.463986	U	ND
VAQS20242150	07/04/2024	Loggerhead	Hampton	37.012563	-76.316815	U	ND
VAQS20242152	07/05/2024	Loggerhead	Northampton	37.367222	-75.994722	U	ND
VAQS20242153	07/06/2024	Loggerhead	Poquoson	37.134397	-76.27038	M	ND
VAQS20242154	07/06/2024	Loggerhead	Northampton	37.262017	-76.0296	U	ND
VAQS20242155	07/07/2024	Loggerhead	Virginia Beach	36.91175	-76.085464	M	ND
VAQS20242156	07/08/2024	Loggerhead	Northampton	37.187979	-75.828309	M	ND
VAQS20242157	07/13/2024	Kemp's ridley	Lancaster	37.623976	-76.331041	U	ND
VAQS20242158	07/13/2024	Kemp's ridley	Lancaster	37.623931	-76.330885	U	ND

VAQS20242159	07/15/2024	Kemp's ridley	Northampton	37.248522	-76.021203	U	ND
VAQS20242160	07/15/2024	Loggerhead	Northampton	37.154097	-75.8622	U	ND
VAQS20242161	07/15/2024	Loggerhead	Northampton	37.144326	-75.871539	U	ND
VAQS20242162	07/15/2024	Loggerhead	Mathews	37.372695	-76.33286	M	ND
VAQS20242096	07/19/2024	Loggerhead	Northampton	37.195468	-76.00668	U	ND
VAQS20242165	07/20/2024	Kemp's ridley	Norfolk	36.935643	-76.209901	U	ND
VAQS20242166	07/23/2024	Loggerhead	Accomack	37.75167	-75.550818	U	ND
VAQS20242168	07/26/2024	Loggerhead	Accomack	38.009286	-75.257021	U	ND
VAQS20242169	07/26/2024	Loggerhead	Norfolk	37.035667	-76.113333	F	66.7
VAQS20242172	07/30/2024	Kemp's ridley	Northampton	37.163595	-75.982174	U	ND
VAQS20242173	07/30/2024	Loggerhead	Lancaster	37.619717	-76.322886	U	ND
VAQS20242175	07/31/2024	Green	Virginia Beach	36.686037	-75.919392	U	ND
VAQS20242176	07/31/2024	Loggerhead	Virginia Beach	36.5827	-75.874181	U	ND
VAQS20242178	08/04/2024	Loggerhead	Northampton	37.171867	-75.987592	U	ND
VAQS20242180	08/10/2024	Loggerhead	Mathews	37.315787	-76.280661	U	ND
VAQS20242181	08/12/2024	Kemp's ridley	Virginia Beach	36.91489	-76.11733	U	40.2
VAQS20242182	08/13/2024	Loggerhead	Accomack	37.859903	-75.394118	U	ND
VAQS20242183	08/14/2024	Loggerhead	Hampton	37.09161	-76.27212	U	ND
VAQS20242184	08/14/2024	Loggerhead	Virginia Beach	36.750914	-75.944865	M	ND
VAQS20242185	08/17/2024	Kemp's ridley	Norfolk	36.932522	-76.198469	U	ND
VAQS20242186	08/17/2024	Loggerhead	Virginia Beach	36.889619	-75.984771	U	ND
VAQS20242187	08/21/2024	Loggerhead	Virginia Beach	36.917	-76.06	F	99.8
VAQS20242188	08/21/2024	Green	Hampton	37.09388	76.27436	U	ND
VAQS20242189	08/23/2024	Kemp's ridley	Virginia Beach	36.64315	-75.89662	U	ND
VAQS20242190	08/23/2024	Kemp's ridley	Mathews	37.480461	-76.266029	U	ND
VAQS20242191	08/24/2024	Loggerhead	Virginia Beach	36.593483	-75.877383	U	ND
VAQS20242192	08/25/2024	Kemp's ridley	Norfolk	36.963623	-76.265108	U	ND
VAQS20242193	08/26/2024	Loggerhead	Virginia Beach	36.84044	-75.97103	F	89.9
VAQS20242194	08/27/2024	Loggerhead	Virginia Beach	36.92725	-76.092967	U	ND
VAQS20242196	08/28/2024	Loggerhead	Northampton	37.084862	-75.976185	U	ND
VAQS20242198	09/03/2024	Loggerhead	Virginia Beach	36.729264	-75.936516	U	ND
VAQS20242199	09/04/2024	Loggerhead	Accomack	37.93264	-75.31402	M	ND
VAQS20242200	09/05/2024	Loggerhead	Virginia Beach	36.67898	-75.91572	U	ND
VAQS20242202	09/07/2024	Green	Virginia Beach	36.91393	-76.11342	F	27.5
VAQS20242203	09/08/2024	Loggerhead	Norfolk	36.956841	-76.252868	U	ND
VAQS20242204	09/11/2024	Loggerhead	Poquoson	37.124667	-76.29375	F	91.5
VAQS20242205	09/13/2024	Loggerhead	Virginia Beach	36.63913	-75.89465	U	ND
VAQS20242206	09/14/2024	Loggerhead	Norfolk	36.948254	-76.239691	U	62
VAQS20242208	09/18/2024	Loggerhead	Virginia Beach	36.824095	-75.975087	U	ND
VAQS20242209	09/18/2024	Loggerhead	Virginia Beach	36.640315	-75.895265	U	ND
VAQS20242210	09/18/2024	Loggerhead	Virginia Beach	36.727426	-75.935817	U	ND
VAQS20242211	09/19/2024	Loggerhead	Accomack	37.727918	-75.566482	U	ND
VAQS20242213	09/24/2024	Loggerhead	Virginia Beach	36.854819	-75.975211	U	ND
VAQS20242214	09/24/2024	Loggerhead	Hampton	36.990281	-76.387101	M	ND
VAQS20242215	09/26/2024	Kemp's ridley	Virginia Beach	36.6734	-75.91238	U	ND
VAQS20242216	09/27/2024	Loggerhead	Virginia Beach	36.843466	-75.971487	U	ND
VAQS20242218	10/01/2024	Loggerhead	Virginia Beach	36.817842	-75.96653	U	ND
VAQS20242220	10/01/2024	Kemp's ridley	Norfolk	36.965479	-76.268558	U	ND
VAQS20242221	10/02/2024	Green	Virginia Beach	36.923332	-76.049733	U	ND
VAQS20242222	10/03/2024	Loggerhead	Lancaster	37.652154	-76.338074	U	66
VAQS20242225	10/04/2024	Loggerhead	Mathews	37.346472	-76.274417	U	ND
VAQS20242226	10/06/2024	Loggerhead	Gloucester	37.325687	-76.585762	U	ND
VAQS20242227	10/07/2024	Loggerhead	Lancaster	37.650145	-76.336271	U	ND
VAQS20242228	10/12/2024	Kemp's ridley	Northampton	37.252763	-76.023464	U	ND
VAQS20242229	10/15/2024	Green	Northampton	37.092187	-75.979808	U	28
VAQS20242230	10/18/2024	Kemp's ridley	Virginia Beach	36.923333	-76.175556	U	ND

VAQS20242231	10/18/2024	Green	Northampton	37.218018	-76.012062	U	ND
VAQS20242232	10/21/2024	Kemp's ridley	Virginia Beach	36.75362	-75.94579	U	40
VAQS20242233	10/21/2024	Green	Virginia Beach	36.9136	-76.11363	F	26.4
VAQS20242234	10/22/2024	Green	Poquoson	37.104899	-76.33874	U	ND
VAQS20242235	10/23/2024	Kemp's ridley	Virginia Beach	36.820305	-75.967188	M	40.5
VAQS20242236	10/23/2024	Kemp's ridley	Virginia Beach	36.927193	-76.004894	U	ND
VAQS20242237	10/24/2024	Green	Virginia Beach	36.90797	-76.09432	F	25.9
VAQS20242238	10/24/2024	Green	Virginia Beach	36.922586	-76.050377	U	23.1
VAQS20242239	10/24/2024	Green	Virginia Beach	36.919321	-76.054828	M	29
VAQS20242241	10/25/2024	Loggerhead	Virginia Beach	36.912997	-76.109994	U	ND
VAQS20242240	10/24/2024	Kemp's ridley	Norfolk	36.952525	-76.246542	U	ND
VAQS20242242	10/25/2024	Green	Northampton	37.165894	-75.988244	F	28.7
VAQS20242243	10/26/2024	Green	Northampton	37.09672	-75.98003	U	ND
VAQS20242244	10/26/2024	Kemp's ridley	Virginia Beach	36.92145	-76.05164	U	ND
VAQS20242245	10/27/2024	Kemp's ridley	Virginia Beach	36.913967	-76.114473	U	ND
VAQS20242246	10/27/2024	Kemp's ridley	Norfolk	36.968433	-76.289156	U	ND
VAQS20242247	10/27/2024	Green	Northampton	37.2045	-76.012278	U	ND
VAQS20242248	10/28/2024	Kemp's ridley	Virginia Beach	36.567815	-75.871275	U	ND
VAQS20242249	10/27/2024	Green	Hampton	37.10002	-76.279232	U	ND
VAQS20242250	10/28/2024	Green	Virginia Beach	36.870209	-75.979419	U	ND
VAQS20242251	10/29/2024	Kemp's ridley	Virginia Beach	36.980278	-76.106944	U	ND
VAQS20242252	10/30/2024	Green	Northampton	37.239527	-76.016526	U	ND
VAQS20242253	10/31/2024	Loggerhead	Northampton	37.427027	-75.981405	U	ND
VAQS20242254	11/02/2024	Green	Virginia Beach	36.919596	-76.054784	U	ND
VAQS20242255	11/02/2024	Green	Virginia Beach	36.736082	-75.938851	U	ND
VAQS20242256	11/02/2024	Kemp's ridley	Virginia Beach	36.893943	-75.985849	U	ND
VAQS20242257	11/02/2024	Kemp's ridley	Northampton	37.324225	-76.016825	U	ND
VAQS20242258	11/03/2024	Green	Northampton	37.151346	-75.97542	U	ND
VAQS20242259	11/04/2024	Green	Norfolk	36.942345	-76.229255	U	ND
VAQS20242260	11/05/2024	Loggerhead	Northampton	37.422363	-75.982758	U	ND
VAQS20242261	11/05/2024	Green	Northampton	37.18203	-75.99397	F	26.4
VAQS20242262	11/05/2024	Green	Northampton	37.206161	-76.01267	U	ND
VAQS20242263	11/05/2024	Green	Northampton	37.196905	-76.00795	U	ND
VAQS20242265	11/08/2024	Kemp's ridley	Hampton	37.002931	-76.30288	U	ND
VAQS20242264	11/08/2024	Green	Virginia Beach	36.782218	-75.956471	U	ND
VAQS20242266	11/08/2024	Green	Virginia Beach	36.91599	-76.063323	U	ND
VAQS20242267	11/09/2024	Green	Virginia Beach	36.915116	-76.066304	F	27.3
VAQS20242268	11/01/2024	Green	Northampton	37.185093	-75.995552	U	ND
VAQS20242269	11/09/2024	Green	Northampton	37.185867	-75.996105	U	ND
VAQS20242270	11/09/2024	Green	Northampton	37.184075	-75.994861	U	ND
VAQS20242271	11/09/2024	Green	Northampton	37.181843	-75.993806	U	ND
VAQS20242272	11/09/2024	Kemp's ridley	Virginia Beach	36.863412	-75.977429	U	ND
VAQS20242273	11/10/2024	Loggerhead	Hampton	37.083875	-76.27356	U	ND
VAQS20242274	11/12/2024	Kemp's ridley	Norfolk	36.951582	-76.244872	U	ND
VAQS20242275	11/12/2024	Loggerhead	Northampton	37.520278	-75.949722	U	ND
VAQS20242276	11/12/2024	Kemp's ridley	Virginia Beach	36.656111	-75.903056	U	ND
VAQS20242277	11/13/2024	Green	Virginia Beach	36.661256	-75.90532	U	ND
VAQS20242278	11/14/2024	Green	Virginia Beach	36.720171	-75.933162	U	ND
VAQS20242279	11/15/2024	Green	Northampton	37.16966	-75.98732	U	ND
VAQS20242280	11/16/2024	Green	Northampton	37.102729	-75.979172	U	ND
VAQS20242281	11/16/2024	Kemp's ridley	Virginia Beach	36.568465	-75.871706	U	ND
VAQS20242282	11/17/2024	Loggerhead	Northampton	37.209269	-76.013232	U	ND
VAQS20242283	11/18/2024	Kemp's ridley	Virginia Beach	36.908051	-75.98885	F	ND
VAQS20242284	11/18/2024	Green	Northampton	37.158246	-75.977747	U	ND
VAQS20242285	11/19/2024	Kemp's ridley	Virginia Beach	36.775859	-75.954304	F	41.3
VAQS20242286	11/21/2024	Green	Hampton	37.041528	-76.288792	U	ND

VAQS20242287	11/21/2024	Green	Northampton	37.191112	-76.001787	U	ND
VAQS20242288	11/21/2024	Green	Norfolk	36.939985	-76.224109	U	26.3
VAQS20242290	11/23/2024	Kemp's ridley	Northampton	37.16742	-75.98822	U	ND
VAQS20242292	11/24/2024	Loggerhead	Northampton	37.505232	-75.956408	U	66.04
VAQS20242293	11/24/2024	Green	Norfolk	36.886639	-76.316763	U	ND
VAQS20242294	11/24/2024	Loggerhead	Northampton	37.34225	-76.004666	U	ND
VAQS20242297	11/27/2024	Green	Northampton	37.20172	-76.01192	U	ND
VAQS20242298	11/28/2024	Green	Northampton	37.207517	-76.013346	U	ND
VAQS20242299	11/29/2024	Green	Virginia Beach	36.86085	-75.97691	M	34.9
VAQS20242300	11/29/2024	Loggerhead	Northampton	37.488798	-75.960985	U	ND
VAQS20242301	11/29/2024	Green	Northampton	37.16806	-75.98784	U	ND
VAQS20242302	11/30/2024	Green	Virginia Beach	36.92119	-76.05222	U	ND
VAQS20242303	11/29/2024	Green	Virginia Beach	36.912716	-76.079946	U	ND
VAQS20242314	12/08/2024	Green	Virginia Beach	36.888232	-76.013167	U	30.4
VAQS20242315	12/08/2024	Green	Norfolk	36.887397	-76.31626	U	ND
VAQS20242318	12/10/2024	Green	Northampton	37.16491	-75.98429	U	ND
VAQS20242321	12/10/2024	Green	Northampton	36.16249	-75.98095	U	ND
VAQS20242320	12/10/2024	Green	Accomack	37.879679	-75.351718	U	ND
VAQS20242322	12/10/2024	Green	Norfolk	36.907616	-76.305774	U	28.9
VAQS20242324	12/13/2024	Green	Northampton	37.10482	-75.9789	U	ND
VAQS20242326	12/14/2024	Green	Accomack	37.871189	-75.359023	U	ND
VAQS20242328	12/16/2024	Green	Accomack	37.871169	-75.359067	U	ND
VAQS20242329	12/15/2024	Green	Accomack	37.871169	-75.359067	U	ND
VAQS20242330	12/18/2024	Green	Northampton	37.24353	-76.01806	U	ND
VAQS20242332	12/20/2024	Loggerhead	Virginia Beach	36.919751	-76.054227	U	ND
VAQS20242335	12/16/2024	Green	Norfolk	36.95607	-76.25211	U	ND
VAQS20242336	12/23/2024	Green	Northampton	37.327108	-76.015584	U	ND
VAQS20242340	12/26/2024	Loggerhead	Northampton	37.336656	-76.009486	U	ND
VAQS20242343	12/27/2024	Kemp's ridley	Virginia Beach	36.913263	-76.076264	F	38.7
VAQS20242344	12/28/2024	Loggerhead	Isle of Wight	37.01875	-76.541283	F	84.1
VAQS20242345	12/28/2024	Green	Norfolk	36.901395	-76.298943	U	ND
VAQS20242346	12/30/2024	Loggerhead	Accomack	37.865695	-75.365591	U	ND
VAQS20242347	12/30/2024	Loggerhead	Mathews	37.514167	-76.288611	U	ND
VAQS20242349	12/31/2024	Loggerhead	Northampton	37.335184	-76.011054	U	ND

Table 4: Live stranded sea turtles recorded by VAQS in 2024, n=118. Length measured in centimeters; F=female, M=male, U=unknown sex.

Field Number	Strand Date	Species	Location	Latitude	Longitude	Sex	Length	Disposition	Dispo Date
VAQS20222058.1	6/5	Kemp's ridley	Norfolk	36.96391	-76.2575	U	38.5	Released	6/5
VAQS20222098.1	5/7	Kemp's ridley	Hampton	37.03615	-76.2901	U	30.7	Released	5/10
VAQS20242001	1/1	Green	Virginia Beach	36.86545	-75.9958	U	28.5	Released	2/28
VAQS20242002	1/4	Green	Norfolk	36.84805	-76.2949	U	28.5	Released	2/28
VAQS20242003	1/7	Green	Norfolk	36.89805	-76.2945	U	30.3	Released	2/28
VAQS20242015	5/17	Kemp's ridley	Hampton	37.03595	-76.2896	U	34.9	Released	5/22
VAQS20242017	5/4	Kemp's ridley	Virginia Beach	36.69414	-75.9227	U	44.3	Released	5/6
VAQS20242018	5/4	Unknown	Virginia Beach	36.69418	-75.9226	U		Unable to recover	
VAQS20242019	5/6	Kemp's ridley	Virginia Beach	36.84373	-75.9701	U	51.8	Released	5/7
VAQS20242020	5/6	Unknown	Virginia Beach	36.84373	-75.9701	U		Unable to recover	
VAQS20242021	5/7	Kemp's ridley	Virginia Beach	36.84373	-75.9699	U	36.2	Released	5/8
VAQS20242022	5/7	Kemp's ridley	Virginia Beach	36.84377	-75.9698	U	51.1	Released	5/9
VAQS20242023	5/8	Unknown	Hampton	37.03674	-76.2916	U		Unable to recover	

VAQS20242025	5/10	Kemp's ridley	Virginia Beach	36.69423	-75.9224	U	36.4	Released	5/11
VAQS20242026	5/10	Kemp's ridley	Virginia Beach	36.69423	-75.9224	U	31.5	Released	5/11
VAQS20242027	5/10	Unknown	Virginia Beach	36.69423	-75.9224	U		Unable to recover	
VAQS20242028	5/10	Kemp's ridley	Hampton	37.03599	-76.2896	U	33.4	Released	5/12
VAQS20242029	5/11	Kemp's ridley	Hampton	37.03596	-76.2898	U	31.2	Released	5/17
VAQS20242030	5/11	Unknown	Norfolk	36.96385	-76.2575	U		Unable to recover	
VAQS20242031	5/12	Kemp's ridley	Hampton	37.03596	-76.2898	U	31.1	Released	6/5
VAQS20242033	5/14	Kemp's ridley	Hampton	37.03599	-76.2896	U	36.6	Released	5/17
VAQS20242037	5/16	Kemp's ridley	Norfolk	36.96395	-76.2574	U	32.6	Released	5/17
VAQS20242038	5/17	Kemp's ridley	Norfolk	36.96354	-76.2578	U	31.7	Released	5/17
VAQS20242039	5/17	Kemp's ridley	Virginia Beach	36.84369	-75.9699	U	35.8	Released	5/19
VAQS20242040	5/17	Kemp's ridley	Virginia Beach	36.81817	-75.9665	U	28.9	Released	5/19
VAQS20242041	5/17	Kemp's ridley	Virginia Beach	36.81817	-75.9665	U	30.1	Released	5/19
VAQS20242042	5/17	Kemp's ridley	Virginia Beach	36.84387	-75.97	U	35.9	Released	5/18
VAQS20242049	5/21	Kemp's ridley	Virginia Beach	36.84377	-75.9699	U	29.7	Released	6/18
VAQS20242051	5/22	Unknown	Norfolk	36.96404	-76.2574	U		Unable to recover	
VAQS20242052	5/22	Kemp's ridley	Virginia Beach	36.69439	-75.9219	U	33.4	Released	5/23
VAQS20242053	5/23	Loggerhead	Hampton	37.03624	-76.2903	U	59.9	Released	5/24
VAQS20242054	5/23	Kemp's ridley	Norfolk	36.96307	-76.2583	U	30.9	Released	5/24
VAQS20242059	5/24	Kemp's ridley	Virginia Beach	36.84373	-75.9698	U	37.1	Released	5/24
VAQS20242060	5/24	Kemp's ridley	Virginia Beach	36.69424	-75.9223	U	23.7	Released	5/28
VAQS20242061	5/25	Kemp's ridley	Virginia Beach	36.69417	-75.9225	U	36.4	Released	5/27
VAQS20242062	5/25	Kemp's ridley	Virginia Beach	36.84363	-75.9708	U	30.7	Released	5/27
VAQS20242063	5/25	Kemp's ridley	Virginia Beach	36.69417	-75.9225	U	28.8	Died at rehab facility	6/11
VAQS20242064	5/25	Kemp's ridley	Virginia Beach	36.69506	-75.9216	U	24.3	Released	7/26
VAQS20242065	5/25	Kemp's ridley	Hampton	37.03626	-76.2904	U	32.9	Released	6/5
VAQS20242067	5/26	Kemp's ridley	Virginia Beach	36.84364	-75.9708	U	27.8	Released	5/27
VAQS20242068	5/26	Loggerhead	Virginia Beach	36.94194	-76.0666	F	70.1	Euthanized	5/26
VAQS20242071	5/26	Loggerhead	Virginia Beach	36.84364	-75.9708	U	58.4	Released	6/21
VAQS20242077	5/28	Kemp's ridley	Hampton	37.03604	-76.2896	U	32.2	Released	6/7
VAQS20242080	5/30	Kemp's ridley	Virginia Beach	36.69426	-75.9221	U	30.2	Released	5/30
VAQS20242081	5/30	Kemp's ridley	Norfolk	36.96359	-76.2578	U	26.8	Released	5/31
VAQS20242084	5/30	Unknown	Virginia Beach	36.84379	-75.9698	U		Unable to recover	
VAQS20242087	5/31	Kemp's ridley	Norfolk	36.96208	-76.2593	U	31.4	Released	6/2
VAQS20242089	6/1	Kemp's ridley	Hampton	37.03606	-76.2896	U	33.9	Released	6/2
VAQS20242090	6/1	Kemp's ridley	Virginia Beach	36.84379	-75.9699	U	30.8	Released	6/2
VAQS20242091	6/1	Kemp's ridley	Virginia Beach	36.84379	-75.9699	U	21	Released	6/5
VAQS20242092	6/1	Kemp's ridley	Virginia Beach	36.84379	-75.9699	U	26.8	Released	6/5
VAQS20242099	6/7	Kemp's ridley	Virginia Beach	36.84372	-75.9701	U	24.1	Released	6/8
VAQS20242099.1	6/12	Kemp's ridley	Virginia Beach	36.67264	-75.9121	U	24	Released	6/13
VAQS20242102	6/8	Unknown	Norfolk	36.96389	-76.2575	U		Unable to recover	
VAQS20242109	6/11	Kemp's ridley	Hampton	37.00067	-76.3072	U	31.4	Released	6/23
VAQS20242113	6/11	Loggerhead	Norfolk	36.96227	-76.2591	U		Unable to recover	
VAQS20242115	6/4	Leatherback	Newport News	36.94802	-76.4025	U		Unable to recover	
VAQS20242116	6/12	Loggerhead	Hampton	37.03603	-76.2896	U	64.6	Released	7/30
VAQS20242117	6/12	Kemp's ridley	Virginia Beach	36.84359	-75.9713	U	32.8	Released	6/13
VAQS20242123	6/16	Loggerhead	Virginia Beach	36.84368	-75.9702	U	48.3	Released	6/21
VAQS20242127	6/18	Kemp's ridley	Virginia Beach	36.84378	-75.9698	U	28.9	Released	6/21
VAQS20242128	6/18	Kemp's ridley	Virginia Beach	37.84378	-75.9698	U	29.7	Released	6/21
VAQS20242129	6/19	Unknown	Norfolk	36.96382	-76.2576	U		Unable to recover	
VAQS20242131	6/20	Kemp's ridley	Accomack	37.88035	-75.3515	U	30.9	Released	6/26
VAQS20242133	6/22	Kemp's ridley	Norfolk	36.96394	-76.2575	U	29.7	Released	6/23
VAQS20242139	6/29	Kemp's ridley	Hampton	37.03602	-76.2897	U	27.1	Released	6/29
VAQS20242141	6/29	Kemp's ridley	Norfolk	36.96393	-76.2575	U	28.9	Released	7/3
VAQS20242142	7/1	Kemp's ridley	Hampton	37.036	-76.2896	U	26	Released	7/3

VAQS20242144	7/1	Unknown	Hampton	37.00057	-76.3071	U		Unable to recover	
VAQS20242145	7/1	Kemp's ridley	Hampton	37.03599	-76.2896	U	31.3	Released	7/3
VAQS20242147	7/2	Loggerhead	Virginia Beach	36.91128	-76.1029	F	64.2	Euthanized	7/2
VAQS20242148	7/3	Loggerhead	Middlesex	37.55169	-76.3041	U	59.4	Released	8/28
VAQS20242151	6/8	Leatherback	EEZ (Accomack)	37.95712	-74.9324	U		Unable to recover	
VAQS20242163	7/16	Kemp's ridley	Hampton	37.03603	-76.2895	U		Unable to recover	
VAQS20242164	7/21	Kemp's ridley	Virginia Beach	36.84381	-75.9698	U	34.3	Released	7/24
VAQS20242167	7/25	Loggerhead	Accomack	37.88108	-75.4147	U	62.3	Released	11/10
VAQS20242170	7/28	Unknown	Norfolk	36.96397	-76.2575	U		Unable to recover	
VAQS20242171	7/28	Kemp's ridley	Virginia Beach	36.88166	-76.1118	F	29.8	Euthanized	7/28
VAQS20242174	7/31	Loggerhead	Hampton	37.03604	-76.2896	U	79.7	Released	9/20
VAQS20242177	8/2	Kemp's ridley	Northumberland	37.73616	-76.2585	U	50.6	Released	11/10
VAQS20242179	8/4	Loggerhead	EEZ (Virginia Beach)	36.9958	-75.4737	U		Unable to recover	
VAQS20242195	8/27	Green	Accomack	37.77176	-75.562	M	29.2	Died before reaching rehab facility	
VAQS20242197	8/31	Green	Norfolk	36.96182	-76.2594	U		Unable to recover	
VAQS20242201	9/6	Loggerhead	Norfolk	36.96396	-76.2575	U	50.9	Released	10/24
VAQS20242207	9/16	Kemp's ridley	Virginia Beach	36.87443	-75.9808	U	24	Taken to rehab facility	
VAQS20242217	9/28	Loggerhead	Virginia Beach	36.84375	-75.9701	U		Unable to recover	
VAQS20242219	10/1	Loggerhead	Hampton	37.01151	-76.3439	U		Unable to recover	
VAQS20242223	10/3	Green	Newport News	36.96719	-76.4088	U	29.4	Released	12/16
VAQS20242224	10/4	Unknown	Virginia Beach	36.84374	-75.9702	U		Unable to recover	
VAQS20242289	11/22	Loggerhead	Northampton	37.32765	-76.0153	U	54.9	Taken to rehab facility	
VAQS20242291	11/23	Green	Norfolk	36.94595	-76.3292	U		Unable to recover	
VAQS20242295	11/24	Loggerhead	Northampton	37.21443	-76.0127	U	72.8	Taken to rehab facility	
VAQS20242296	11/24	Green	Norfolk	36.90667	-76.3075	U		Unable to recover	
VAQS20242304	11/30	Green	Accomack	37.87138	-75.3571	U	24.5	Taken to rehab facility	
VAQS20242305	12/1	Green	Norfolk	36.90701	-76.3076	U	21.7	Taken to rehab facility	
VAQS20242306	12/1	Green	Accomack	37.87411	-75.3562	U	27.3	Taken to rehab facility	
VAQS20242307	12/4	Green	Norfolk	36.95409	-76.2718	U		Unable to recover	
VAQS20242308	12/6	Green	Virginia Beach	36.87409	-76.0077	U	29.2	Taken to rehab facility	
VAQS20242309	12/6	Green	Norfolk	36.96876	-76.2882	U	25.7	Taken to rehab facility	
VAQS20242310	12/6	Green	Norfolk	36.95366	-76.2719	U	30.3	Died at rehab facility	12/6
VAQS20242311	12/6	Kemp's ridley	Norfolk	36.95366	-76.2719	U	24	Taken to rehab facility	
VAQS20242312	12/6	Green	Virginia Beach	36.8922	-76.0184	U	27.4	Died at rehab facility	12/6
VAQS20242313	12/7	Loggerhead	Northampton	37.2667	-76.0235	U	57.5	Taken to rehab facility	
VAQS20242316	12/8	Green	Norfolk	36.8977	-76.2895	U	29.5	Died at rehab facility	12/8
VAQS20242317	12/9	Green	Norfolk	36.93292	-76.3252	U	29.9	Taken to rehab facility	
VAQS20242319	12/10	Loggerhead	Northampton	37.15978	-75.9787	U	57.1	Taken to rehab facility	
VAQS20242323	12/12	Kemp's ridley	Norfolk	36.83837	-76.2766	U		Unable to recover	

VAQS20242325	12/13	Green	Virginia Beach	36.88985	-75.9852	F	28.1	Died at rehab facility	12/14
VAQS20242327	12/15	Green	Virginia Beach	36.71372	-75.9307	U	24.8	Taken to rehab facility	
VAQS20242331	12/19	Kemp's ridley	Virginia Beach	36.91854	-76.1264	U	22.2	Taken to rehab facility	
VAQS20242333	12/21	Kemp's ridley	Norfolk	36.93361	-76.2018	U	20.1	Taken to rehab facility	
VAQS20242334	12/22	Kemp's ridley	Virginia Beach	36.91398	-76.1149	U	27	Taken to rehab facility	
VAQS20242337	12/23	Green	Virginia Beach	36.91383	-76.1135	F	26.4	Died at rehab facility	12/25
VAQS20242338	12/24	Green	Norfolk	36.84794	-76.2942	U	28.2	Taken to rehab facility	
VAQS20242339	12/25	Green	Virginia Beach	36.91924	-76.1285	U	31.4	Taken to rehab facility	
VAQS20242341	12/26	Green	Norfolk	36.9565	-76.2532	F	30.6	Died at rehab facility	12/27
VAQS20242342	12/27	Loggerhead	Norfolk	36.93384	-76.203	U	57.2	Taken to rehab facility	
VAQS20242348	12/30	Kemp's ridley	Hampton	37.02506	-76.3404	U	41.7	Euthanized	12/31

Figures

Marine Mammals

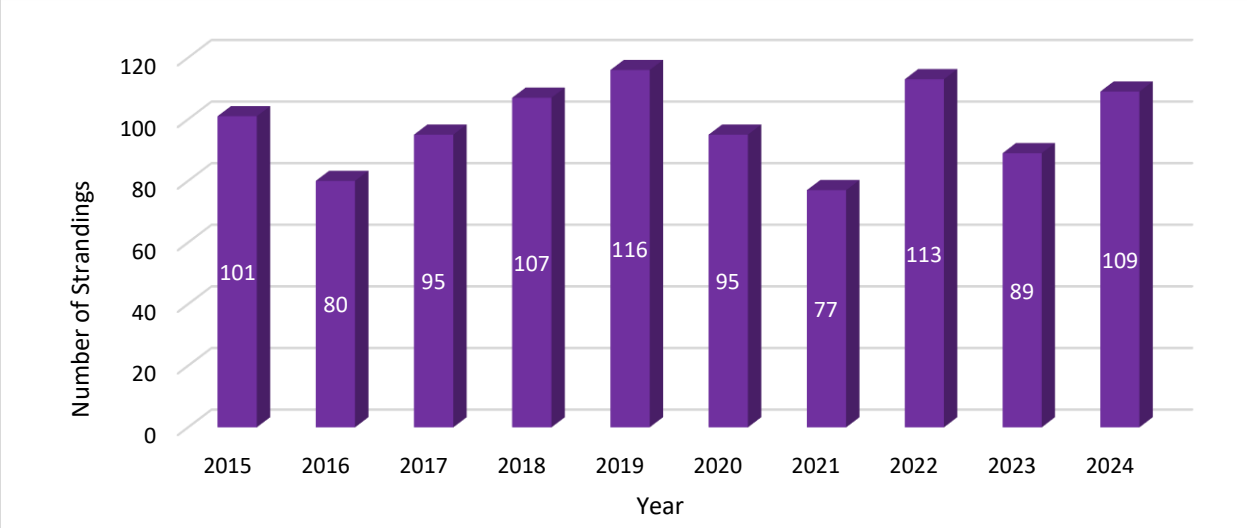


Figure 1: Yearly frequency of marine mammal strandings in Virginia, 2015-2024 (average= 98).

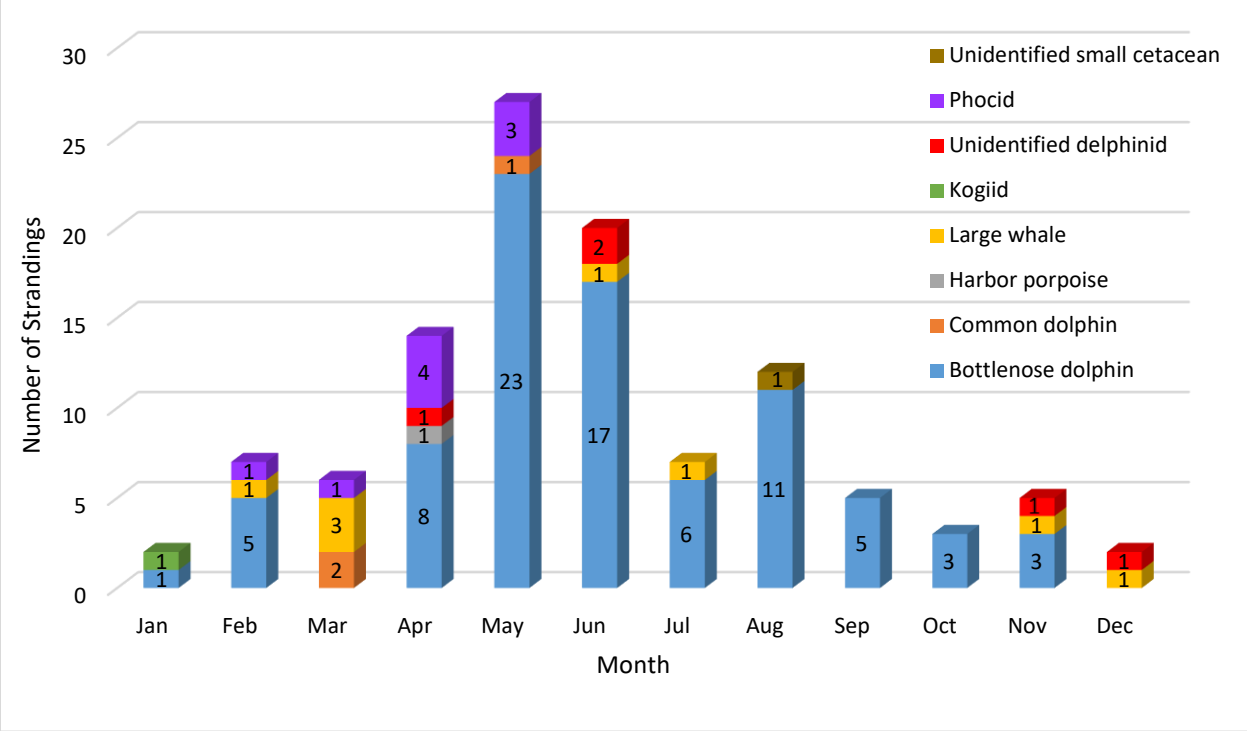


Figure 2: Monthly frequency of marine mammal strandings by species group in Virginia during 2024.

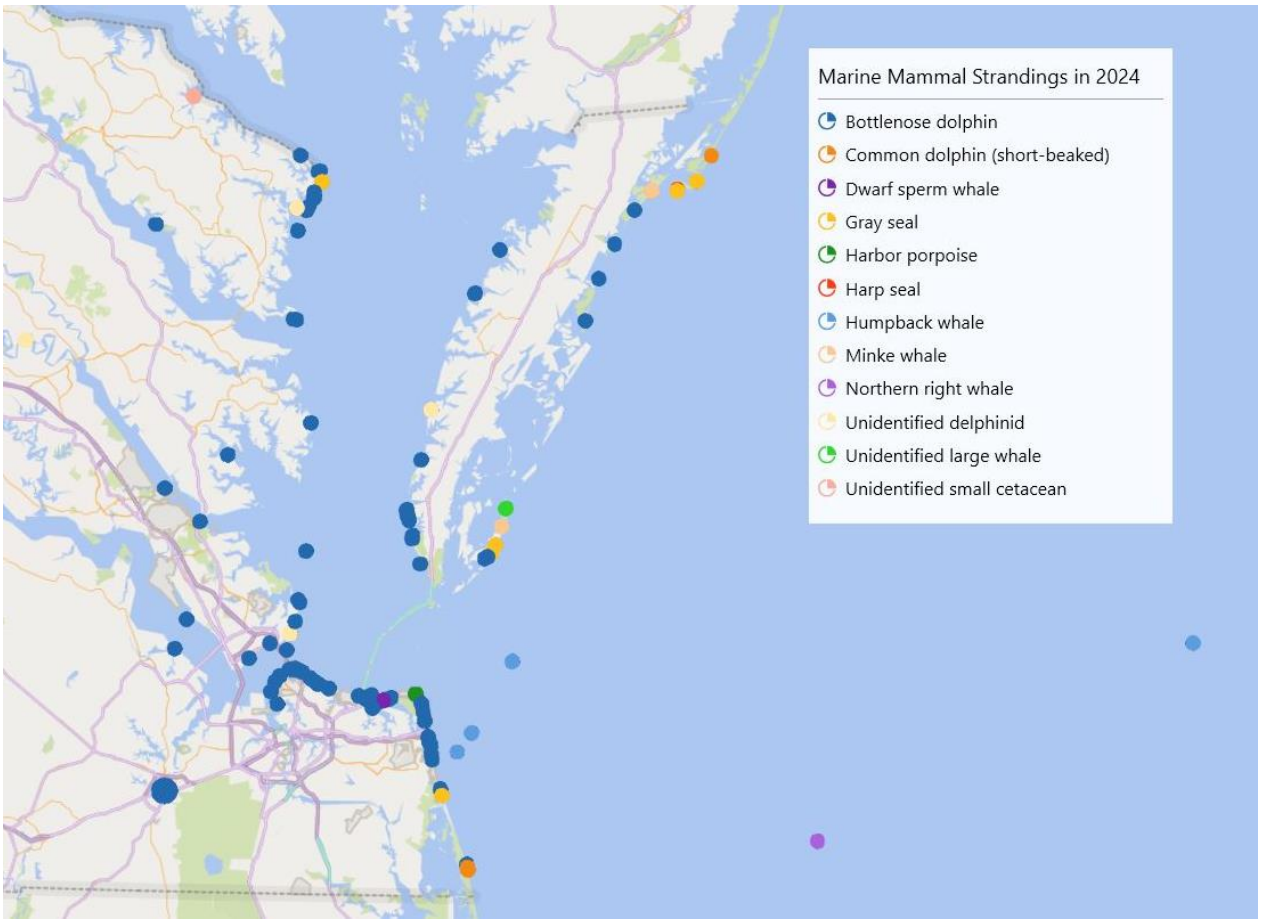


Figure 3: Locations of Virginia marine mammal strandings in 2024.

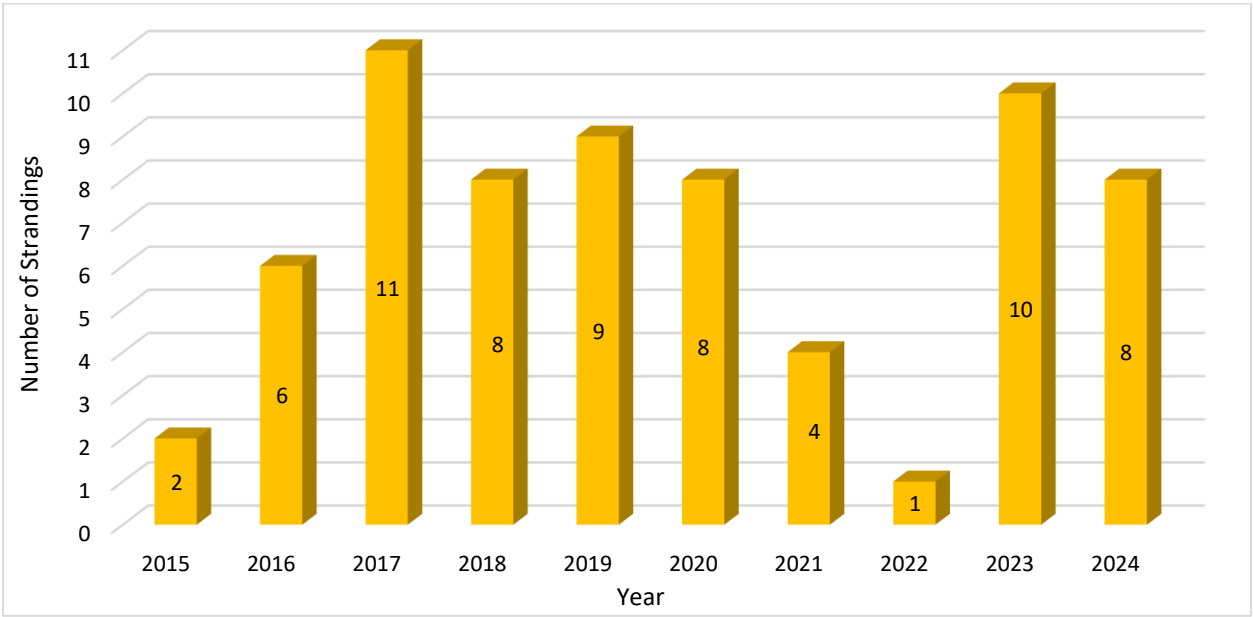


Figure 4: Yearly stranding frequency of large whales in Virginia, 2015-2024.

Sea Turtles

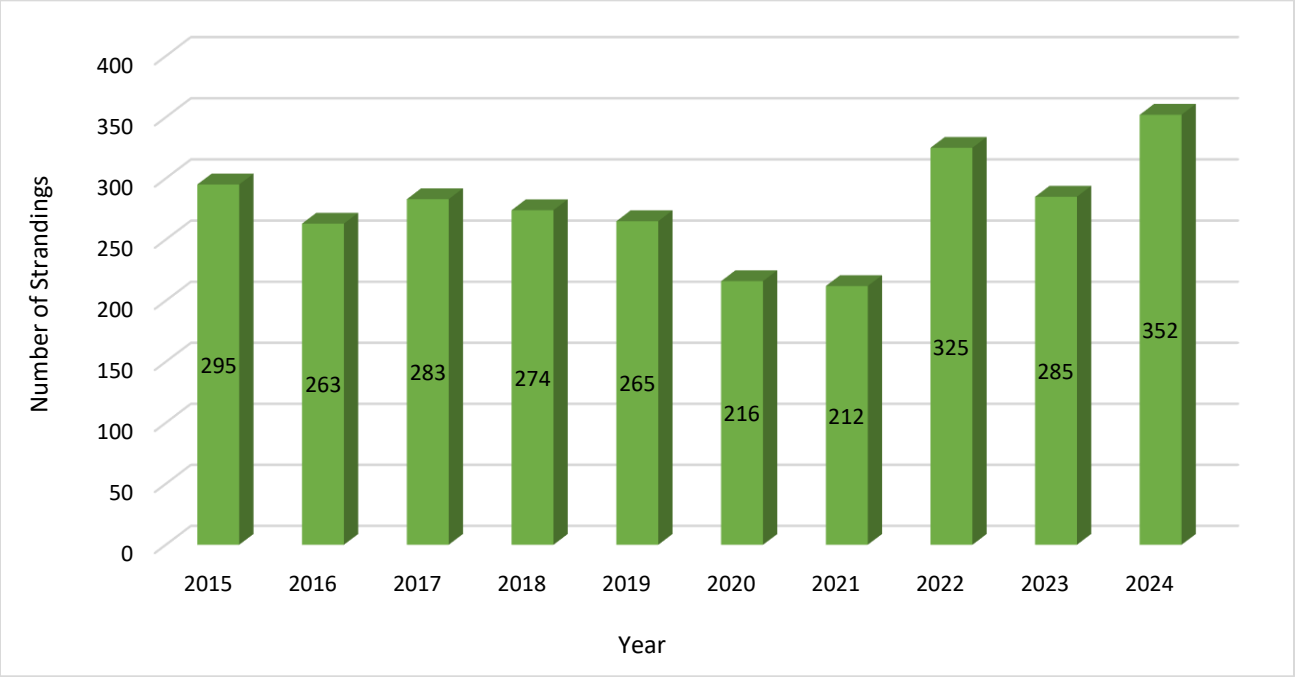


Figure 5: Yearly frequency of sea turtle strandings in Virginia, 2015-2024 (average= 277).

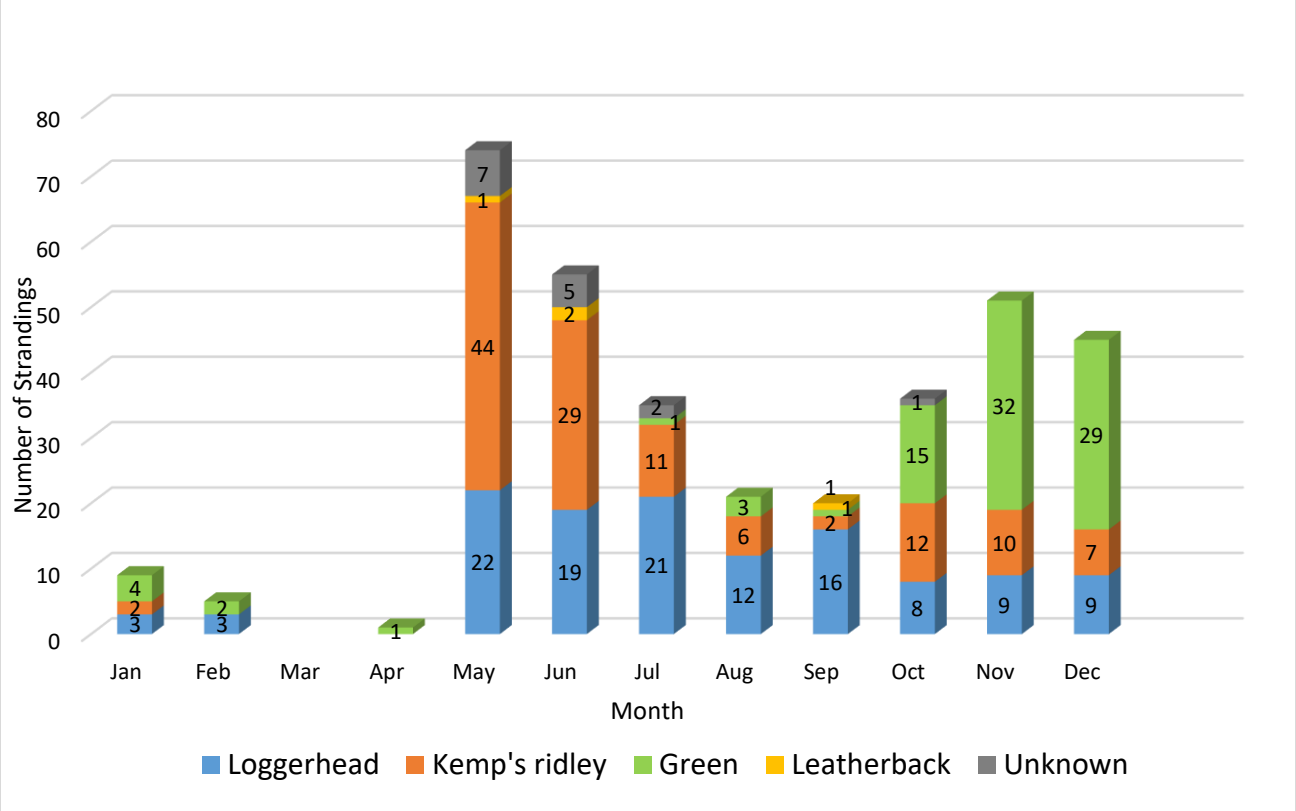


Figure 6: Monthly frequency of sea turtle strandings by species in Virginia during 2024.

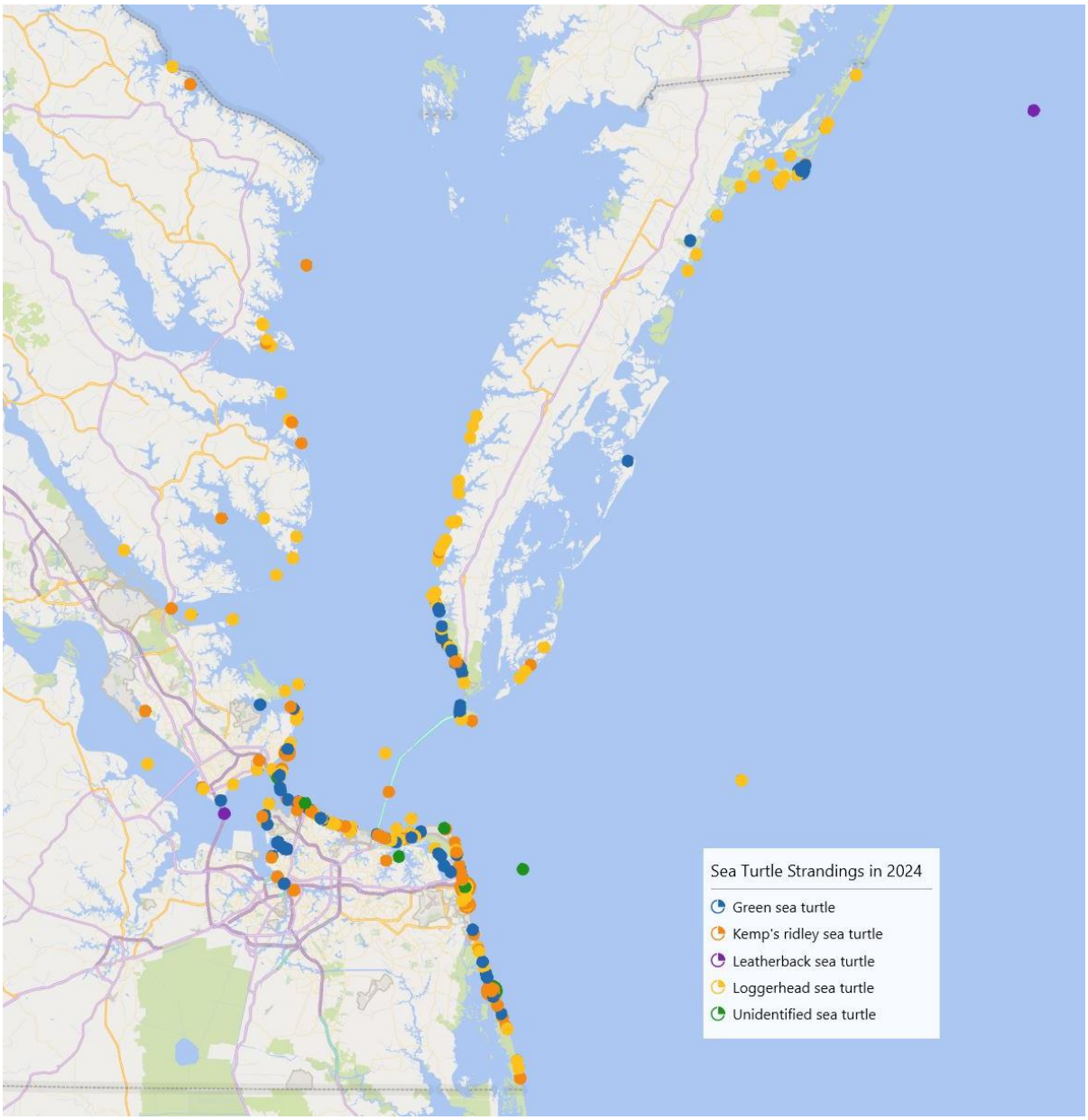


Figure 7: Locations of Virginia sea turtle strandings in 2024.

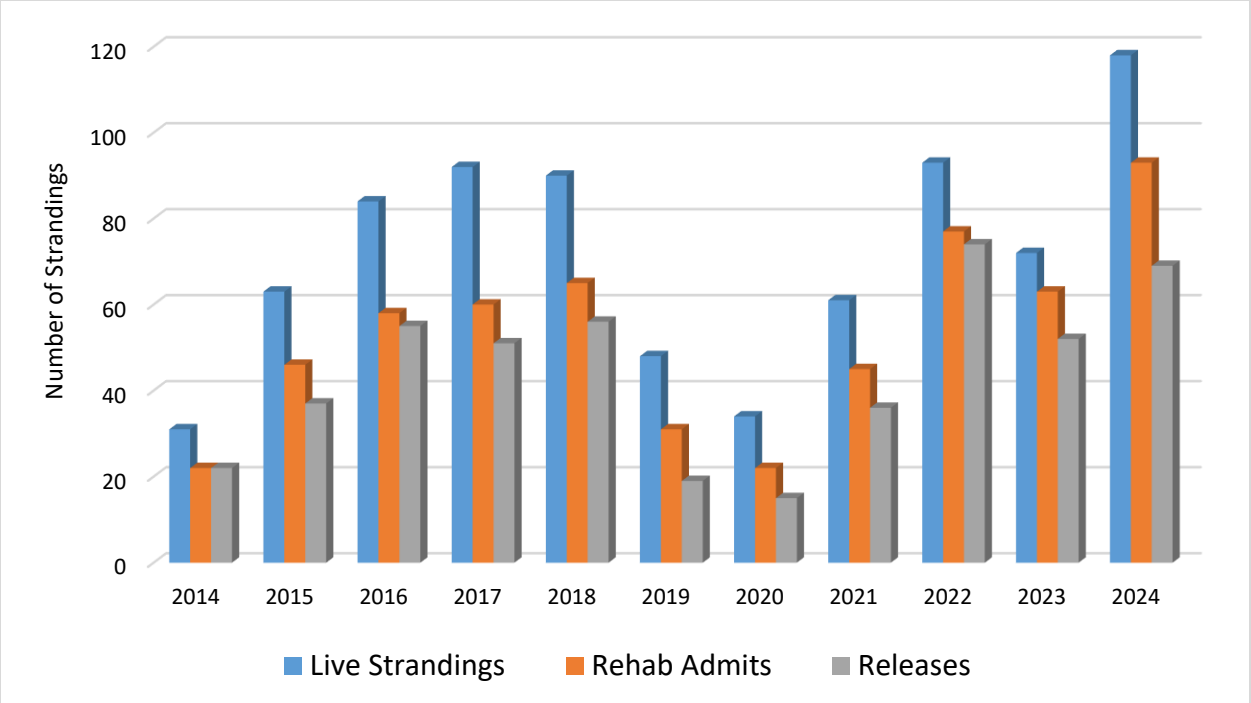


Figure 8: Live sea turtle stranding reports, rehabilitation admits, and releases from Virginia from 2014 to 2024.

Appendix I: Professional and Education Activities

Outreach	Date	Attendance	Location
Environmental Studies Program – Necropsy Experience (HS)	3/18/2024	3	DMACC
Environmental Studies Program – Response Experience (HS)	3/20/2024	3	DMACC
Environmental Studies Program – Rehab Experience (HS)	3/22/2024	3	DMACC
Outreach at Oceanfront Humpback Whale Stranding	3/3/2024-3/4/2024	~1,200	Resort Area Beach
Outreach at release of four sea turtles	6/21/2024	~20	47th Street

Demonstrations & Lectures	Date	Attendance	Location
Dr. Soraya Bartol Undergraduate Class Necropsy Demo	6/20/2024	10	DMACC
Dr. Greg Silber Undergraduate Class Necropsy demo	8/1/2024	12	DMACC
Veterinary Class Lecture – Medical management of sea turtles with recreational fisheries interactions	7/21/2024	15	Virtual

Stranding Center Tours, Group Presentations, Events	Date	Attendance	Location
Tour of DMACC for Ocean Commotion Auction Winner	2/16/2024	4	DMACC
Tour of DMACC for visiting right whale collaborators	4/3/2024	10	DMACC
Tour of DMACC for net frame fabricators	6/21/2024	2	DMACC
Tour of DMACC for Back Bay staff and intern	8/15/2024	2	DMACC
VAQ Staff Passport Program Vet Rounds Shadow	7/16/2024	1	DMACC

Public Presentation and Events	Date	Attendance	Location
VAQ Day of the Seal Outreach	3/22/2024	~100	VAQ
Back Bay Bash Outreach Event	6/1/2024	~100	BBNWR
VAQ World Oceans Day Outreach	6/8/2024	~75	VAQ
VAQ World Sea Turtle Day Outreach	6/16/2024	~200	VAQ
Ocean Park Civic League Stranding Presentation	8/8/2024	50	Brock Center
World Beach Day Outreach	8/30/2024	~200	VAQ
GARS Volunteer Stranding Spotlight Series	9/4/2024	30	Virtual
Conferences & Meetings	**Date**	**Attendance**	**Location**
Southeast and Mid-Atlantic Marine Mammal Conference	4/26-28	~100	Beaufort, NC
Greater Atlantic Regional Stranding Conference (GARSCON)	9/16-9/20	60	Virtual
International Association for Aquatic Animal Medicine Annual Conference	5/19-23	~300	Galway, Ireland

Staff Training	Date	Attendance	Location
Active Threat Training	4/17/2024	50	VAQ
Cold Stun & Medical Math Staff Review	10/31/2024	5	VAQ

Cold Stun & Medical Math Staff Review	11/13/2024	4	VAQ
First Aid/CPR Training	12/11/2024	5	VAQ
HAZWOPER 24 Hour Certification Training / 8 Hour Recertification Course	Various	4	Online course

Volunteer & Cooperator Trainings & Meetings	**Date**	**Attendance**	**Location**
Volunteer & Cooperator Annual Business Meeting	2/9	81	Virginia Beach
Pier Partner Response Training	4/25	3	DMACC
Pier Partner Response Training	4/26	5	DMACC
Nesting Training	5/1	8	Back Bay National Wildlife Refuge
Nesting Training	5/2	5	DMACC
Pier Partner Response Training	5/6	3	DMACC
Volunteer Orientation and Onboarding	5/6	25	DMACC, Aquarium
Beach Driving Training	5/13	8	Virginia Beach
Beach Driving Training	5/15	9	Virginia Beach
Intern Orientation and Onboarding	5/15	1	DMACC, Aquarium
Intern and Fellow Orientation and Onboarding	5/30	3	DMACC, Aquarium
Beach Driving Training	6/1	4	Virginia Beach
Overnight Sea Turtle Nest Monitoring Training	8/1	72	Aquarium
Intern Orientation and Onboarding	8/14	1	DMACC
Intern Orientation and Onboarding	10/11	1	DMACC
Beach Driving Training	10/16	4	Virginia Beach
Volunteer Orientation and Onboarding	10/28	23	DMACC, Aquarium
Beach Driving Training	11/13	6	Virginia Beach
Beach Driving Training	11/18	15	Virginia Beach

Stranding-Related Business	**Date**	**Attendance**	**Location**
Network Meetings	1x/month	Unknown, 1-5 staff	Virtual
Consortium Meetings	1-2x/month	~20	Virtual
Consortium Steering Committee Meetings	~2x/month	2-3	Virtual
2023/2024 NARW UME Case Review	10/3/2024	12	Virtual
Large Whale UME Operational Briefings	1x/month	Unknown	Virtual
Atlantic Humpback and Minke Whale UME Core Call	1x/month	Unknown	Virtual

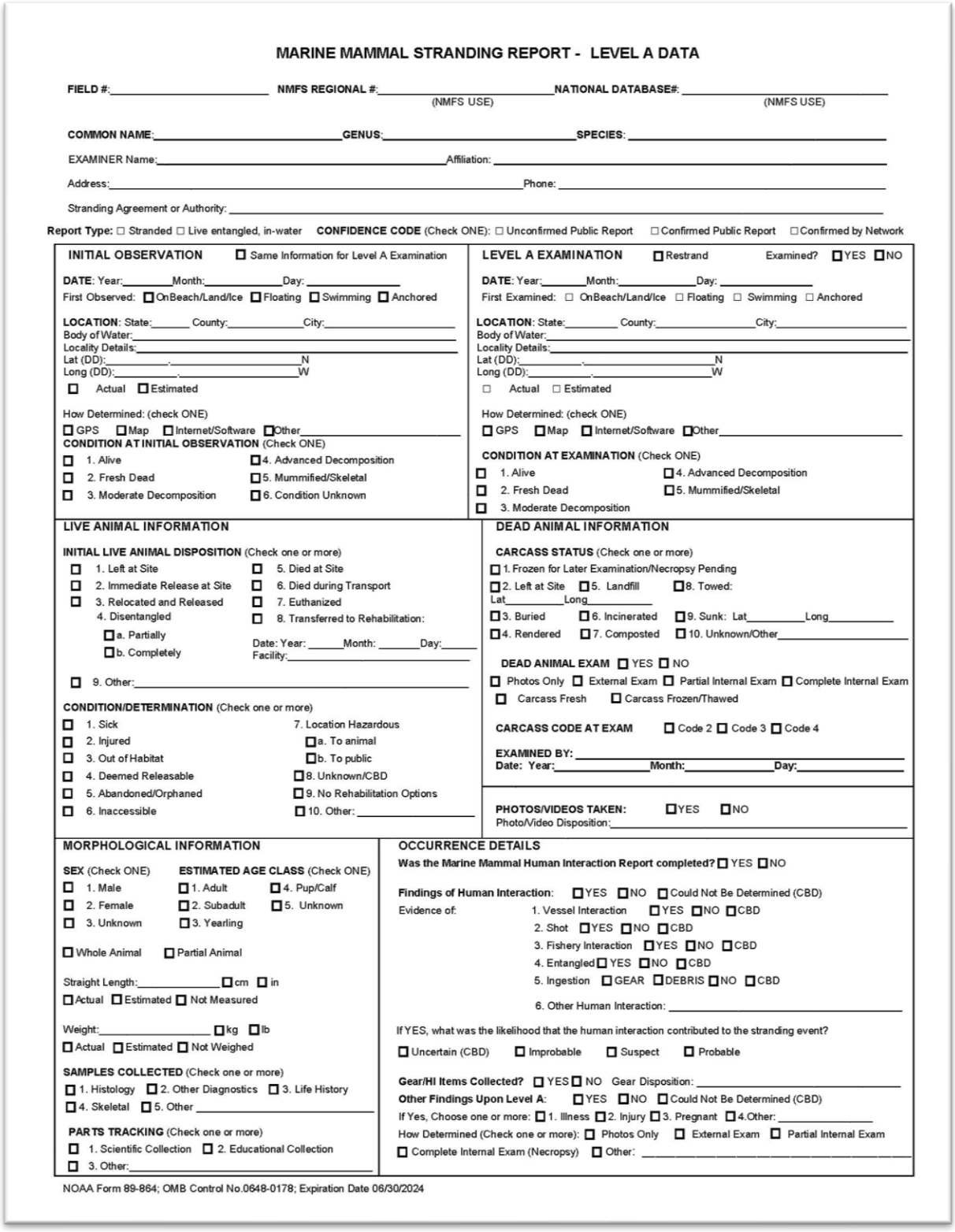
Other	Date	Attendance	Location
WHRO Cold Stun Sea Turtle Interview	1/3	1	Virtual
WAVY Cold Stun Sea Turtle Interview	1/19	1	Virtual
Virginia Living Magazine Interview	1/26/2024	1	Virtual
North Atlantic Right Whale Necropsy Support	1/31-2/2	~25	Martha's Vineyard, MA
MARCO Webinar: A dive into Sea Turtle Research Planning in Support of Impact Assessment for US Atlantic Offshore Wind	2/7	~50	Virtual
RWSC Science Plan Release Webinar	2/9	168	Virtual
RWSC Data Governance Subcommittee Meeting	3/8	~65	Virtual
VB Sea turtle nesting and beach grooming meeting	4/25/2024	8	Virtual
IFAW Assistance (high live cetacean caseload)	11/18 – 11/22		Cape Cod, MA
AZA Sea Turtle SAFE Program Steering Committee	1x/month	~12	Virtual

Scientific Review Work

- **Epple A**: NOAA Marine Mammal Research and Response Act – Proposed Cetacean Morphometrics Form (review prior to public comment phase); April 2024.
- **Epple A**: NOAA Marine Mammal Research and Response Act – Proposed Pinniped Morphometrics Form (review prior to public comment phase); April 2024.
- **Epple A**: NOAA Marine Mammal Research and Response Act – Proposed Sample Form (review prior to public comment phase); May 2024.
- **Epple A**: NOAA Marine Mammal Research and Response Act – Proposed Dead Animal Form (review prior to public comment phase); June 2024.
- **Epple A**: NOAA Marine Mammal Research and Response Act – Proposed Stranding Basic Data Form (review prior to public comment phase); July 2024.
- **Epple A**: NOAA Marine Mammal Research and Response Act – Proposed Entanglement Basic Data Form (review prior to public comment phase); July 2024.
- **Epple A**: NOAA Marine Mammal Research and Response Act – Proposed Sample Result Form (review prior to public comment phase); July 2024.
- **Epple A**: NOAA Marine Mammal Research and Response Act – Proposed Live Animal Form (review prior to public comment phase); August 2024.

Appendix II: Stranding Network Datasheets

A. Marine Mammal Level A data sheet



MARINE MAMMAL STRANDING REPORT - LEVEL A DATA

FIELD #:_____ **NMFS REGIONAL #:**_____ (NMFS USE) **NATIONAL DATABASE#:** _____ (NMFS USE)

COMMON NAME:_____ **GENUS:**_____ **SPECIES:** _____

EXAMINER Name:_____ Affiliation: _____

Address:_____ Phone: _____

Stranding Agreement or Authority: _____

Report Type: ☐ Stranded ☐ Live entangled, in-water **CONFIDENCE CODE** (Check ONE): ☐ Unconfirmed Public Report ☐ Confirmed Public Report ☐ Confirmed by Network

INITIAL OBSERVATION ☐ Same Information for Level A Examination

DATE: Year:_____ Month:_____ Day: _____

First Observed: ☐ OnBeach/Land/Ice ☐ Floating ☐ Swimming ☐ Anchored

LOCATION: State:_____ County:_____ City:_____

Body of Water:_____

Locality Details:_____

Lat (DD):_____._____N

Long (DD):_____._____W

☐ Actual ☐ Estimated

How Determined: (check ONE)

☐ GPS ☐ Map ☐ Internet/Software ☐ Other_____

CONDITION AT INITIAL OBSERVATION (Check ONE)

☐ 1. Alive ☐ 4. Advanced Decomposition

☐ 2. Fresh Dead ☐ 5. Mummified/Skeletal

☐ 3. Moderate Decomposition ☐ 6. Condition Unknown

LEVEL A EXAMINATION ☐ Restrand Examined? ☐ YES ☐ NO

DATE: Year:_____ Month:_____ Day: _____

First Examined: ☐ OnBeach/Land/Ice ☐ Floating ☐ Swimming ☐ Anchored

LOCATION: State:_____ County:_____ City:_____

Body of Water:_____

Locality Details:_____

Lat (DD):_____._____N

Long (DD):_____._____W

☐ Actual ☐ Estimated

How Determined: (check ONE)

☐ GPS ☐ Map ☐ Internet/Software ☐ Other_____

CONDITION AT EXAMINATION (Check ONE)

☐ 1. Alive ☐ 4. Advanced Decomposition

☐ 2. Fresh Dead ☐ 5. Mummified/Skeletal

☐ 3. Moderate Decomposition

LIVE ANIMAL INFORMATION

INITIAL LIVE ANIMAL DISPOSITION (Check one or more)

☐ 1. Left at Site ☐ 5. Died at Site

☐ 2. Immediate Release at Site ☐ 6. Died during Transport

☐ 3. Relocated and Released ☐ 7. Euthanized

4. Disentangled ☐ 8. Transferred to Rehabilitation:

☐ a. Partially Date: Year: _____ Month: _____ Day:_____

☐ b. Completely Facility:_____

☐ 9. Other:_____

CONDITION/DETERMINATION (Check one or more)

☐ 1. Sick 7. Location Hazardous

☐ 2. Injured ☐ a. To animal

☐ 3. Out of Habitat ☐ b. To public

☐ 4. Deemed Releasable ☐ 8. Unknown/CBD

☐ 5. Abandoned/Orphaned ☐ 9. No Rehabilitation Options

☐ 6. Inaccessible ☐ 10. Other: _____

DEAD ANIMAL INFORMATION

CARCASS STATUS (Check one or more)

☐ 1. Frozen for Later Examination/Necropsy Pending

☐ 2. Left at Site ☐ 5. Landfill ☐ 8. Towed:

Lat_____ Long_____

☐ 3. Buried ☐ 6. Incinerated ☐ 9. Sunk: Lat_____ Long_____

☐ 4. Rendered ☐ 7. Composted ☐ 10. Unknown/Other_____

DEAD ANIMAL EXAM ☐ YES ☐ NO

☐ Photos Only ☐ External Exam ☐ Partial Internal Exam ☐ Complete Internal Exam

☐ Carcass Fresh ☐ Carcass Frozen/Thawed

CARCASS CODE AT EXAM ☐ Code 2 ☐ Code 3 ☐ Code 4

EXAMINED BY: _____

Date: Year:_____ **Month:**_____ **Day:**_____

PHOTOS/VIDEOS TAKEN: ☐ YES ☐ NO

Photo/Video Disposition:_____

MORPHOLOGICAL INFORMATION

SEX (Check ONE) **ESTIMATED AGE CLASS** (Check ONE)

☐ 1. Male ☐ 1. Adult ☐ 4. Pup/Calf

☐ 2. Female ☐ 2. Subadult ☐ 5. Unknown

☐ 3. Unknown ☐ 3. Yearling

☐ Whole Animal ☐ Partial Animal

Straight Length:_____ ☐ cm ☐ in

☐ Actual ☐ Estimated ☐ Not Measured

Weight:_____ ☐ kg ☐ lb

☐ Actual ☐ Estimated ☐ Not Weighed

SAMPLES COLLECTED (Check one or more)

☐ 1. Histology ☐ 2. Other Diagnostics ☐ 3. Life History

☐ 4. Skeletal ☐ 5. Other _____

PARTS TRACKING (Check one or more)

☐ 1. Scientific Collection ☐ 2. Educational Collection

☐ 3. Other:_____

OCCURRENCE DETAILS

Was the Marine Mammal Human Interaction Report completed? ☐ YES ☐ NO

Findings of Human Interaction: ☐ YES ☐ NO ☐ Could Not Be Determined (CBD)

Evidence of:

1. Vessel Interaction ☐ YES ☐ NO ☐ CBD
2. Shot ☐ YES ☐ NO ☐ CBD
3. Fishery Interaction ☐ YES ☐ NO ☐ CBD
4. Entangled ☐ YES ☐ NO ☐ CBD
5. Ingestion ☐ GEAR ☐ DEBRIS ☐ NO ☐ CBD
6. Other Human Interaction: _____

If YES, what was the likelihood that the human interaction contributed to the stranding event?

☐ Uncertain (CBD) ☐ Improbable ☐ Suspect ☐ Probable

Gear/HI Items Collected? ☐ YES ☐ NO Gear Disposition: _____

Other Findings Upon Level A: ☐ YES ☐ NO ☐ Could Not Be Determined (CBD)

If Yes, Choose one or more: ☐ 1. Illness ☐ 2. Injury ☐ 3. Pregnant ☐ 4.Other: _____

How Determined (Check one or more): ☐ Photos Only ☐ External Exam ☐ Partial Internal Exam

☐ Complete Internal Exam (Necropsy) ☐ Other: _____

NOAA Form 89-864; OMB Control No.0648-0178; Expiration Date 06/30/2024

GE# _____ (NMFS Use)

Group Event: ☐ YES ☐ NO

If Yes, Type: ☐ Cow/Calf Pair ☐ Mass Stranding ☐ UME # Animals:_____☐ Actual ☐ Estimated

TAG DATA		ID#	Color	Type	Placement* (Circle ONE)	Applied	Present	Removed
Tags Were:								
Present at Time of Stranding (Pre-existing):	☐ YES ☐ NO				D DF L R LF LR RF RR V	☐	☐	☐
Applied during Stranding Response/Release:	☐ YES ☐ NO							
Applied during Rehabilitation/Release:	☐ YES ☐ NO				D DF L R LF LR RF RR V	☐	☐	☐
Absent but Suspect Prior Tag:	☐ YES ☐ NO							
					D DF L R LF LR RF RR V	☐	☐	☐
					D DF L R LF LR RF RR V	☐	☐	☐

* D= Dorsal; DF= Dorsal Fin; L= Left Lateral Body R= Right Lateral Body LF= Left Front; LR= Left Rear; RF= Right Front; RR= Right Rear; V= Ventrum

ADDITIONAL IDENTIFIER: _____ (If animal is restranded, please indicate any previous field numbers here)

ADDITIONAL REMARKS:

DISCLAIMER

THESE DATA SHOULD NOT BE USED OUT OF CONTEXT OR WITHOUT VERIFICATION. THIS SHOULD BE STRICTLY ENFORCED WHEN REPORTING SIGNS OF HUMAN INTERACTION DATA.

DATA ACCESS FOR LEVEL A DATA

UPON WRITTEN REQUEST, CERTAIN FIELDS OF THE LEVEL A DATA SHEET WILL BE RELEASED TO THE REQUESTOR PROVIDED THAT THE REQUESTOR CREDIT THE STRANDING NETWORK AND THE NATIONAL MARINE FISHERIES SERVICE. THE NATIONAL MARINE FISHERIES SERVICE WILL NOTIFY THE CONTRIBUTING STRANDING NETWORK MEMBERS THAT THESE DATA HAVE BEEN REQUESTED AND THE INTENT OF USE. ALL OTHER DATA WILL BE RELEASED TO THE REQUESTOR PROVIDED THAT THE REQUESTOR OBTAIN PERMISSION FROM THE CONTRIBUTING STRANDING NETWORK AND THE NATIONAL MARINE FISHERIES SERVICE.

PAPERWORK REDUCTION ACT INFORMATION

PUBLIC REPORTING BURDEN FOR THE COLLECTION OF INFORMATION IS ESTIMATED TO AVERAGE 30 MINUTES PER RESPONSE, INCLUDING THE TIME FOR REVIEWING INSTRUCTIONS, SEARCHING EXISTING DATA SOURCES, GATHERING AND MAINTAINING THE DATA NEEDED, AND COMPLETING AND REVIEWING THE COLLECTION OF INFORMATION. SEND COMMENTS REGARDING THIS BURDEN ESTIMATE OR ANY OTHER ASPECT OF THE COLLECTION INFORMATION, INCLUDING SUGGESTIONS FOR REDUCING THE BURDEN TO: CHIEF, MARINE MAMMAL AND SEA TURTLE CONSERVATION DIVISION, OFFICE OF PROTECTED RESOURCES, NOAA FISHERIES, 1315 EAST-WEST HIGHWAY, SILVER SPRING, MARYLAND 20910. NOT WITHSTANDING ANY OTHER PROVISION OF THE LAW, NO PERSON IS REQUIRED TO RESPOND, NOR SHALL ANY PERSON BE SUBJECTED TO A PENALTY FOR FAILURE TO COMPLY WITH, A COLLECTION OF INFORMATION SUBJECT TO THE REQUIREMENTS OF THE PAPERWORK REDUCTION ACT, UNLESS THE COLLECTION OF INFORMATION DISPLAYS A CURRENTLY VALID OFFICE OF MANAGEMENT AND BUDGET (OMB) CONTROL NUMBER.

NOAA Form 89-864; OMB Control Number 0648-0178; Expiration Date: 06/30/2024

B. Sea Turtle Stranding and Salvage Network (STSSN) data sheet (slightly modified for VAQS' specific use)

SEA TURTLE STRANDING AND SALVAGE NETWORK — STRANDING REPORT

OBSERVER'S NAME AND CONTACT INFORMATION:
First _____ M.I. _____ Last _____
Email _____
Affiliation _____
Phone number (____) _____

STRANDING DATE: *Use two digits for date fields.*
Year 20[__][__] Month[__][__] Day[__][__]
Turtle number by day[__][__][__] *Use three digits.*
VAQS Field Number: _____

STRANDING LOCATION:
State _____ County _____
Latitude _____ ☐ est Longitude _____ ☐ est
Location description _____

SPECIES: (check one, do not guess)
☐ Loggerhead (CC) ☐ Kemp's ridley (LK)
☐ Green turtle (CM) ☐ Olive ridley (LO)
☐ Leatherback (DC) ☐ Unidentified
☐ Hawksbill (EI)

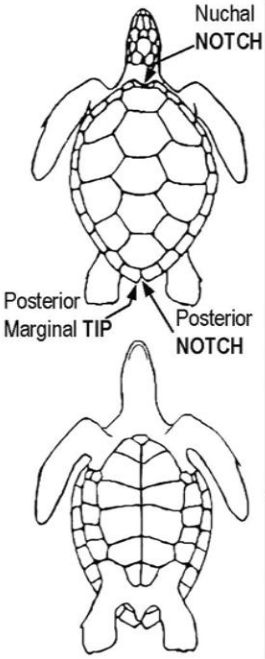
CIRCUMSTANCES OF ENCOUNTER: (check one)
Traditional Stranding
☐ Found washed ashore or washing ashore ☐ **Post-hatchling Washback**
☐ Found floating/struggling at water surface
☐ Found underwater ☐ **Cold-stunning**
Incidental Capture
☐ Caught by recreational fisherman
☐ Found in the intake canal of power plant
☐ Found in dredge equipment
☐ Entangled in line of pot/trap buoy
☐ Caught in commercial hook/line fishery
☐ Caught in commercial net fishery
☐ Captured during **relocation** efforts
☐ Captured during **research** efforts
☐ **Other** _____

NECROPSY:
Necropsied? ☐ Yes ☐ No ☐ Pending
Necropsy Date? _____
Necropsy Prosectors: _____
Necropsy type: ☐ Partial ☐ Complete

PHOTOS: (submit photos to state coordinator)
☐ YES (indicate below the completeness of photo series) ☐ NO
☐ Dorsal aspect visible ☐ Ventral aspect visible
A complete photo series includes photographs of the dorsal and ventral aspects of the turtle, and all injuries or anomalies.

CONDITION: (check one)
☐ Alive
☐ Mildly decomposed
☐ Moderately decomposed
☐ Severely decomposed
☐ Dried carcass
☐ Skeletal

SEX: (check one)
☐ Female
☐ Male
☐ Unknown
How Determined?
☐ Necropsy
☐ Tail Length



TAGS:
Contact state coordinator before disposing of a tagged turtle!
Flipper tags found? ☐ YES ☐ NO
Check all 4 flippers. If found, record tag number & location.
1. _____
2. _____
3. _____
PIT tag scan performed? ☐ YES ☐ NO
Check all 4 flippers. If found, record tag id & location.
1. _____
2. _____
Possible tag scars? ☐ YES ☐ NO
Check all locations of possible tag scars:
☐ Front left ☐ Front right ☐ Rear left ☐ Rear right
Living tag found? ☐ YES ☐ NO
If found, photograph & record scute number & side.
_____
Tracking gear found? ☐ YES ☐ NO If present, describe.
Do not dispose of turtle or remove gear; consult STSSN coordinator.
_____

CARAPACE MEASUREMENTS:
All measurements in cm, check box if estimated
Using calipers
Straight length (notch-tip) _____ ☐ est
Minimum length (notch-notch) _____ ☐ est
Straight width (widest point) _____ ☐ est
Using non-metal measuring tape
Curved length (notch-tip) _____ ☐ est
Minimum length (notch-notch) _____ ☐ est
Curved width (widest point) _____ ☐ est

EXAMINATION DETAILS:
Type of examination: (check one)
☐ In-person exam by STSSN participant
☐ Evaluated from photographs submitted by the public
Completeness of body: (check all that apply)
☐ Complete
☐ Missing head
☐ Missing one or more flippers (100%)
☐ Missing 50% or more of the shell (body)
☐ Not determined
Mouth checked? ☐ YES ☐ NO ☐ UNKNOWN

WEIGHT: (do not estimate weight)
Measured weight: _____ **kg**

TAIL MEASUREMENT:
Did the tail extend past the carapace?
At least 5cm/2in (LK or LO), 10cm/4in (CC, CM, EI), or 15cm/6in (DC)
☐ YES, directly measured: _____ **cm**
☐ NO ☐ NOT DETERMINED

FATE OR FINAL DISPOSITION:
If the stranded turtle was alive, choose one of the following:
☐ Alive, immediately released
☐ Alive, taken to rehabilitation facility; where?
_____
☐ Died before reaching rehabilitation facility
If the turtle was found dead or died, choose one of the following:
☐ Dead and left where found; marked? ☐ YES ☐ NO
If marked, describe: _____
☐ Dead; buried, rendered, or otherwise disposed of
☐ Dead and salvaged; location of salvaged remains?
_____
Salvaged for necropsy? ☐ YES ☐ NO

Revised: 19-Jan-21 **Clear Form**

ANTHROPOGENIC MATERIAL

Was there any man-made material found on the turtle (e.g., fishing gear, tar, or oil)? ☐YES ☐NO **If yes, were photos taken?** ☐YES ☐NO

If man-made material was present, please answer the following questions. (check all that apply)

Were any fishing hooks present on the turtle? ☐YES ☐NO — Where were the hooks located? ☐Mouth ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

If yes, was the gear collected? ☐YES ☐NO

Was line <0.5 cm dia. present on the turtle? ☐YES ☐NO ☐ — Where was the line located? ☐Mouth ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail ☐Cloaca

If yes, was the gear collected? ☐YES ☐NO

Was the turtle entangled in line ≥0.5 cm dia.? ☐YES ☐NO Where was the line located? ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

If yes, was the gear collected? ☐YES ☐NO

Was the turtle entangled in fishing net? ☐YES ☐NO — Where was the net located? ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

If yes, was the gear collected? ☐YES ☐NO

Was there any tar or oil present? ☐YES ☐NO — Where was the tar or oil located? ☐Mouth ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

If yes, were any samples collected? ☐YES ☐NO

Was there any other man-made material present? ☐YES ☐NO — Where was the material located? ☐Mouth ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

Please describe the material: _____

INJURIES

Were any injuries externally evident? ☐YES ☐NO **If yes, were photos taken?** ☐YES ☐NO

If injuries were evident, please answer the following questions. (check all that apply)

Were there any definitive vessel-strike injuries evident? ☐YES ☐NO — Where were these injuries located? ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

Were there any blunt force injuries evident? ☐YES ☐NO — Where were these injuries located? ☐Head ☐Carapace ☐Plastron

Were there any shark-bite injuries evident? ☐YES ☐NO — Where were these injuries located? ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

Were there any amputations of unknown cause evident? ☐YES ☐NO — Where were these amputations located? ☐Front left flipper ☐Front right flipper ☐Rear left flipper ☐Rear right flipper

How many amputations were present? _____

Was there an incised wound evident? ☐YES ☐NO — Where was the wound located? ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

(e.g., clean cuts, as created by knife; typically longer than wide)

Was there a perforating or penetrating wound evident? ☐YES ☐NO — Where was the wound located? ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

(a wound that is typically deeper than wide)

Was there a wound indicative of entanglement or ingestion of anthropogenic material without this material being present? ☐YES ☐NO — Where was the wounds located? ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

Was there a furrow on the edge of the beak? ☐YES ☐NO

Was there some other type of injury evident (not already described)? ☐YES ☐NO

Please describe: _____

DISEASES AND LEECHES

Were any diseases or leeches externally evident? ☐YES ☐NO **If yes, were photos taken?** ☐YES ☐NO

If diseases or leeches were evident, please answer the following questions. (check all that apply)

Were there any fibropapilloma-like tumors present? ☐YES ☐NO **If yes, were photos taken?** ☐YES ☐NO

Were eye tumors present? ☐YES ☐NO

Were mouth tumors present? ☐YES ☐NO

Did any of the tumors have a papillary texture? ☐YES ☐NO

Were there any non-fibropapilloma-like tumors present? ☐YES ☐NO **If yes, were photos taken?** ☐YES ☐NO

Please describe: _____

Were there any external skin lesions evident? ☐YES ☐NO **If yes, were photos taken?** ☐YES ☐NO

Which of the following best describes the lesions? ☐Superficial crusts on the skin surface ☐Deep lesions exposing underlying tissue ☐Both superficial crusts and deep lesions were present ☐Neither

Which best describes the extent of superficial crusts? ☐Found only in single area or in a few small, isolated areas ☐Found over large areas

Where were the superficial crusts found? ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

Which best describes the extent of the deep lesions exposing underlying tissues?

☐Found only in single area or in a few small, isolated areas ☐Found over large areas

Where were the deep lesions found? ☐Head ☐Neck ☐Carapace ☐Plastron ☐Front flipper ☐Rear flipper ☐Tail

Were there any leeches or leech eggs evident? ☐YES, small isolated egg patches or few adults ☐YES, large egg patches or many adults ☐NO **If yes, were photos taken?** ☐YES ☐NO

ADDITIONAL COMMENTS: _____

Appendix III: List of Species Stranded in Virginia

A. Marine mammal species in stranding records from Virginia, U.S.A. (Virginia Aquarium Marine Mammal Stranding Database, Potter 1991).

Common Name	Scientific Name	ESA Status
Order: Sirenia		
Family: Trichechidea		
West Indian manatee	*Trichechus manatus latirostris*	Threatened
Order: Cetacea		
Suborder: Mysticeti		
Family: Balaenidae		
North Atlantic Right whale	*Eubalaena glacialis*	Endangered
Family: Balaenopteridae		
Fin whale	*Balaenoptera physalus*	Endangered
Sei whale	*Balaenoptera borealis*	Endangered
Humpback whale	*Megaptera novaeangliae*	Not Listed
Minke whale	*Balaenoptera acutorostrata*	Not Listed
Suborder: Odontoceti		
Family: Physteridae		
Sperm whale	*Physeter macrocephalus*	Endangered
Pygmy sperm whale	*Kogia breviceps*	Uncertain
Dwarf sperm whale	*Kogia sima*	Uncertain
Family: Ziphiidae		
Gervais' beaked whale	*Mesoplodon europaeus*	Uncertain
True's beaked whale	*Mesoplodon mirus*	Uncertain
Sowerby's beaked whale	*Mesoplodon bidens*	Uncertain
Blainville's beaked whale	*Mesoplodon densirostris*	Uncertain
Family: Delphinidae		
Long-finned pilot whale	*Globicephala melas*	Not Listed
Short-finned pilot whale	*Globicephala macrorynchus*	Not Listed
Risso's dolphin	*Grampus griseus*	Not Listed
Bottlenose dolphin	*Tursiops truncatus*	Not Listed
Atlantic white-sided dolphin	*Lagenorhynchus acutus*	Not Listed
Pygmy killer whale	*Feresa attenuata*	Not Listed
Melon-headed whale	*Peponocephala electra*	Not Listed
Rough-toothed dolphin	*Steno bredanensis*	Uncertain
Common dolphin	*Delphinus delphis*	Not Listed
Striped dolphin	*Stenella coerubeoalba*	Not Listed
Atlantic spotted dolphin	*Stenella frontalis*	Not Listed
Family: Phocoenidae		
Harbor porpoise	*Phocoena phocoena*	Not Listed
Order: Carnivora		

Common Name	Scientific Name	ESA Status
Suborder: Pinnipedia		
Family: Phocidae		
Harbor seal	*Phoca vitulina*	Not Listed
Gray seal	*Halichoerus grypus*	Not Listed
Hooded seal	*Crystophora cristata*	Not Listed
Harp seal	*Pagophilus groenlandica*	Not Listed

B. Sea turtle species in stranding records from Virginia, U.S.A. (Virginia Aquarium Sea Turtle Stranding Database).

Common Name	Scientific Name	ESA Status
Class: Reptilia		
Order: Testudines		
Family: Dermochelyidea		
Leatherback sea turtle	*Dermochelys coriacea*	Endangered
Family: Cheloniidae		
Green sea turtle	*Chelonia mydas*	Threatened
Loggerhead sea turtle	*Caretta caretta*	Threatened
Hawksbill sea turtle	*Eretmochelys imbricata*	Endangered
Kemp's ridley sea turtle	*Lepidochelys kempii*	Endangered