

NJ DOLPHINS—FAQs 01/07/2009

GENERAL

Why are the dolphins still here?

Probably because they continue to find food and the area is providing them with shelter.

Where are the animals that are unaccounted for?

We don't know and we don't know their condition. After the most recent surveys, we believe that the five animals confirmed in the Shrewsbury River on Jan 5 and 6 are the only live animals remaining in the area.

Are these animals going to die this winter?

We certainly hope not, but expect some will die and it is possible that none of the animals will survive.

Why won't you rescue these animals?

We do not believe we improve their prospects by doing so. What we can do is protect the ability of these wild animals to remain wild and use the very instincts and behaviors that also ensure the long-term health and survival of the larger population. They may fail, but that too is a common and important pattern in nature.

Why would dolphins stay in the area if they will not survive conditions?

The dolphins in the Shrewsbury/Navesink River have been present since at least June, adapting well to changing conditions. They are in a typical habitat and have the ability to swim to deeper water on their own. They exhibit normal behavior for wild dolphins. For these reasons, and based on ranging behaviors of this species elsewhere, we believe this is likely an example of a population attempting to extend and expand its range during a period when environmental conditions for the most part have been favorable.

Have dolphins ever overwintered here in the past?

None have been documented that we know of. Over the past two decades, however, bottlenose dolphins have overwintered in waters off Massachusetts and Virginia.

Why are some experts saying the dolphins should be moved and others that they should not?

We do not expect that everyone will agree with us. However we continue to consult widely with the recognized experts who study dolphins on the east coast, and who respond to stranded, ill, and injured dolphins in our region—in other words, those most knowledgeable about this specific situation. While not everyone agrees with our current approach, it reflects the consensus of the majority.

Did you reject offers from groups in Florida to help rescue the animals?

The groups in Florida made their initial offer before learning all the facts about this situation, and subsequently deferred to the recommendation of the Northeast stranding network and dolphin experts to allow the animals a chance to survive on their own. The

Florida groups have offered assistance with any stranding response, and the Northeast Region's stranding network will let them know if additional support is needed.

Is it true that dolphins do not belong in rivers? Why do you say they are in natural habitat?

The Shrewsbury/Navesink Rivers are definitely considered part of the dolphins' natural habitat. Coastal bottlenose dolphins quite commonly occur in rivers, estuaries and shallow-water embayments like the Shrewsbury/Navesink throughout their range, and can tolerate a wide range of environmental conditions (e.g., salinity and temperature fluctuations) as long as they are in good body condition, have sufficient food, and are not otherwise ill or injured.

Some people worry that the Highlands Bridge construction is keeping these animals from getting out of the river—isn't that a reason to move them?

There is still no evidence to suggest that the bridge construction activities are influencing the dolphins' movement. The construction activities are not constant and there are periods of time when no construction occurs. There are documented cases of dolphins traveling around major bridge construction projects elsewhere with no adverse effects on their behavior.

Should people be worried about the dolphins?

We understand many people are worried about the dolphins, but it is important to remember that we should not always interfere with natural processes and the dolphins may stay in the estuary as long as it is providing them with necessary food and shelter.

What is the status of this species of dolphin along the U.S. Atlantic coast?

The dolphins in the Shrewsbury and Navesink Rivers are bottlenose dolphins (*Tursiops truncatus*), which are an abundant species with a worldwide distribution. The species is not endangered or threatened. In the waters of the United States, scientists recognize at least 11 different population "stocks" for this species in either the coastal or offshore waters of the Atlantic, Gulf of Mexico and Pacific. Genetic testing of the dolphins currently in the Shrewsbury and Navesink Rivers has shown that they are part of the "northern coastal migratory stock" which is included in a larger coastal migratory stock of dolphins that NMFS designated as "depleted" in 1993 following a die-off in 1987/1988. A trend for this northern migratory population stock cannot be determined at this time, but the most recent abundance estimate is about 7,500 dolphins. The estimated combined total of the 7 recognized coastal migratory stocks along the U.S. Atlantic (New York to Florida) is approximately 31,500 animals. The estimated total of the Western North Atlantic offshore stock is 70,775 animals.

STRANDINGS

Are the dolphins considered stranded or out of habitat?

No, the dolphins are not considered to be stranded or out of habitat. As defined in Section 410 of the Marine Mammal Protection Act:

"The term 'stranding' means an event in the wild in which:

(A) a marine mammal is dead and is:

(i) on a beach or shore of the United States; or

(ii) in waters under the jurisdiction of the United States (including any navigable waters); or

(B) a marine mammal is alive and is:

(i) on a beach or shore of the United States and unable to return to the water;

(ii) on a beach or shore of the United States and, although able to return to the water, is in need of apparent medical attention; or

(iii) in the waters under the jurisdiction of the United States (including any navigable waters), but is unable to return to its natural habitat under its own power or without assistance."

The dolphins in the Shrewsbury/Navesink River do not currently meet the definition of a stranded animal because they are in their natural habitat, and have the ability to swim to deeper water on their own.

What if strandings occur?

The Northeast Regional marine mammal stranding network is ready to assist in the event of a stranding. Animals that live-strand will be evaluated to assess whether they can be transported and released in a different location relatively quickly, or if they need to be transported to a rehabilitation facility for follow-up care.

Isn't it your job to assist marine mammals in distress?

Yes, and we have a well-organized network of marine mammal stranding responders who are on call 24 hours a day and 7 days a week to do so. Our network, including the 21 member organizations in the Northeast, routinely responds to animals that are sick or injured from natural or human-induced causes, including animals that are displaced or otherwise considered out of habitat after extreme weather or oceanographic events (e.g., animals washed inshore from hurricanes).

Aren't these animals in distress?

It is likely that some of them are, but owing to entirely natural and typical conditions. Stranding response is not intended to prevent all natural mortalities.

Shouldn't you simply try to move all the animals if you think some might not live?

In our judgment, no. Survivorship is one concern, but it is equally important not to interfere with the natural progression of their lives. The dolphins entered the river system on their own and there is no evidence to suggest that human activities or unusual circumstances are preventing them from leaving. Also, we have no way of knowing which animals are most likely to survive with or without intervention, and we continue to believe most will not survive an attempt to force them from the area or to move them elsewhere. If an animal strands alive, our network is ready to respond and provide the necessary care.

CONDITION

How are the dolphins doing?

From June through mid-December, the dolphins appeared healthy and in good body condition. During the latter part of December we documented body mass loss and other signs of weight loss in some of the animals. Feeding, socializing behaviors were otherwise unchanged.

How many dolphins are there?

At present we believe that five live animals continue to reside in the Shrewsbury River. We also received and are trying to confirm a report that some of the dolphins passed under the Highlands Bridge and swam out into Sandy Hook Bay in recent weeks. NOAA biologists will continue conduct surveys every 2 to 3 weeks to monitor and assess the animals.

What happened to the others?

Of the original 16 documented in July, 3 are confirmed dead, the current whereabouts of 8 are unknown, and 5 were in the Shrewsbury River in early January. None were sighted in the Navesink in January, although it was thoroughly searched.

Why did three die?

Two juvenile dolphins stranded dead in the Navesink River: one on September 24th and the other on October 8th. Necropsies revealed that one had chronic fungal pneumonia and the other had parasites. Both of these causes are common among young dolphins.

A third animal, an apparently older, pregnant female, was recovered dead on Dec. 25. Necropsy results are pending. Initial results showed old lesions on the lung and no stomach contents. This was also one of the animals showing some loss of body mass by the latter part of December.

A fourth dead dolphin was reported floating in Sandy Hook Bay during the summer but could not be recovered, so whether it was one of the original 16 and what caused its death is unknown.

Did the juvenile dolphins die from pneumonia because of the cold water temperatures?

No, both juvenile dolphins died when the water temperatures were still above 15°C (59°F). Pneumonia is a common cause of death year round in several species of marine mammals in both temperate and tropical waters. Viral, fungal and bacterial forms of pneumonia are commonly found in bottlenose dolphins.

Where are the dolphins now?

Mostly in the Shrewsbury River, we believe. Animals have not been documented in the Navesink since Dec. 29.

BEHAVIOR

If the dolphins are not in distress, why have they been observed tail slapping?

Scientists believe that bottlenose dolphins exhibit tail slapping behavior for a variety of reasons. Tail slapping can indicate aggression or annoyance, or this behavior could also be used as a communication tactic to alert group members to an individual's presence or location.

MOVING OR CAPTURING

Are you going to move the dolphins?

There are currently no plans to move the dolphins. We are prepared to respond to stranding events and the Northeast Regional stranding network is ready to assist as needed.

Are you willing to risk the dolphins' survival in the estuary if this is their natural behavior and the environmental conditions change?

Intervening carries the same, if not a higher, risk of mortalities. After consulting with the recognized experts, we have concluded that the dolphins' best chance for survival lies with preserving their natural behavior and allowing nature to determine the outcome.

Why is moving the dolphins more dangerous than leaving them where they are?

The majority of stranding responders in the Northeast are concerned that animals would be separated from their social group (particularly mother-calf pairs), forced into an area with less prey and lower chances of survival, and/or a mass stranding event would occur. Past attempts to herd or capture and move dolphins in this same area have failed, resulting in dead animals. Furthermore, the number of animals in this situation, their apparent acclimation to the area, and the distance to Sandy Hook Bay are all factors that confound success of an intervention attempt.

Has moving bottlenose dolphins ever been successful?

In the Northeast there is no previously documented attempt to move this number of bottlenose dolphins, or moving a group of bottlenose dolphins the distance that would be required in this situation. The previous attempts to move the bottlenose dolphins in the Shrewsbury/Navesink in 1993 and 2000 were not successful and the animals ultimately did not survive. In general, herding in this region has been more successful with larger groups of other cetacean species (e.g., common dolphins, Atlantic white-sided dolphins) over shorter distances when the animals have been truly out of their normal habitat and in danger of stranding due to tidal fluctuation. During these herding events, some or all of these animals have died although in several instances they have been 100% successful.

Could you be wrong?

Potentially, but the majority of members in the Northeast stranding network and experts in bottlenose dolphin biology with whom we have consulted agree that attempting to intervene at this stage is inappropriate, would likely be ineffective and could cause more harm than good for the animals.

Would you consider intervening if it is a human-induced cause?

Yes, we and the stranding network routinely respond to animals that have been displaced or injured by human activities. We have also assisted animals found in inappropriate habitats after hurricanes, floods, or other extreme oceanographic/weather events.

Have you looked for human-induced causes?

Our observations so far indicate that these dolphins are occurring and behaving in a way that is consistent with other coastal bottlenose dolphins along the East Coast. We are monitoring sound levels in the river to assess the ambient noise levels in the area, including the bridge construction project. There is currently no evidence to suggest that their behavior is anything other than natural at this time, and our analyses are ongoing.

Are you willing to move them because people want you to?

The dolphins should only be moved if there is a legitimate biological reason to do so. Bottlenose dolphins are highly adaptive and can survive cold water temperatures provided there is sufficient prey available to maintain body condition, as illustrated in the earlier events when dolphins overwintered in Massachusetts and Virginia.

Can others move them?

Under the Marine Mammal Protection Act (MMPA), federal, state and local officials could attempt to intervene with the dolphins as part of their official duties for (1) the protection or welfare of the mammal, (2) the protection of the public health and welfare, or (3) the nonlethal removal of nuisance animals.

Any other attempt is a violation of the MMPA, and violators are subject to enforcement action and prosecution.

Is the State of New Jersey going to act?

Not at this time. We are working closely in partnership with the State on monitoring and enforcement and will continue to do so.

How would you move them if you decide to do so?

It would depend on the situation. At this point, a live capture would likely be our first alternative, especially if the number of animals is now much fewer than when this option was considered in the fall.

Why not herd?

This has not been tried, as far as we know, with this species in this number over this distance. However, in other herding attempts animals have been unresponsive, have splintered into smaller groups or scattered, have turned back and gone under the line, or taken other kinds of evasive actions. Since bottlenose dolphins are very good at maneuvering around boats, we expect similar kinds of behavior.

What do you think would happen in this case?

The animals have been feeding and living in this area for several months when traffic has been high. They have most likely become somewhat habituated to vessel traffic and it is likely they will ignore vessels intentionally trying to herd them.

MONITORING

How are you evaluating the condition of the dolphins?

Primarily through routine visual observations from land and biweekly on-the-water observations by trained biologists who work with this stock of coastal bottlenose dolphins. We have also been monitoring sound levels in the river to assess the ambient noise levels in the area including the bridge construction project. However, there is currently no evidence to suggest that their behavior is anything other than natural at this time, and our analyses are ongoing.

ENVIRONMENT

What prey species will be present in the Navesink/Shrewsbury river system overwinter for the dolphins to feed on?

Based on previous surveys conducted by Northeast Fisheries Science Center Sandy Hook Laboratory, the fish species expected in the river system include: winter flounder and to a lesser extent species such as blueback herring and alewife. Other less abundant species may also be present. Winter flounder are known to remain present throughout the winter.

What about water temperatures?

Dolphins have stayed in Charleston Harbor and Broad Bay, Virginia at temperatures of 8° C, and even during icing conditions. Dolphins that overwintered in Virginia Beach were exposed to water temperatures as low as 4.4° C, and dolphins that overwintered in Cape Cod Bay, Massachusetts were exposed to water temperatures averaging -1° to 2° C. In general, bottlenose dolphins can tolerate a wide range of temperatures and salinities as long as they're in good body condition, have enough food, and are not otherwise ill or injured.

Can dolphins survive icing?

There are examples where they have survived as long as they are in good body condition, sufficient prey are present, and they are not otherwise ill or injured. Sudden or hard freezes are likely to affect the prey first and the dolphins soon afterward, regardless of where the dolphins are located.

NOISE

What about the bridge construction project? Are they afraid to go under the bridge?

We can't know for sure, however, there are documented occurrences of dolphins around major bridge construction elsewhere with no adverse affects.

Are you monitoring the noise?

Yes. We are working with Rutgers University to record the ambient sounds in the river system. We have installed two hydrophones to collect data, both adjacent to the construction site and just over a mile upriver from it. We hope to learn more about the ambient level of noise to which the animals are accustomed as well as try to identify how much noise the construction is making underwater.

Have you asked for the bridge construction to stop?

We have made arrangements with DOT and the bridge construction company to have a NOAA-approved observer present during construction activities that involve in-water noise like pile driving, and that those tasks will be halted if dolphins appear within 500 yards of the site.