

Narragansett Bay Seal Monitoring

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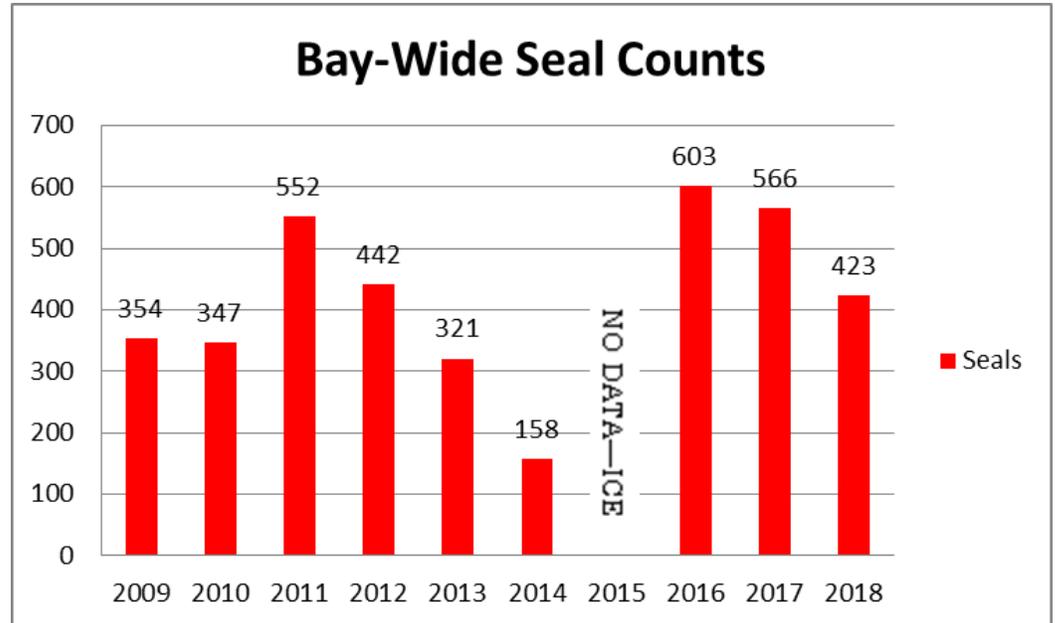
Narragansett Bay Seals

The harbor seal is the State Marine Mammal of Rhode Island and one of the most charismatic residents of Narragansett Bay. Speckled tan or gray with large dark eyes and weighing 175-250 pounds, these seals migrate south from Maine and the Atlantic Provinces of Canada in the fall. Warm, sheltered waters and abundant food provide a winter haven for these animals. Although harbor seals are the most common seal in Narragansett Bay, gray, harp, and hooded seals are occasionally sighted as well.

Seal Monitoring

To better understand the habits and numbers of seals in Narragansett Bay, Save The Bay staff and volunteers began monitoring seals in 1994. Monitoring consists of regular volunteer observations at known haul-out sites throughout the seal season. Since 2009, an annual Bay-Wide Seal Count has been held on a single day near the peak of the season when all haul-out sites are visited at low tide.

423 Seals in 2018 Bay-Wide Count



During Save The Bay's annual Bay-Wide Seal Count on March 27, 2018, volunteers observed 423 harbor seals at 22 sites throughout Narragansett Bay. Weather was clear with temperatures of 39-50 degrees and winds that varied from 3-16 knots.

Variable viewing conditions, especially wind speeds, account for most of the variability in Bay-Wide Count numbers from year to year. Years with low winds have produced the highest counts, because seals prefer to haul out in those conditions. This

(Continued on page 2)

About Citizen Science Data



The Narragansett Bay Seal Monitoring Program is a volunteer effort to observe and better understand local seal populations. The project is designed to provide useful observations from the general public, and it is not a formal scientific study.

Bay-Wide Count

(Continued from page 2)

year had more typical winds, so the total of 423, which is average for the history of our count, is what we'd expect for a stable seal population.

See complete results on page 3.

The Bay-Wide Seal Count is an annual effort coordinated by Save The Bay in collaboration with the EPA's Atlantic Ecology Division, and Narragansett Bay Estuarine Research Reserve. Save The Bay thanks our 2018 seal monitors for their service: Doreen Anderson, Letty Bowley, Walter Brown, Marc Cardin, Don Cobb, Maureen Dewire, Mary Dunn, Barbara Walton Faria, Richard & Sue Graefe, David Katz, Serena Lyon, Linda Mosher, Karen Neri, Janet O'Connell, Jackie Proulx, Kenny Raposa, Christine Ryan, Robert & Karen Schultz, Nancy Smith, A. Michael Steers, Jane Walsh, Cathy Wigand and Shawen Williams.



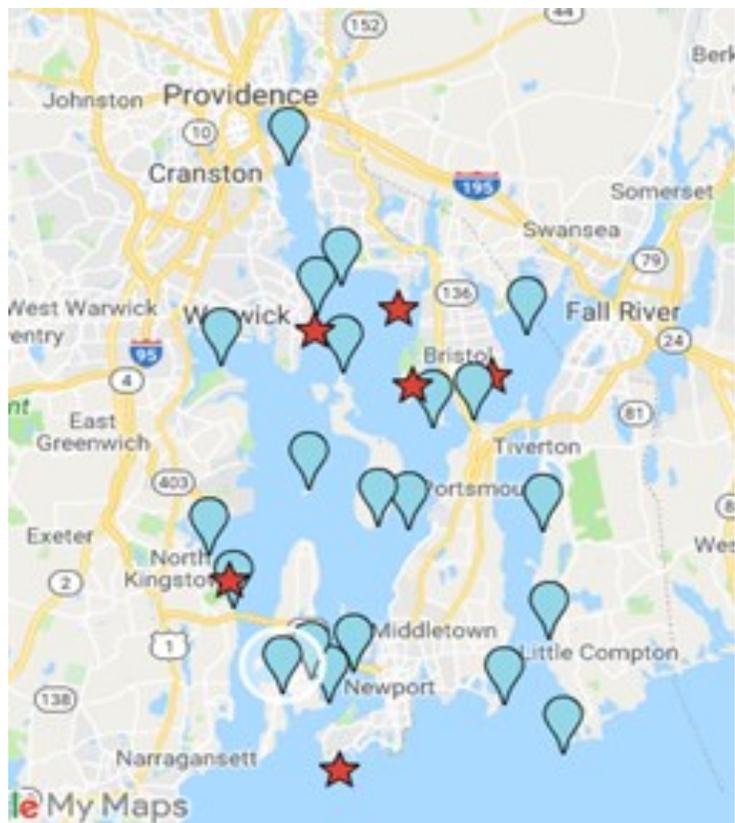
A harbor seal hauled out at Fields Point in Providence

Haul-Out Sites Around Narragansett Bay

Harbor seals are seen from the mouth of the Bay at Brenton Point to as far north as Providence. Seals "haul out" on rocks for a variety of possible reasons including regulating body temperature and rest.

Haul-out sites are variable in terms of their use by seals. Some are only occasionally visited, while others regularly have over 100 seals present at low tide. Others may be well-used, but difficult for volunteers to access. The graphs on pages 4-8 represent haul-out sites that are regularly used by large numbers of seals and regularly monitored by volunteers. Frequent, repeated observations at these sites help illustrate the seal season in Narragansett Bay, answering the following questions: when do they arrive and when do they leave? When is the peak of seal population in the Bay? The data indicates that the highest numbers are usually seen in late March.

For more information on Save The Bay's seal monitoring program and data, contact Save The Bay's Volunteer Manager, July Lewis, at jlewis@savebay.org.



Haul-out sites in Narragansett Bay. Red stars mark sites illustrated by graphs on pages 4-8.

Bay-Wide Seal Count 2018 Results

Tuesday, March 27, 2018

Low Tide: 11:42 am

Temperature: 39-50 (F)

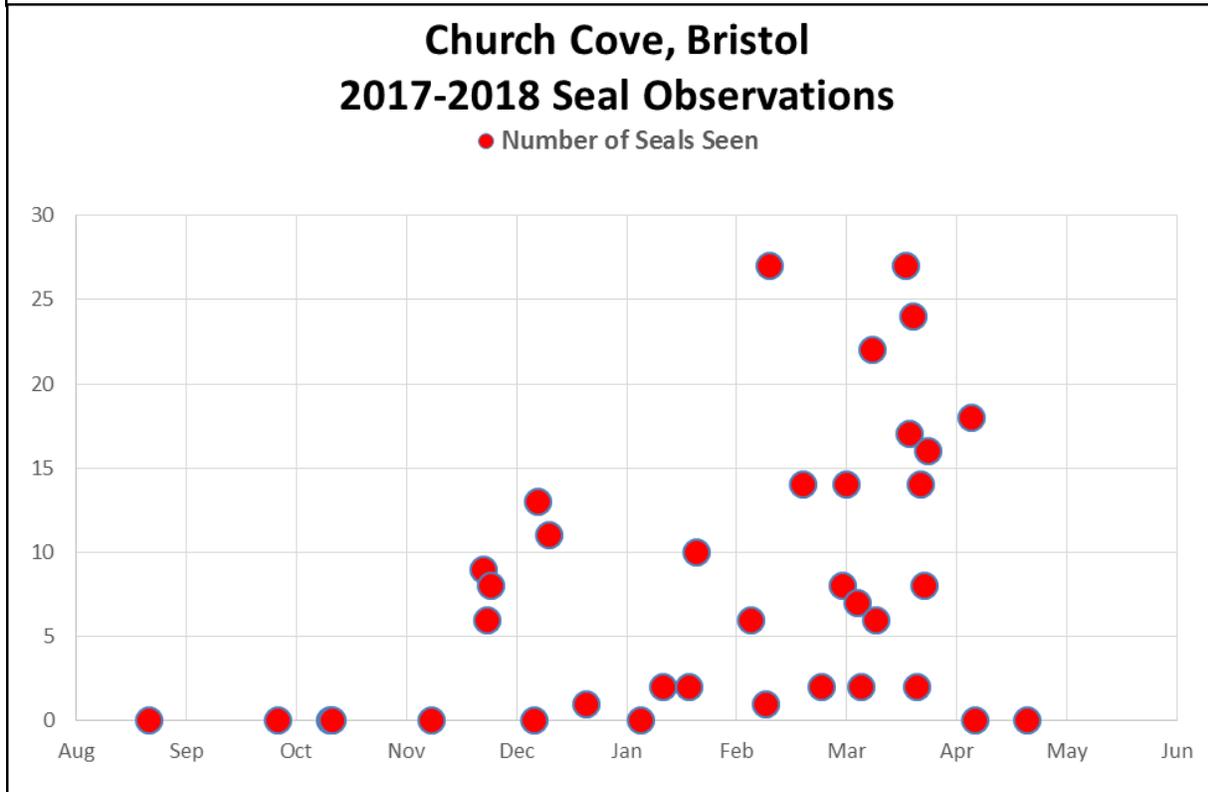
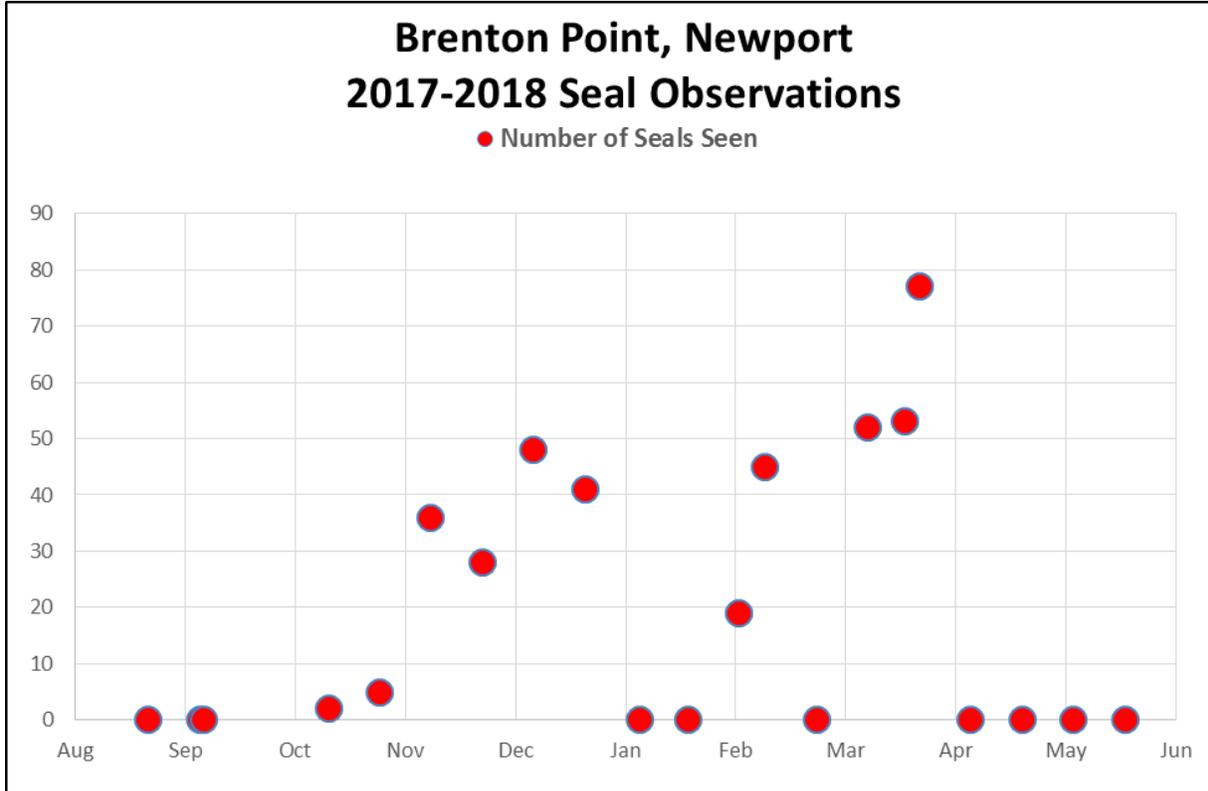
Weather: Clear

Winds: 3-16 knots

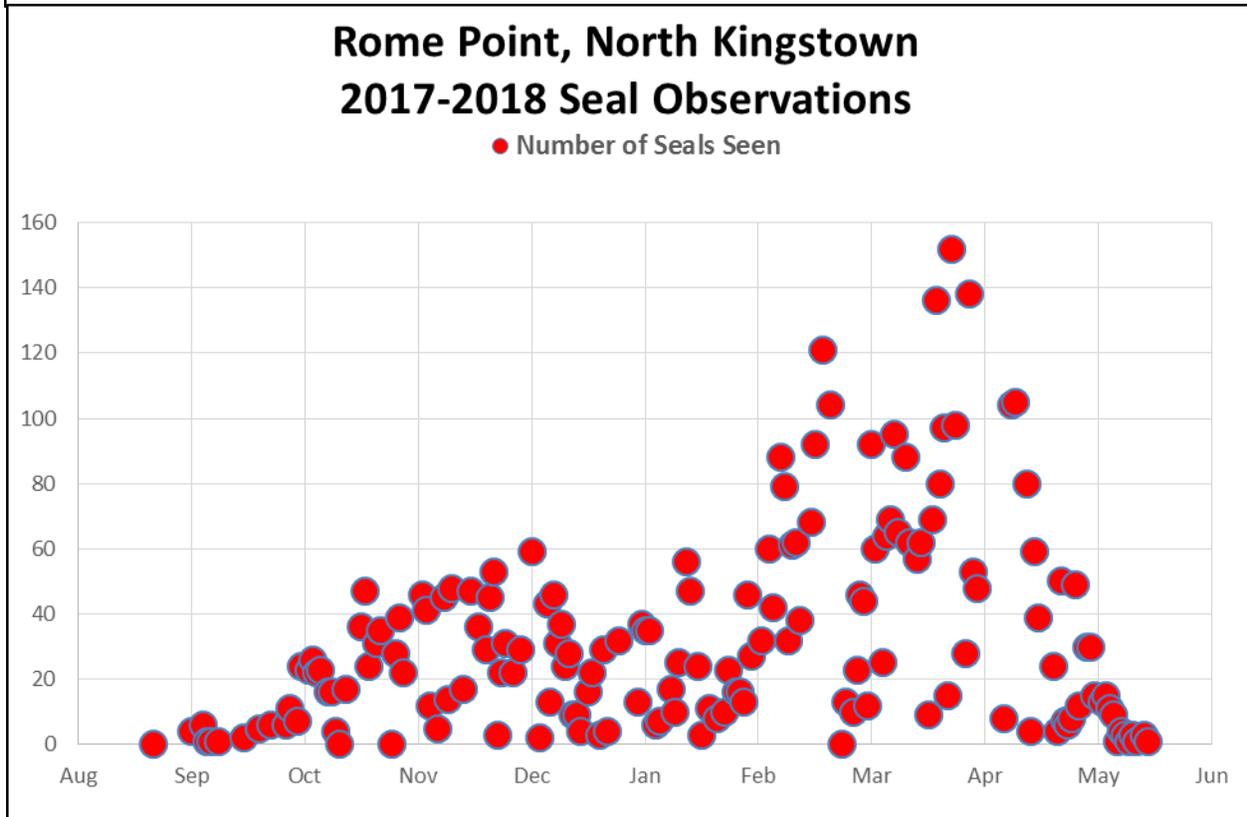
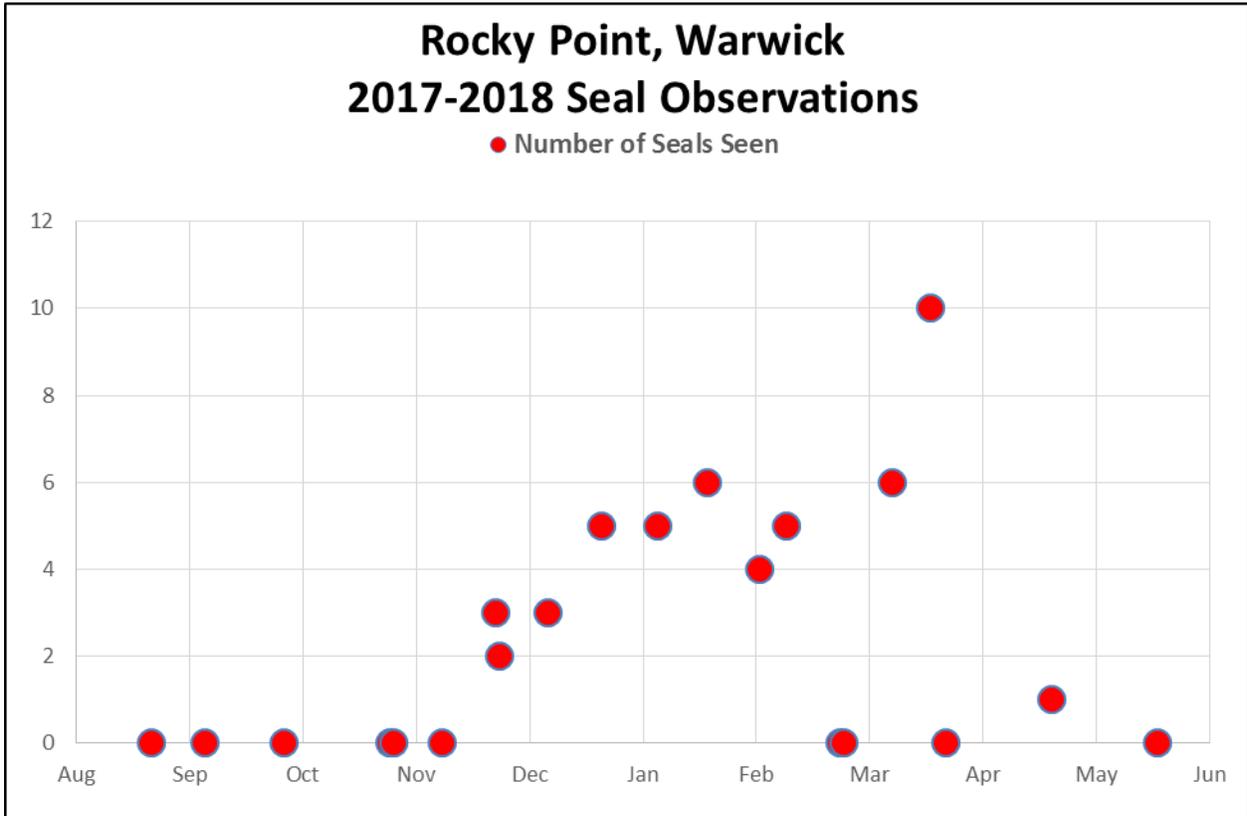
Monitoring Site	Time	Weather Conditions	Hauled Out Seals	Seals in the Water	Total Number of Seals Seen
Barren Ledge	11:15 AM	Clear	0	0	0
Brenton Point	12:20 PM	Clear	53	0	53
Church Cove	11:36 AM	Clear	27	0	27
Citing Rock	11:50 AM	Clear	67	1	68
Coddington Cove	12:05 PM	Clear	25	1	26
Coldspring Rock	12:10 PM	Clear	19	0	19
Dyer Island	12:03 PM	Clear	7	2	9
Field's Point	11:45 AM	Clear	0	0	0
Halfway Rock	12:20 PM	Clear	23	0	23
Hog Island	11:00 AM	Clear	9	1	10
Hope Island	12:28 PM	Clear	37	11	48
Mackerel Cove	11:40 AM	Clear	0	0	0
Providence Point	12:15 PM	Clear	4	2	6
Prudence Island T-Wharf	11:42 AM	Clear	26	0	26
Rocky Point	11:15 AM	Clear	10	0	10
Rome Point	11:42 AM	Clear	69	0	69
Rumstick	11:20 AM	Clear	1	0	1
Sakonnet Point	9:30 AM	Clear	19	0	19
Sally Rock	11:30 AM	Clear	0	0	0
Seapowet Rock	11:50 AM	Clear	2	0	2
Spar Island	10:40 AM	Clear	1	1	2
Usher Cove	12:04 PM	Clear	5	0	5
				TOTAL:	423

Seasonal Seal Monitoring

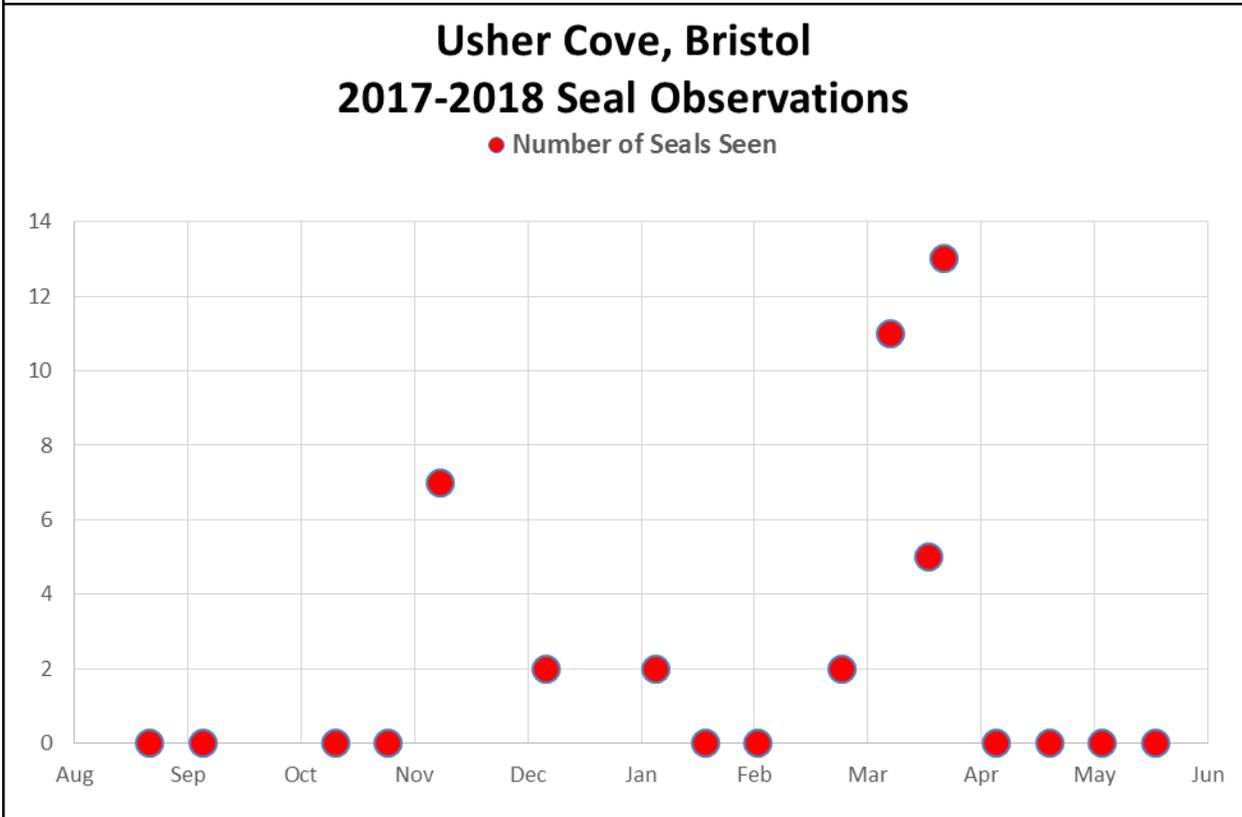
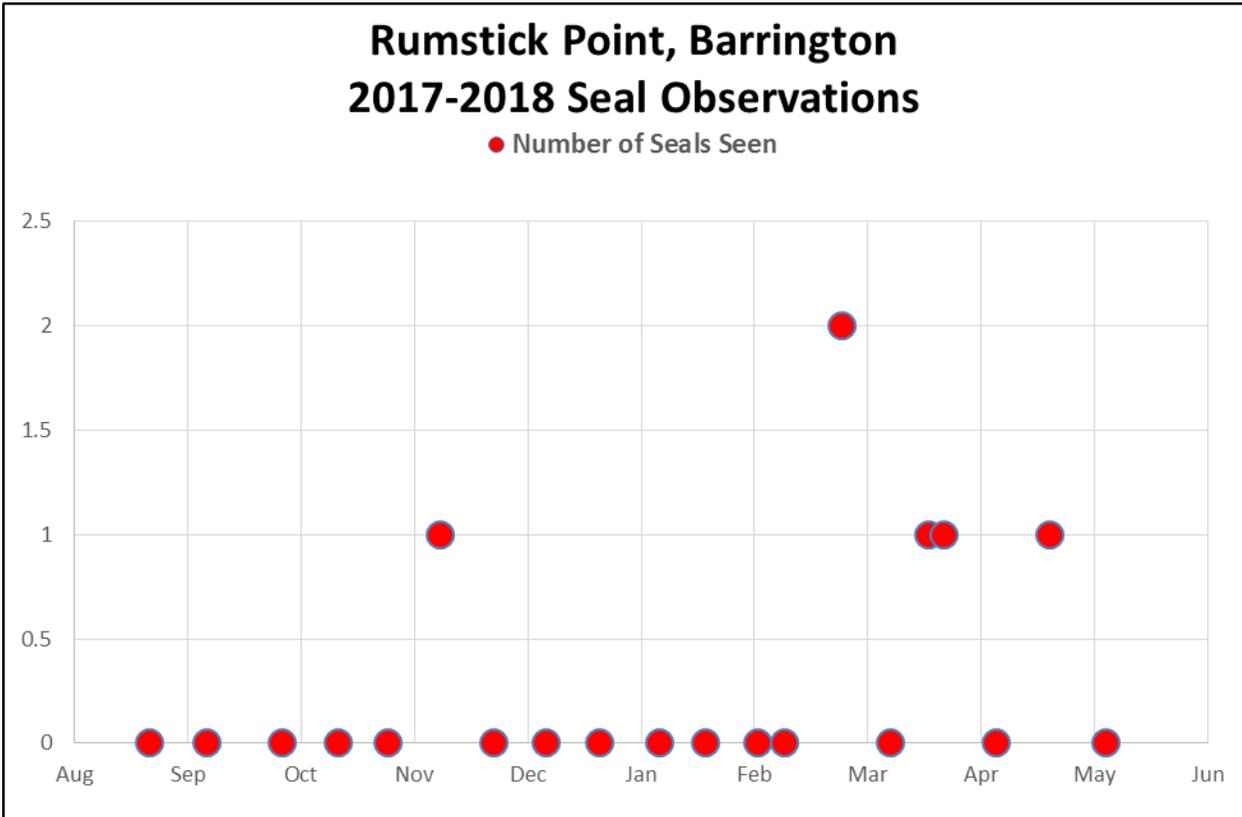
The following graphs illustrate the numbers of seals sighted at specific Narragansett Bay haul out sites throughout the 2017-2018 seal season. These scatter graphs make it easy to see the “shape” of the seal season, with seals beginning to arrive in the fall, peaking in March, and dropping off sharply in April.



Seasonal Seal Monitoring (continued)



Seasonal Seal Monitoring (continued)



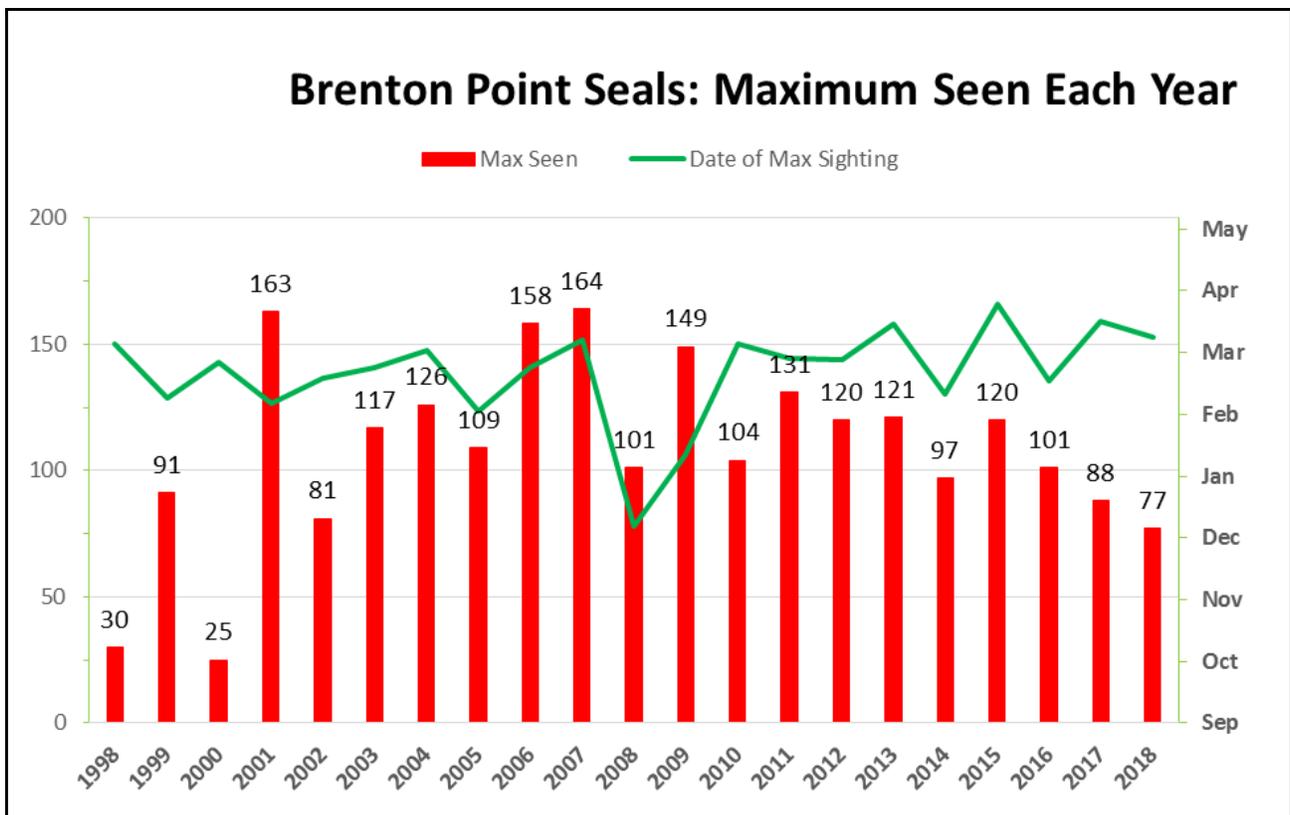
Historical Seal Monitoring Data

The following haul-out sites have had detailed, consistent monitoring for many years. In the following graphs, the red bars indicate the highest number of seals seen at each haul-out site for each year. In addition, the month and day that the maximum number was sighted is indicated by the green line.



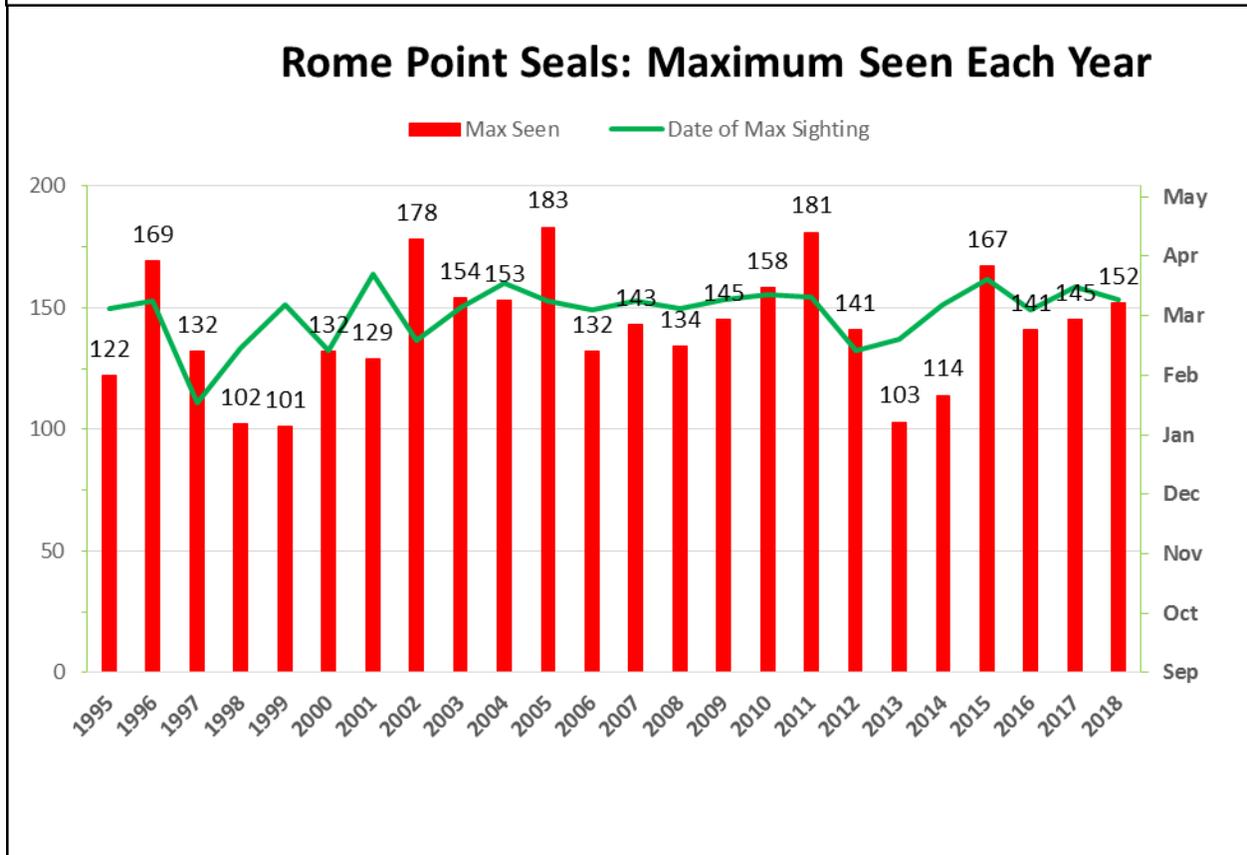
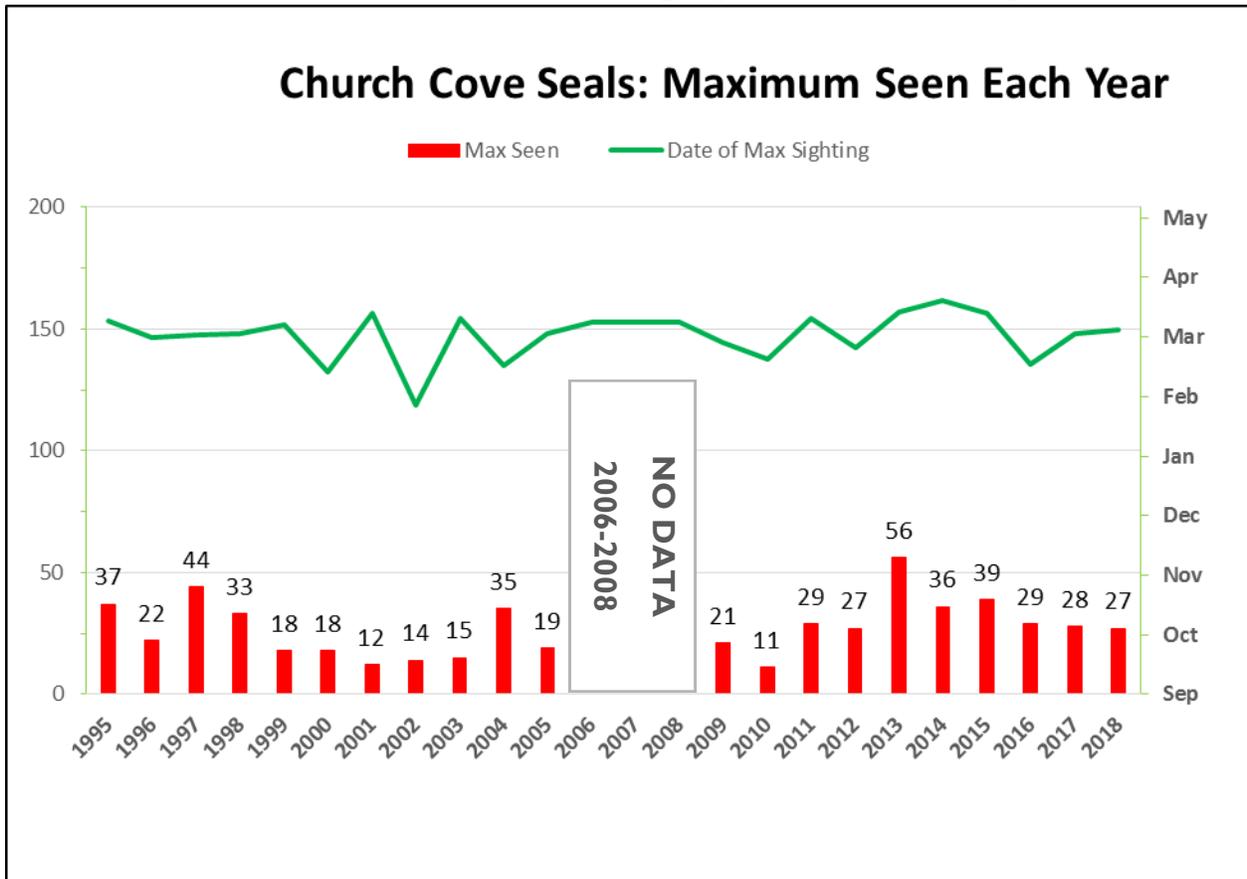
Since each seal season straddles two years (September—May) seal seasons are represented on the X-axis by the year in which they end. Therefore, 2018 refers to the 2017-2018 season. Note that the secondary Y-axis displays the months of the seal season: September through May. Dips in the green line represent an early maximum, and peaks represent a late maximum.

Looking at long term trends may help us be alert to changes such as impacts from nearby development at a particular site, or the effects of climate change on seal migration.



**Note: In the 2007-2008 seal season, the maximum seen for Brenton Point was in November 2007. Prior data processing methods missed this unusual early peak, therefore this year's graph has been updated.*

Historical Seal Monitoring (continued)

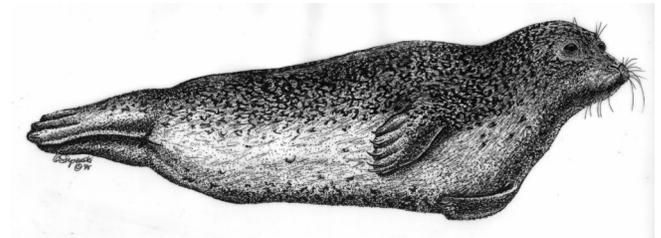


Seals of Narragansett Bay

HARBOR SEAL

Size: Males: 5 to 6 feet, 250 lbs. Females: 4.5 to 5.5 feet, 175 lbs.

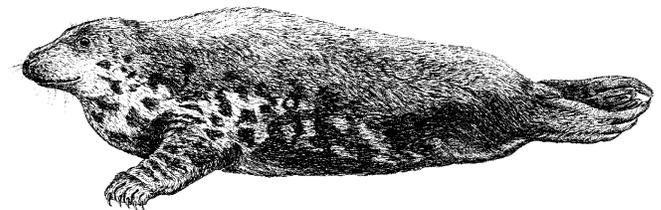
Description: Tan to dark gray with fine dark spotting on the back. As seals dry, their coat changes color. Harbor seals have small heads and large eyes. From a profile view they have a short muzzle and a concave forehead, much like a dog's head. They are the most common marine mammal in New England.



GRAY SEAL

Size: Males up to 8 feet and 800lbs; females up to 7 feet and 400 lbs.

Description: Very large seal; long and broad snout resembles a horse head. Juveniles can be confused with harbor seals. Their coat is brown, gray or black with spots and blotches on the neck and sides. Males are darker than females. They live in colonies on sandy island beaches, and are occasionally seen on Rhode Island's south shore.



HARP SEAL

Size: At weaning, 65 to 80 lbs. Adults 5-6 feet, 250-400 lbs.

Description: White pups born on pack ice in the Canadian sub-Arctic. Juveniles are gray to dark tan with dark spots. In older harp seals the black spots converge on the back into a harp-shaped design. Some harp seals retain their spotted pelage ("spotted harps"). Of the seals that retain their spots, some have dark gray streaks, creating a completely gray pelage ("sooty harps"). Some adults and juveniles may wander south of their range into New England during winter.



HOODED SEAL

Size: At weaning, 110 lbs. Adult males up to 9 feet and 900 lbs; females smaller.

Description: Juveniles are called "blue-backs" due to the steel-blue color of the top half of their back; no spots. Adult seals have blue-gray pelage with black spots over the body. The front of the face is black. Their limbs are rather small in proportion to their body. Hooded seals get their name from the inflatable "hood" on the top of the heads of adult males. When the hood is deflated, it hangs down over the upper lip. Males inflate this red, balloon-like nasal septum until it protrudes out of one nostril. Juveniles may wander south of their range into New England after weaning.



Seal Watching Tips

Many people enjoy watching seals at their haul-out sites. However, sometimes observers can put stress on the seals and frighten them off their resting spots, causing them to lose precious energy. What might seem like a minor disturbance may be one of many they experience throughout the day and is, in fact, a violation of the Marine Mammal Protection Act. Follow these tips to get the most out of your seal-watching experience and keep seals safe.

- **WHEN TO WATCH:** Best times are February through early April, at low tide, on a calm day.
- **HOW TO WATCH:**
 - From at least 50 yards away with binoculars or a telescope.
 - Leash or control your dog.
- **FROM A BOAT:** Maintain a parallel course at least 50 yards away, which is less threatening than a direct approach. Avoid sudden changes in course or speed, or circling the animals. Kayaks and canoes, with their low profiles and quiet approach, can actually be more threatening than motorboats.
- **BE ALERT FOR SIGNS OF DISTURBANCE.** Seals stretching their necks, moving toward the water, looking at you or increasing their vocalization indicate that the seals are preparing to flee. Back off immediately.
- **DO NOT FEED THE SEALS.** Feeding encourages seals to approach boats increasing the likelihood for propeller injuries. Seals also bite, carrying infectious diseases.
- **LEAVE STRANDED SEALS ALONE.** If you find a seal that is dead, being harassed, or stranded in the same area for more than 24 hours, please contact Mystic Aquarium at 860-572-5955.

The Marine Mammal Protection Act prohibits disturbing, feeding or harassing seals.

Seal Tours



Save The Bay offers Seal Tours and Nature Cruises from October through April out of Newport, Westerly and Fall River. Our naturalists provide fascinating information about seals and an on-the-water view of these amazing animals.

**Visit www.savebay.org/seal
to make a reservation!**

