Chesapeake DolphinWatch

UMCES • Chesapeake Biological Laboratory

Photo courtesy of John Knisley

Photo courtesy of Carolyn Wilson

Photo courtesy of Jeff G.

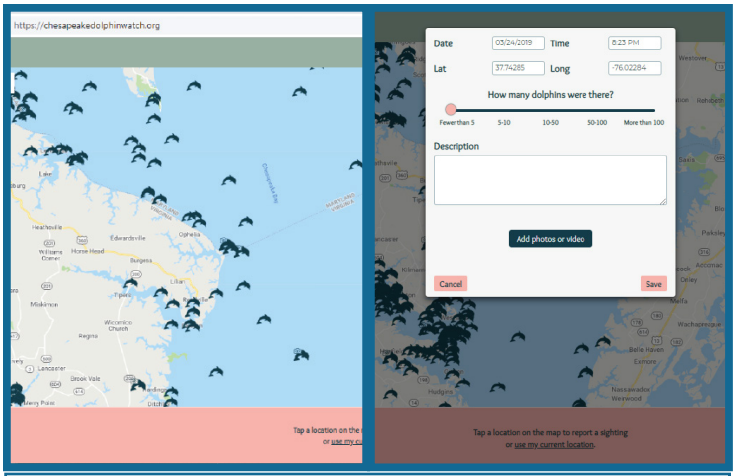
Citizen scientists inform bottlenose dolphin research in Chesapeake Bay.
www.ChesapeakeDolphinWatch.org

Little is known about how often bottlenose dolphins come into Chesapeake Bay, how long they spend here, what areas of the Bay they are using and why. In 2017, Dr. Helen Bailey and her team at Chesapeake Biological Laboratory (CBL) developed an app which engages members of the public as citizen scientists to help answer these questions. Boaters, anglers, birders and those who enjoy being on the Bay can report dolphin sightings in real time. This observation network provides information on dolphin distribution and local residents are encouraged to learn about these animals through participating in this research project.

To join the nearly 4,000 citizen scientists already reporting dolphins, set up an account using an email address at: chesapeakedolphinwatch.org or download the mobile app from iTunes or Google Play. Users can view bottlenose dolphin sightings, photos and videos from sightings, and listen to recordings of dolphin communication from our hydrophones (underwater microphones).

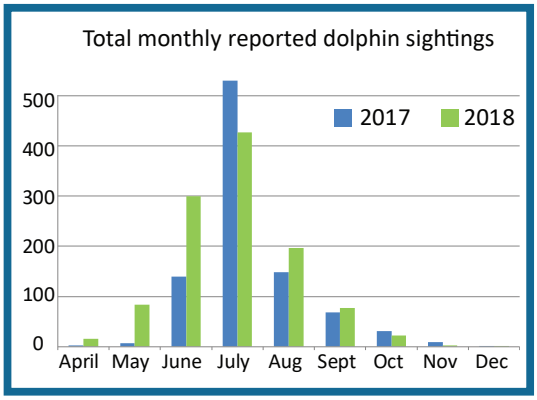
To report a dolphin sighting:

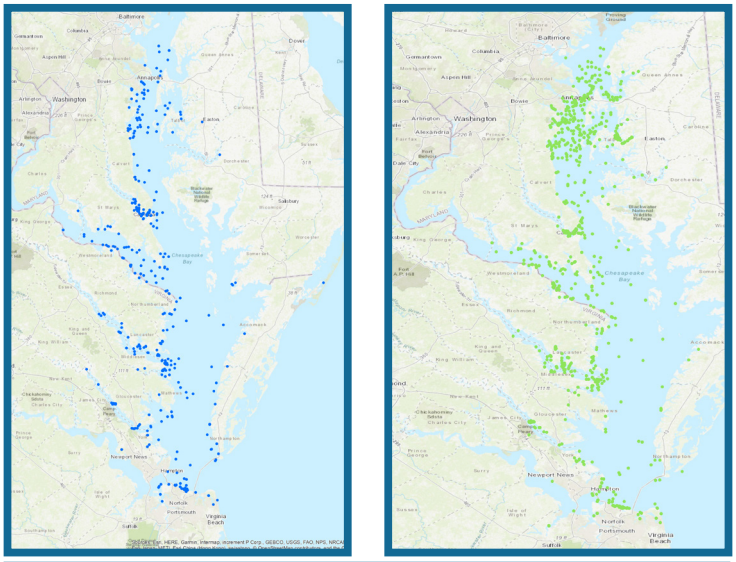
- click the map on the location you saw the dolphins
- enter dolphin sighting date, time, and select estimated group size from slider bar
- type a short desciption of what you saw, where you observed the dolphins, or interesting details you noted
- upload a photo or video



The photos above show previews of the Chesapeake DolphinWatch map and dolphin sighting reporting box.

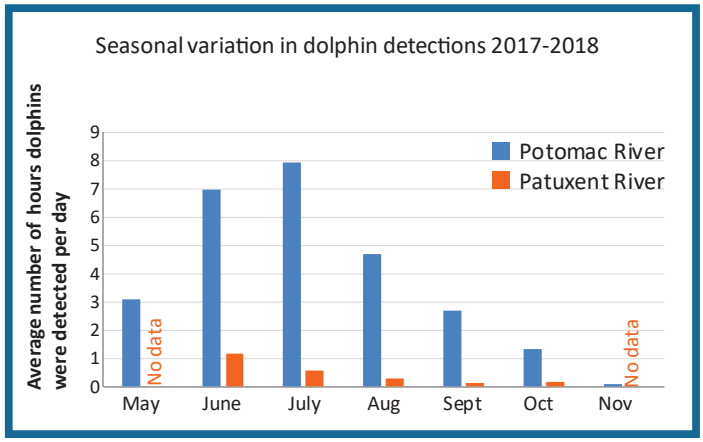
In 2017 a total of 949 dolphin sightings were reported, of which we were able to confirm 420 (44%). In 2018 a total of 1,129 dolphin sightings were reported, of which 855 (76%) were confirmed.





2017 dolphin sightings (above left, blue dots) and 2018 dolphin sightings (above right, green dots).

In 2017 and 2018 dolphins were reported in the lower Bay (Virginia portion) nearly year-round, the middle Bay primarily from May to September, and in the upper Bay June to July. There were many dolphins reported in the Upper Bay, near the Bay Bridge, and Chester River in 2018. Dolphin sightings peaked in July of both 2017 and 2018 across Chesapeake Bay.



The seasonal pattern of occurrence was confirmed by underwater acoustic click detectors from two C-PODs located in the middle Bay, in the Patuxent and Potomac Rivers.By pairing sighting data (which cover a large area) with C-POD data (which has systematic effort), we have developed a better understanding of the occurrence and seasonal distribution of bottlenose dolphins in the Chesapeake Bay.

Learn more about Chesapeake DolphinWatch: http://www.umces.edu/dolphinwatch

The Chesapeake Biological Laboratory

Located where the Patuxent River meets the Chesapeake Bay, the Chesapeake Biological Laboratory (CBL) is the oldest publicly supported marine lab on the East Coast. Founded in 1925, it has been a national leader in fisheries science, estuarine ecology, environmental chemistry and toxicology for more than 90 years. As part of the University of Maryland Center for Environmental Science, the principal institution for advanced environmental research and graduate studies within the University System of Maryland, our faculty and graduate students are developing new approaches to solving the environmental challenges facing Calvert County, our nation, and our world.

University of Maryland
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Chesapeake Biological Laboratory

CBTRUST Chesapeake Bay Trust

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Chesapeake Biological Laboratory
P.O. Box 38, 146 Williams Street,
Solomons, MD 20688
Phone: 410-326-4281
www.umces.edu/cbl