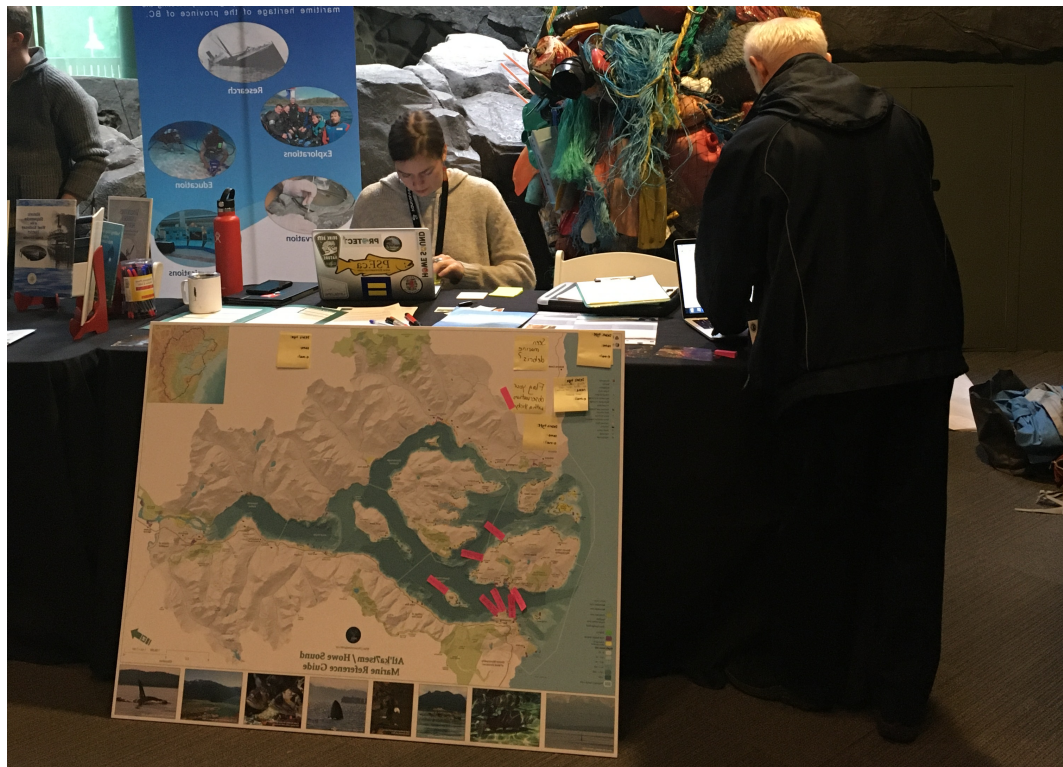


Scuba Diving in Átl'ka7tsem/ Howe Sound

Survey hosted by the Howe Sound/
Átl'ka7tsem Marine Reference Guide

In January 2020, the Howe Sound/Átl'ka7tsem Marine Reference Guide attended the 21st Annual Divers' Weekend

This annual event, hosted at the Vancouver Aquarium by Ocean Wise, offers ocean lovers a chance to ignite and reignite their passion for our underwater world. Divers and non-divers can visit fascinating displays and exhibits, including 3D photogrammetry models of underwater caves and heritage hardhat dive gear, and learn about incredible species and archaeological shipwrecks to explore.



The Guide's booth at the 21st Annual Divers' Weekend



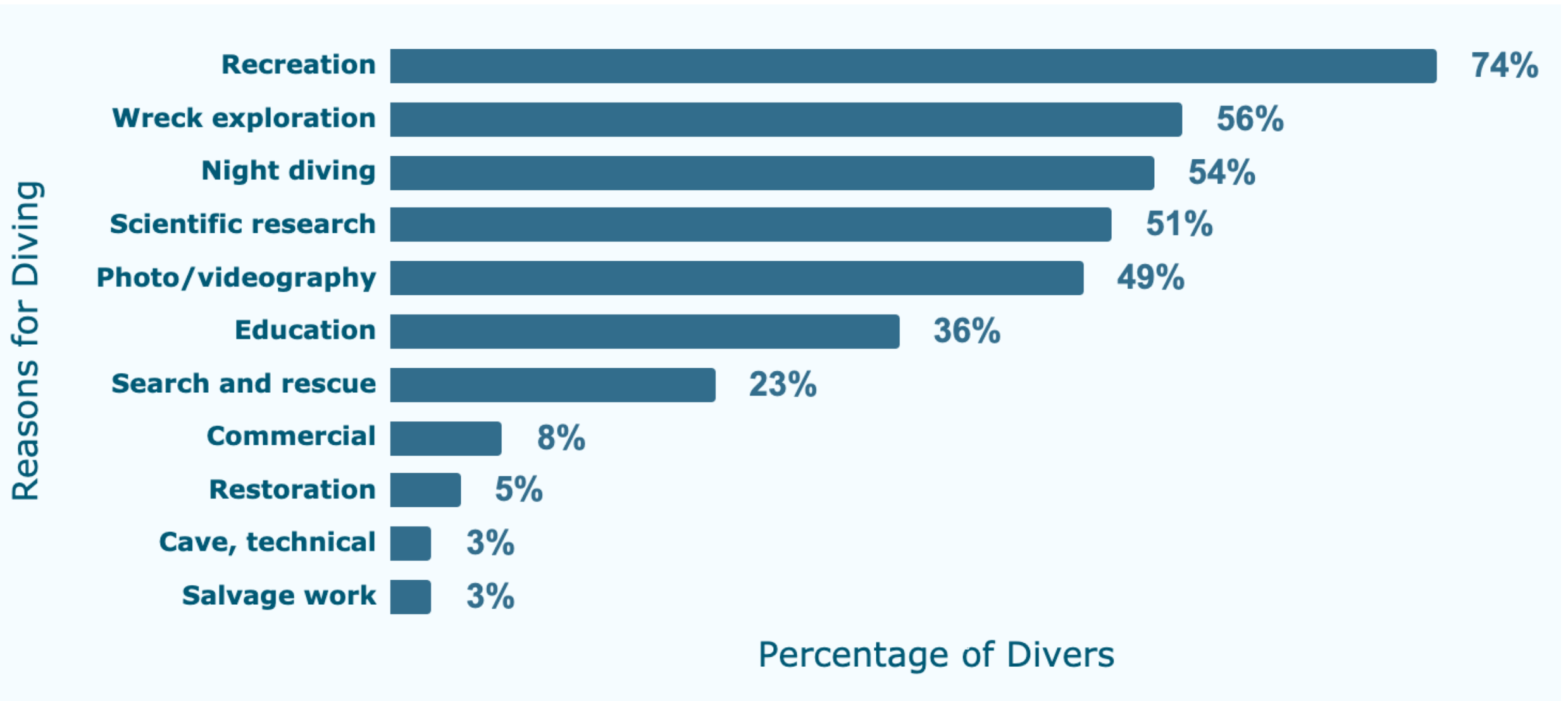
As this year's theme was citizen science, we provided two opportunities for folks to contribute to the Marine Reference Guide's research. First, we asked divers to identify on a map where they have seen underwater debris while diving in Howe Sound/Átl'ka7tsem (Squamish Nation place name). Click [HERE](#) to see a living map of these observations and more!

Second, we shared a survey with visitors to better understand where they dive in the Sound and what they love to see. Thirty-nine people completed our survey, keep reading to see the results!



Collecting local and community knowledge is critical to achieving the Guide's goal of holistically bringing together information about the diverse human and ecological values that we associate with the Sound's ocean and freshwater. We used the survey responses to create a map of popular dive sites in the Sound, which will contribute toward an online decision-support tool that will inform decision-making, community education, and marine spatial planning in the Sound. See howesoundguide.ca for more information about this project.

We asked divers their reason(s) for diving in Howe Sound/Átl'ka7tsem

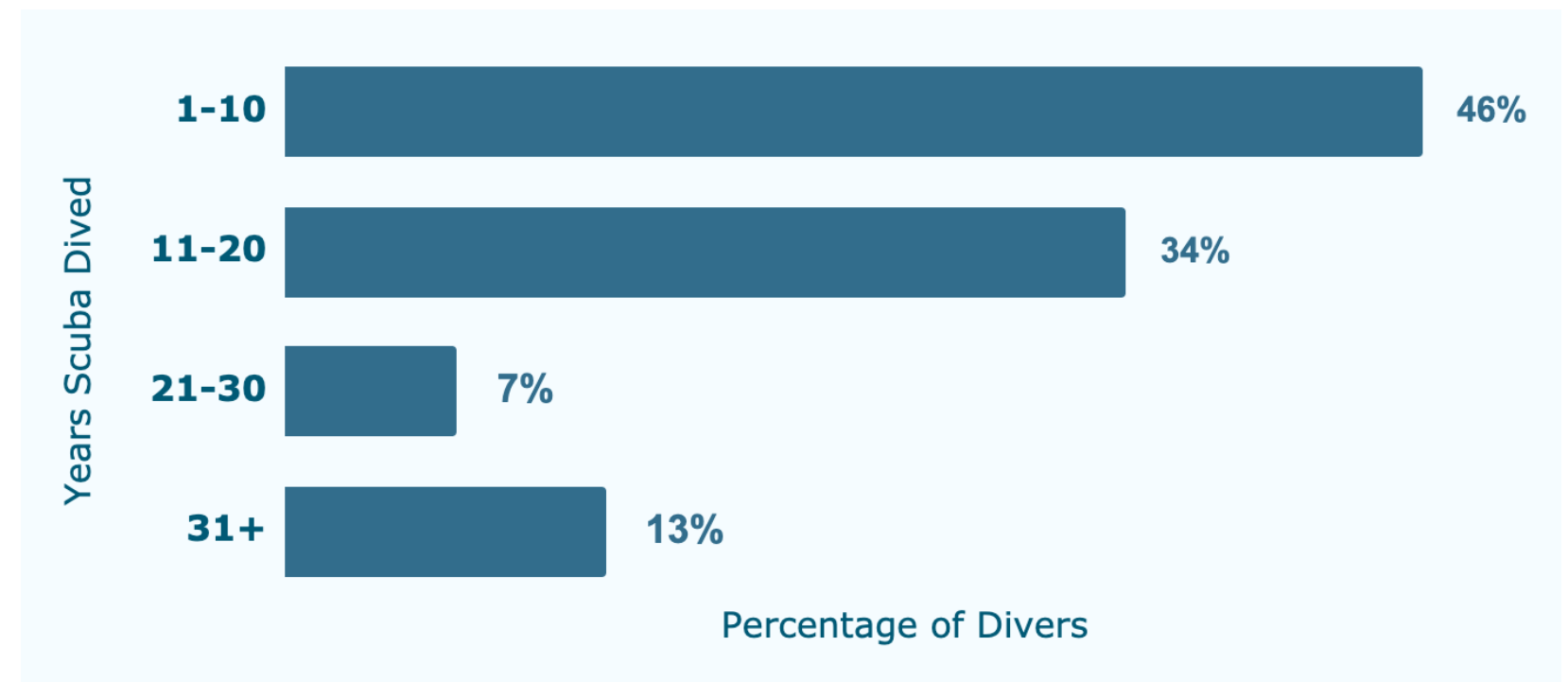


13% of the divers we surveyed have dived in the Sound for over 30 years!

Fun fact: One diver said that they have dived in Átl'ka7tsem for 48 years! They must have some amazing stories to share!



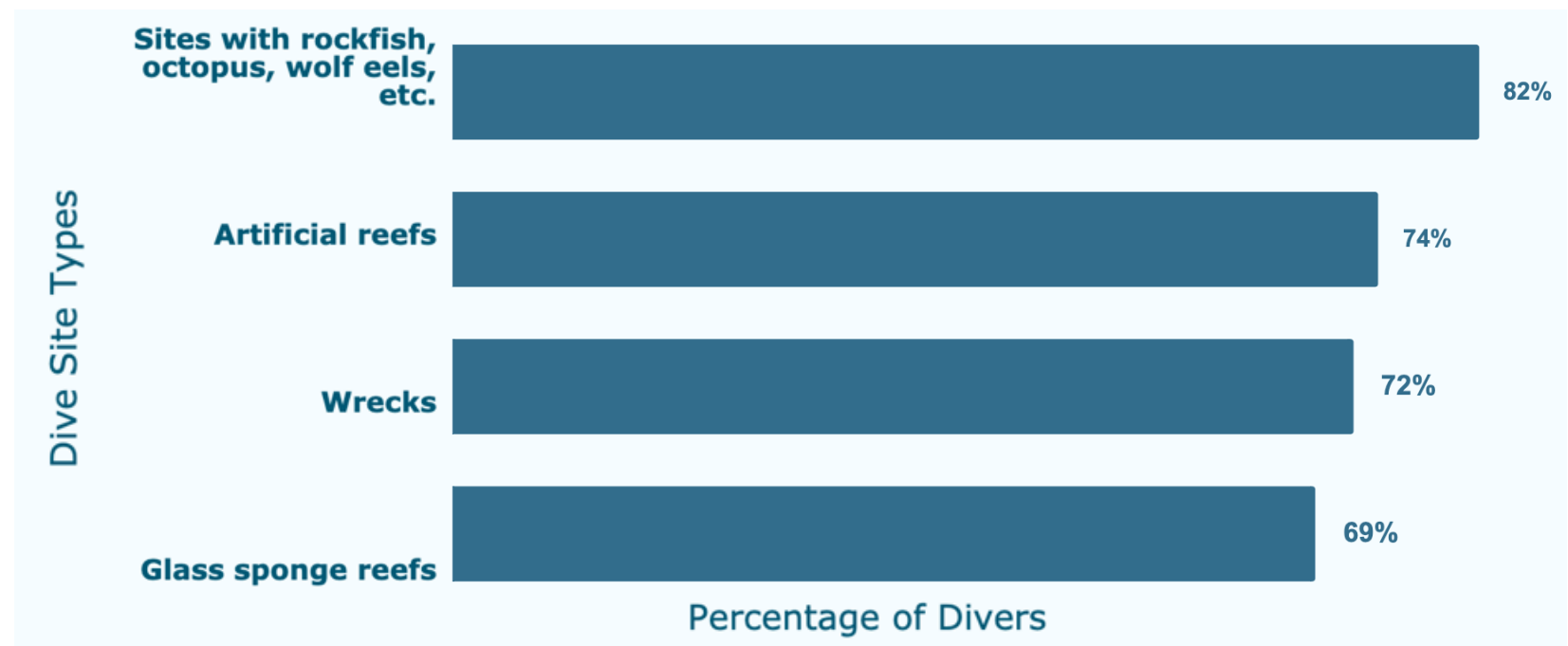
Heritage hardhat divers exhibit at Divers' Weekend



What places do divers like to visit and explore in Howe Sound/Átl'ka7tsem?























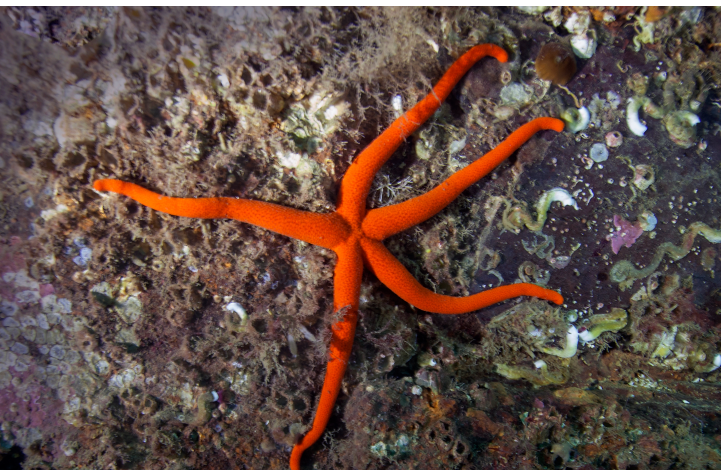
Glass sponge with coonstripe shrimp.
Photo: Adam Taylor



Popular Scuba Dive Sites in Howe Sound/Átl'ka7tsem

We asked divers to identify their favourite dive sites in Átl'ka7tsem. The top two most popular sites were Porteau Cove followed by the HMCS Annapolis.

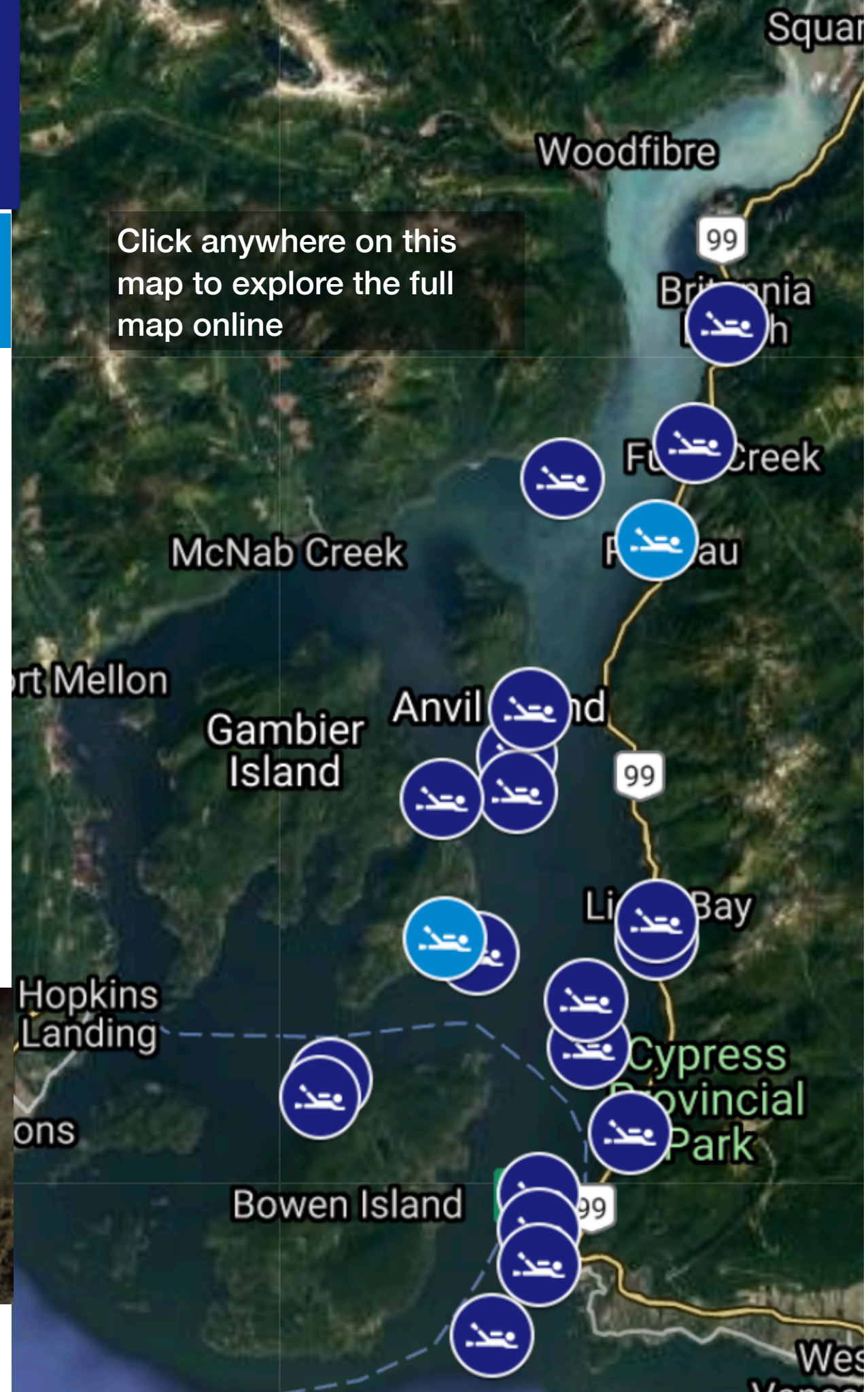
- | | |
|---|--|
|  Kelvin Grove |  Halkett Pinnacle |
|  South Bowyer Dive Buoy |  HMCS Annapolis |
|  Lookout Point |  Ansell Point |
|  Whytecliff Park Whyte Islet |  Furry Creek |
|  Bird Islet |  Anvil Island SouthEast |
|  Passage Island Reef |  Defence Islands |
|  Christie Islet |  Hutt Island NE |
|  Pam Rocks |  Hutt Island South |
|  Porteau Cove |  Brigade Bay |
|  Britannia Beach |  Lions Bay |
|  North Bowyer Dive Buoy | |



Blood star, *Henricia leviuscula*,
Photo: Kyla Hemmelgarn



Yelloweye rockfish, *Sebastes ruberrimus*
Photo: Lee Newman



"General slow **increase in fish populations** but still observe significant number of poachers"

"**Less fishing line debris**"

"**Fluctuations in rockfish**, less bottom dwellers on some sites, more schools of yellowtail on others"

"**Damage to sponge reefs** from fishing gear particularly at Hutt Island"

"**More silt** but also **more returning wildlife**"

"**More life on Annapolis**, more sightings of seals and orcas"

"Less fish, decline of sea stars.
Overall decline of sea life"

"Transition from sunflower star dominated rocky reefs to **sea star wasting**"

"I began to explore the waters of Howe Sound just before the **sea star wasting disease** killed a large number of sea stars. The number of **ochre stars** appear to be **rebounding**, however I have rarely seen the once abundant sunflower stars since the epidemic. During this time, urchin barrens appeared in areas that once had abundant ochre star populations (on rocky outcroppings), however those observations are from a few year ago."

"**Sponge reef damage, increase in yellow tail rockfish**"

"**Increase in small baitfish** such as Anchovies and herring"

"I was present for the **sun star die-off**. Whytecliff used to have a lot more life and variety but now it's **over-dove** and lacking the spectacular sights it used to have. All up and the coast there have been significant changes in fish population too, **rockfish are declining**"

"**Damage to glass sponges** from fishing traps, lead weights and trolling line"

"Growth of different species in numbers and size as well as other **manmade reefs** that have been added"

**72% of divers
have observed
ecological changes
in Howe Sound/
Átl'ka7tsem over
the years**



Photo: Kyla Hemmelgarn

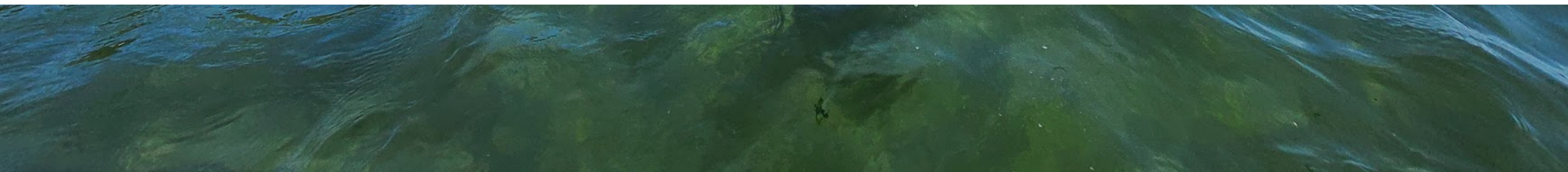


Photo: Kyla Hemmelgarn



Photo: Diane Reid

50% of divers said that they have participated in citizen science/monitoring in Howe Sound/Átl'ka7tsem - that's incredible!



Thanks for reading! For more information about the Howe Sound/Átl'ka7tsem Marine Reference Guide:

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Check out our website ➡ www.howesoundguide.ca

Send us an email ➡ howesoundguide@gmail.com

