

KACHEMAK BAY RESEARCH RESERVE

Invasive Tunicate Monitoring

2017 Progress Report

The main goal of invasive tunicate monitoring is to detect invasive tunicates as soon as possible, should they arrive.

This is the 12th year KBRR has checked settling plates for marine invasives. We have not detected any invasive species yet.



Oyster farm equipment on Hesketh surveyed for invasives.

House Bill 38: Invasive Species

One harbor in Sitka has been dealing with the invasive tunicate *Didemnum vexillum* for quite a few years now. Lessons learned from this eradication effort have led to House Bill 38, which was voted in by the House of Representatives in March 2016. This bill would help prevent invasive species from being moved around to other Alaskan coastal areas on fishing or mariculture gear and was introduced by Rep. Paul Seaton. The bill needs to be passed by the senate and signed into law by the governor.

Visual surveys result show no invasives found in 2017...Settling plates from **Homer Harbor** and **Seldovia Harbor** produced no invasive species. **Kasilof** setnet lines were surveyed thanks to assistance from KBNERR staff, Tim Osmar, Monica Zappa, and crew. Samples are still being analyzed, yet no invasives were spotted during the initial survey. We surveyed a portion of **Hesketh Island** that was housing oyster farm equipment that was destined for retirement. The floats were within the intertidal zone, so there was concern that some of the organisms could still be alive. After surveying the floats, the only live organisms found were native. The potential *Didemnum vexillum* spotting in 2016 on **Seldovia's Outside Beach**, which turned out to be a local *Polysyncranton spp.*, was surveyed this summer to view potential expansion. The survey in 2017 showed that, although some was still present, most patches were smaller and the overall abundance was down.

For detailed reports on each of these surveys, e-mail rmrobinson3@alaska.edu or call 907-235-4797.



Sampling set net lines in Kasilof



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Marine Invasive Species!



Prevent the Spread of Marine Invaders!

-  CLEAN
-  DRAIN
-  DRY



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The pictured invasive tunicate, *Didemnum vexillum*, (Dvex), was found in Whiting Harbor in Sitka. In suitable environmental conditions it can spread over boat hulls, docks, pilings, and other hard surfaces, as well as seafloor substrate. This invader can also smother algae, sea grasses and slow moving organisms such as clams, oysters, mussels, and other invertebrates.

Photo credit: NOAA, 2010



Marine invasive species are non-native plants and animals that can harm ecosystems that support native species. By crowding out native species, these invaders can negatively impact the marine environment. Non-native marine species are most commonly introduced in places with high human traffic, such as boats and harbors. Marine invaders hitchhike on infrastructure transported from these locations, causing their spread. A few simple steps can help protect our Bay and ensure marine invaders do not take over:

- **At a minimum, DRY by storing above high tide for 3 weeks;**
- **If possible, CLEAN (scrape or power wash) plants and animals from all equipment away from the water and dispose in the garbage at an upland site;**
- **DRAIN water from any reservoirs.**
- **Clean, drain, and dry. Every time.**



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