KACHEMAK BAY RESEARCH RESERVE

Invasive Tunicate Monitoring

2014 Progress Report

The main goal of invasive tunicate monitoring with the Smithsonian Environmental Research Center (SERC) is to detect invasive tunicates as soon as possible, should they arrive.

This is the 9th year KBRR has checked settling plates for invasive species (three times per year) in both the Homer and Seldovia Harbors.



Invasive tunicate rediscovered!

In 2000 SERC did a baseline study in Kachemak Bay and recorded sightings of an invasive tunicate, *Botrylloides violaceus*. We have not seen it since, until a photo came in from a UAF diver the spring of 2013. This organism is tough to find, which is actually good news! A sample was finally attained and verified this summer. In 2015 UAF will be surveying the Hesketh Island area to find the extent of this invasive tunicate. Stay tuned. See next page for identification tips.

Local Harbor dock removals.

Homer and Seldovia are getting dock upgrades to their harbors. Seeking the cheapest way to get rid of the old floats, they let folks come get them and put them to use. Sounds great, but there is danger in towing structures encrusted with marine animals around to new areas in a water body. We don't know of any invasives in our harbors, but what if we missed them and the docks were infested? Ideally the docks should be cleaned first.

Docks have been towed to 6 different places around Kachemak Bay. ADF&G is working with Army Corps of Engineers to require docks to be cleaned of marine organisms before they can be moved in the future.



If you would like to become involved in our community monitoring programs, contact Catie Bursch at catie.bursch@alaska.gov

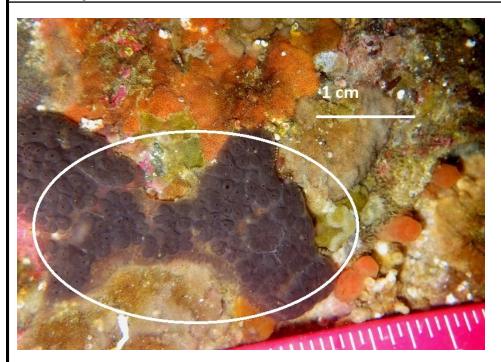




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Have you seen this invasive tunicate?

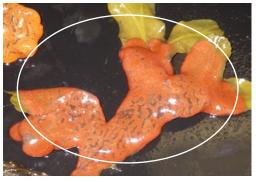
Botrylloides violaceus



This colonial tunicate is thin with double rows or chains of zooids. The tunic is relatively tough and leathery to the touch. Range is California to Alaska. Our specimen from Kachemak Bay is dark purple, above, but can be orange, red, yellow, tan or brown. It grows on a variety of surfaces such as docks, boat hulls, buoys, ropes, pilings, rocks, mussels and seaweeds.



©Gary Freitag Sitka and Ketchikan have this in their harbor.



©Heather Meuret Woody

If you see this tunicate in Kachemak Bay, please take a photo of it and take note of the location with GPS coordinates if possible, or detailed description of the location including the closest landmark. Thanks!

Send information to: Kachemak Bay Research Reserve - Catie Bursch 1-907-226-4661 <u>Catie.bursch@alaska.gov</u> or Alaska Department of Fish and Game –Invasive Hotline 1-877-invasiv



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Marine Invasive Species!



Prevent the Spread of Marine Invaders! CLEAN DRAIN DRY

Catie Bursch Kachemak Bay Research Reserve (907) 235-NERR catie.bursch@alaska.gov The pictured invasive sea squirt, 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.

