

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME OFFICE OF THE COMMISSIONER

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November 3, 2010

Honorable Members of the Assembly
City and Borough of Sitka
City Hall, Third Floor
100 Lincoln Street
Sitka, AK 99835

Dear Members:

I appreciate the opportunity to address the City and Borough of Sitka Assembly on Tuesday, November 9, 2010, to report details about detection in June of a marine invasive species, the colonial tunicate *Didemnum vexillum*, in Sitka waters. The Alaska Department of Fish and Game (ADF&G) is working closely with marine invasive species experts at the Smithsonian Environmental Research Center and San Francisco State University, Romberg Tiburon Marine Lab, as well as state, federal, tribal, university, and local agencies to respond to this invasive species. ADF&G takes seriously its responsibility to educate members of the Sitka public about this invasive marine species and the potential threat it poses to the natural resources and habitats that provide commercial, subsistence, and recreational opportunities to Sitkans. On October 26th we met with key stakeholders and the Fish and Game Advisory Committee to discuss these issues, and to take questions. On November 8th we will present information to the public at a town meeting.

Didemnum vexillum (*D. vex*) was detected in Whiting Harbor in June, during a Marine Invasive Species Bioblitz. A bioblitz is an event with a designated date and period of time when volunteers focus on a group of species in a specific area to learn about the distribution of their populations. The Sitka bioblitz was a success in that nearly twenty volunteers helped us search the City of Sitka harbors for marine invasive species. We detected invasive tunicates in all ten of the harbors we surveyed, and detected what we feared was *Didemnum vexillum* only in Whiting Harbor.

On August 9th, 2010, ADF&G received confirmation, based on genetic analysis, that the tunicate found Whiting Harbor was indeed *Didemnum vexillum*. In early September, ADF&G shellfish divers completed a survey at the head of Whiting Harbor to investigate if *D. vex* was growing on the seafloor. The divers found *D. vex* growing on rocks, rip rap, kelp, native crabs, mariculture

gear, and various types of debris littering Whiting Harbor. The enclosed map identifies Whiting Harbor; areas in pink indicate established populations of *D. vex*.

Photographs taken of the *D. vex* in Whiting Harbor are also enclosed; several were taken during a scouting trip in late August. The first picture is a section of seaweed that is almost completely encrusted with *D. vex*. The second photo is lantern net with *D. vex* growing over the net, reducing flow of water and available food for the oysters inside. I've also included a close-up shot of the invasive tunicate on seaweed. This smothering growth habit is in part what makes the organism such a problem for native species.

Finally, I've included the ADF&G News Release issued after we received confirmation of the identity of the colonial tunicate, and outlining reasons for concern. *Didemnum vexillum* is a non-motile, colonial tunicate that grows rapidly on natural and manmade substrates in undulating mats or dripping tendrils. It can reproduce sexually or asexually. If fragments of the colony break off, they can establish viable populations wherever they land. *D. vex* can grow quickly over the seafloor, covering benthic organisms; including seaweed, bivalves, even crabs, and result in ecosystem changes. This species was first reported in 2003 as a 6.5 m² patch 160 miles off the coast of Cape Cod; today that patch is a nearly continuous mat covering over 100 m².

Sitka waters are rich in natural resources that provide food, income, and traditional and recreational harvest opportunities. ADF&G is dedicated to working with the local community, stakeholders, and experts to identify feasible ways of managing or controlling the invasive tunicate found in Whiting Harbor. Our first goal is to inform the public so they do not accidentally move this species around and to report if they see *D. vex* in waters outside Whiting Harbor.

Please don't hesitate to contact me with any questions or concerns.

Sincerely,



Tammy Davis
Project Leader, Invasive Species Program