

Tongass Wilderness Stewardship: Whitewater Bay, Admiralty Island July 9-16, 2011

The trip to Whitewater Bay was both a continuation of previous weed eradication and trash collection efforts as well as a new effort to monitor sound and solitude data in the area and proved to be a successful partnership between the Southeast Alaska Conservation Council, the U.S. Forest Service, and the Juneau Cooperative Weed Management Area (JCWMA). This trip not only was successful in its goals to eradicate invasive species, collect trash, and monitor sound and solitude in the area, but also significantly contributed to building a foundation for future stewardship efforts in the Admiralty area. SEACC staff member Dan Lesh and Wilderness Manager for the Admiralty Island National Monument and Juneau Ranger District John Neary partnered to lead the trip, and in addition to these leaders, participants included invasive species specialist Dana White of JCWMA, SEACC intern Paige Hill, USFS volunteer Peter Fee, and SEACC volunteers Karla Hart, Dick Farnell, and Caroline Hedin.

Invasive Species Eradication

Invasive species detract from the wilderness character of a thriving natural ecosystem and eradication efforts are an important part of wilderness stewardship. Weed eradication efforts on this trip built upon the success of an on-going weed pull that began in 2009 under botanist Ellen Anderson. Under the direction of Invasive Specialist Dana White, the crew primarily focused on pulling black bindweed (*Fallopia convolvulus*).



A group member locates black bindweed

According to the Plant Invasiveness Assessment System for Alaska, Black bindweed has an invasiveness ranking of 50 out of 100. It is particularly devastating to ecosystems because of its classification as having "highly aggressive reproduction" as a single plant can produce up to 30,000 seeds. Black bindweed can flower and seed at any point throughout the year, making eradication efforts difficult. On this trip, however, participants noted few flowering plants, and the fact that most weeds were pulled before seed dispersal will ensure a highly effective eradication effort. Additionally, black bindweed seeds can remain dormant for several years, meaning eradication efforts must occur regularly for multiple years in order to ensure results. A survey of the five by ten foot test plot near Sand Point created in 2009 revealed that only fifteen plants were growing in this area, compared to twenty seven in 2010, suggesting that eradication efforts are significantly reducing the amount of black bindweed in the area.

Though the group mainly focused on bindweed eradication, they also identified other invasive species including field mustard, curly dock, common dandelion, lambs quarters, common

chickweed, and white clover and worked to at least partially eradicate and record the location of these species throughout the course of the week. The group pulled approximately forty-three pounds of bindweed, sixteen pounds of curly dock, five pounds of dandelions, and three pounds of field mustard.

In addition to successfully surveying 2.75 miles of beach fringe and pulling the 1.2 miles of beach that were infested, volunteers were able to collect GPS points to significantly improve upon previous maps of infested areas which will improve the effectiveness and efficiency of future eradication efforts. The USFS map provided to the group in Whitewater Bay proved to be largely inaccurate, and the group collected updated and revised data which was later used to create the attached map that can be used in future eradication expeditions to Whitewater Bay.

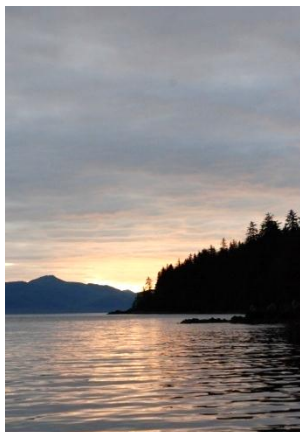


The group goes over maps of the area and creates an itinerary for weed eradication and trash collection.

Trash Collection

Trash collection efforts were also successful, and the group collected approximately twenty pounds of trash. The volunteer group from 2010 noted they found a significant amount of trash, including tires and refuse from commercial fishing, none of which were discovered on the 2011 expedition where trash was comprised mostly of plastic waste and small buckets. In addition to successfully restoring the wilderness character of the area, the lack of trash found suggests that trash collection efforts have significant and long-lasting impacts on the preservation of wilderness areas.

Solitude and Sound Monitoring



Whitewater Bay provides excellent opportunities for solitude.

Throughout the trip, the group collected solitude monitoring information for the U.S. Forest Service, tracking wilderness disturbances they encountered and the impact of these disturbances. The group collected over seventy-five hours of data over the eight day trip and noted that there were few disturbances and the impact of these disturbances on the wilderness experience of the group was low. Volunteers also investigated the effectiveness of the National Park Service's "Natural Sounds and Night Skies" monitoring program techniques in wilderness areas in the Tongass. Through sound monitoring efforts, the group was able to provide valuable feedback

about the effectiveness of these monitoring systems in the Whitewater Bay and Admiralty area.

Lasting Partnerships

Finally, the partnership that developed between SEACC, USFS, and JCWMA during the Whitewater Bay trip resulted in the submission of a joint Resource Advisory Committee (RAC) proposal that may fund additional trips to Whitewater Bay in 2012 and 2013 in order to ensure progress continues and total eradication is achieved. In addition to the practical importance of this RAC grant, the facilitation of an ongoing, cooperative partnership between SEACC, the USFS, and JCWMA will be invaluable for future eradication efforts in Whitewater Bay and other wilderness areas.



The group with the results of trash collection and weed eradication efforts.

This trip was also successful in cultivating accountability among volunteers and creating a better understanding of how recreational users are also partially responsible for the effective maintenance of wilderness areas. Participants were able to see how human activity can disturb the quality of wilderness areas, and the trip made many participants further committed to continuing their individual stewardship efforts through appropriate wilderness ethics as well as

participation in future stewardship trips. In-kind donations totaled approximately \$2,000 in addition to the 130 volunteer man-hours contributed during the trip (approximately half of the 258 total man-hours worked).

Conclusions and Recommendations

The continued eradication and trash collection efforts in Whitewater Bay have already significantly improved the wilderness character of the area. Through an on-going partnership with SEACC, the U.S. Forest Service, and JCWMA, threats to the wilderness character of Whitewater Bay can be reduced. Priority should be given to the eradication of black bindweed in order to ensure previous efforts at seed bank exhaustion are fully integrated into future efforts.

The Whitewater Bay area appears—based on past subjective experience and on data collected during the 2011 trip—to provide excellent opportunities for solitude. Tour groups and other controllable uses of this area should be managed to project the solitude of this unique area.

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Please see attached:

JCWMA Trip Report
Updated Infestation Map
Solitude Survey Form
Sound Monitoring Survey Form

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