

## Infestation of invasive aquatic plant discovered in interior Alaska

Meeting planned for December 3<sup>rd</sup>

In late August 2010, our office became aware of a substantial infestation of an invasive aquatic plant, *Elodea canadensis*, in the Fairbanks area. Over the last 6 weeks, we have been searching the literature on this species, and corresponding with people who have studied it. While there is still a lot we don't know about this infestation and this species, here are some of the things we've learned.

The species is known as "common waterweed," "Canadian waterweed," or *Elodea canadensis*. It is native to southern Canada and the eastern US. It is not native to Alaska. This species has invaded most of northern Europe, and has spread all the way across Russia to Lake Baikal. It has invaded slow-moving stream systems in New Zealand, and is a major problem in irrigation canals in Australia. This species was originally transported to all these locations as an aquatic ornamental or as an aquarium plant. It spreads in two ways: by breaking up and re-rooting after it is washed downstream or by being carried to new water bodies inadvertently by people, e.g. caught in boat trailers.

It is well-documented that *Elodea* can "fill up" waterways with dense growths of plant material. In other places around the world that it has invaded, *Elodea* has dramatically impeded the navigability of slow-moving waters and of lakes (see photo below). The dense plant material can make fishing problematic or impossible. Invasion by *Elodea* has been shown to negatively impact salmon spawning

habitat. When *Elodea* and other aquatic plants invaded a Chinook spawning area of a river in northern California, both water velocities and spawning activity declined dramatically.

As best we can tell at this point, the infestation in the Fairbanks area began in Chena Slough, a tributary of the Chena River. Dense patches of *Elodea* extend for over a mile of Chena Slough, sometimes almost filling the slough basin (see photos next page). And more importantly, *Elodea* has been found in the Chena River, both floating freely and growing attached to river

bottom sediments in several places. Unfortunately, we were not able to thoroughly survey the lower Chena River before freeze-up.

It's likely that *Elodea* was introduced to Chena Slough by someone dumping an aquarium. We believe the infestation in the slough has developed within the last 5 to 10 years; if that's correct, then this species is capable of colonizing waterways here quickly, as it has in northern Europe and Eurasia. If *Elodea* continues to spread in interior Alaska, it could have significant negative impacts on slow-moving stream and river systems, and on many interior lakes.



*Elodea canadensis* infestation in a bay of Lake Baikal, Russia.

Photo: N. Pronin.



A dense bed of *Elodea* growing in Chena Slough. In this area the plant material was several feet thick, extended from the slough bottom up to within a few inches of the water surface.  
Photo: T. Wurtz

We have organized a meeting to discuss this situation with land managers, biologists, and agency representatives. You or a representative of your group is invited and encouraged to attend. We'll share what we have learned about this species, what we know about its extent here, and begin a discussion of what might be done to keep it from spreading further in the river system or being unintentionally spread overland to new locations. We hope to work as a group to develop a preliminary action plan.

The meeting will be held at the Alaska DNR building (across from Fred Meyers West), in the large conference room, on Friday, December 3<sup>rd</sup>, from 10 am – noon.

For more information, please contact:  
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A paddlefull of *Elodea* scooped from Chena Slough in August, 2010. Photo: T. Wurtz