

Final Report, AIS Grant (AEPP-328-12)

Project Summary

The project officially began on Wednesday, April 25th, 2012 with the attendance of 29 interested students and 9 adult volunteers at an AIS Workshop held at the Community Center in Solon Springs, Wisconsin. Carrie Sanda, Douglas County AIS Coordinator, conducted the workshop from 6:00-9:00 pm. Boat landing inspections began with the fishing opener on Saturday, May 5th and extended through Labor Day weekend for a total of 18 weekends. During that period two landing sites were monitored each weekend for a total of 42 hours per weekend. Due to the positioning of the 4th of July in the calendar, we monitored our busiest site the entire holiday week. For the 18-week period, inspection teams were present at landing sites a total of 804 hours, or a total of 721.5 student worker hours and 349 adult volunteer hours. During this period, monitors inspected a total of 1219 boats entering and/or leaving Upper St. Croix Lake. Along with inspecting the boats for plants before launching, the inspection teams also checked boats coming out of the water to make sure they left the landing sites free of plant materials and carrying no water. The teams handed out educational materials such as Eurasian Water Milfoil and Purple Loosestrife informational packets, and bait rules. They reminded over 3163 boaters about the water and plant transport laws, the 100' no-wake law, and the problems associated with invasive species. While informing boaters about the threat posed by the introduction of Eurasian Water Milfoil and other aquatic invasive species into our lake, the monitors demonstrated proper inspection procedures boaters can employ on their own to ensure their boats and trailers don't transport invasive species to other lakes.

Achievement of Project Goals

1.) Monitoring boat landings:

Student workers for the project were recruited from the local high school in late April. Adult volunteers were solicited from the Upper St. Croix Lake Association, the Village and Town Boards of Solon Springs, and the broader Solon Springs Community beginning in late April and continually throughout the summer. A training session was held for the student workers and the adult volunteers before monitoring began on Wednesday, April 25th in the local Community Center from 6:00 to 9:00 pm. The training session was attended by a total of 38 students and adults. Carrie Sanda, Douglas County AIS Coordinator, also held two other training sessions at the same location at later dates for interested adults in surrounding communities.

Two boat launches were monitored each weekend by trained boat inspectors between May 5th (fishing opener) and Labor Day. The boat launches were located at the end of Main Street in Solon Springs, a.k.a. the St. Croix Inn Site, and also along County Road A, a private launch site at Lakeview Lodge. The St. Croix Inn Site was monitored from 4:00 – 7:00 pm Fridays, and 7:00 am – 7:00 pm on Saturdays and Sundays, and also on holiday Mondays (Memorial Day and Labor Day). We also monitored during the entire 4th of July week from 7:00 am – 7:00 pm at this site. The Lakeview Lodge Site, being

traditionally less busy, was monitored from 7:00 am – 4:00 pm on Saturdays and 7:00 am – 1:00 pm on Sundays. The DNR launch site, a.k.a. Palmer’s Landing on County Road A, was initially a consideration for monitoring given the State’s ambitious project to rebuild the launch in early spring. Spring turned into summer with daylight fast disappearing and the project has just begun. Construction at this site will last until October 1st. We will definitely monitor this site next boating season as it will satisfy a niche, space for parking cars and trucks with boat trailers. At each monitored site, one trained student and at least one adult volunteer inspected the watercrafts. Only adult volunteers monitored the launch sites the first two weekends, May 5-7 and May 12-14 and the last two weekends of the project, August 24-26 and September 1-3 as students were unavailable because of school sports and other activities revolving around school. During the 18 weeks of the project inspectors were present at the launch sites a total of 721.5 hours or a total of 1070.5 student worker plus adult volunteer hours.

2.) Education of boaters regarding AIS and prevention:

During the 18 weeks of the project, monitors inspected a total of 1219 boats entering and/or leaving Upper St. Croix Lake. Along with inspecting the boats for plants before launching, the inspection teams also checked boats coming out of the water to make sure that they left the landing site free of plant materials and carrying no water. As Minnesota doubled their “carrying aquatic plants” fine, inspectors also reminded boaters that being vigilant could help them out financially. The inspection teams also handed out educational materials regarding Eurasian Water Milfoil, purple loosestrife, VHS, and a host of other aquatic invasive species. They placed Stop Hitchhikers stickers on boater’s trailers and talked with over 3163 boaters about the problems associated with aquatic invasive species and what lakes in our local area were currently affected by these invasives. In addition to informing the boaters about the threat posed by the introduction of Eurasian Water Milfoil and other aquatic invasive species into our lake, the monitors demonstrated proper inspection procedures that boaters could employ on their own to ensure their boats and trailers arrive at landing sites free of plant materials in the future. Most boaters seemed keenly aware of the dangers that AIS posed on our pristine lake environment. While carrying out the watercraft inspections, students asked boaters questions about their boating practices and knowledge about AIS and they in turn used this information to fill out daily Watercraft Inspection Reports. These reports were completed for each launch site during each 3-hour monitoring session and then all of this survey data was entered into the Wisconsin DNR CB/CW database (SWIMS).

During the busiest week of the summer, July 2nd – 8th, 140 boats were inspected at the launch sites. During this weekend alone, inspectors talked with more than 381 boaters about AIS. The landing site at the end of Main Street in Solon Springs, a.k.a. St. Croix Inn Site, was routinely the busiest launch site throughout the boating season. During all boat inspections, inspectors asked boaters questions about their boating practices and used this information to fill out Watercraft Inspection Reports. The reports were completed for each launch site during each 3-hour monitoring session and all of the survey data was entered into the CB/CW database (SWIMS).

3. & 4.) Public Education about AIS:

Public education of lake property owners, Lake Association members, and the

broader Solon Springs community was achieved through the publication of articles in the initial membership letter, the newsletter and local newspapers and the distribution of brochures at public events and places. There were two CB/CW workshops held at the Solon Springs Community Center for area volunteers, or those who yearned to become a volunteer. Douglas County AIS Coordinator, Carrie Sanda held both of these workshops. While 38 students and volunteers participated in the April 25th workshop, several members of the Solon Springs community at large participated in the other. As we approached mid-August and plant matter began to thicken in the lake, both student and adult volunteers alike were often personally trained by the coordinator on what to look for in the case of Eurasian Water Milfoil. This usually resulted in a lesson of leaflet numbers or structure and they turned out to be either Northern Water Milfoil or Coontail, both of which are native species in our lake.

An Upper Lake St. Croix Advisory Committee, which includes personnel from both the Town and the Village Boards, the St. Croix Lake Association, Douglas County Forestry Department, Friends of the St. Croix Headwaters and the local high school, as well as community members at large, has been particularly interested in both the volume of watercraft using the lake and the distance boaters have traveled to use the lake. Together, we are trying to sort out a solution that will hopefully satisfy most of these patrons. The major driving force is the protection and preservation of Upper St. Croix Lake of which exotic species would render less than pristine. An initial announcement of the AIS grant along with a description of the proposed project and an invitation to attend the CB/CW boat-landing inspector training workshop went out to all members of the lake association, lake property owners, and residents within a mile radius of the lake in early April. A total of 9 community members, plus 29 students, attended this workshop. As this was the fifth (non-consecutive) year of this type of grant, several lake association members were already on board and ready to participate again as launch site volunteers. This fact, and an extensive calling effort on the part of the project coordinator culminated in the participation of 77 community members in the project, 20 students and 57 adults.

During the monitoring segment of the project, May 5th, 2012 to September 3rd, 2012, the AIS project coordinator wrote an article for the local newspaper, an article for the lake association's newsletter, continued care of a rain garden to help mitigate soil erosion and harmful chemicals from reaching Park Creek, wrote an article for Lucius Woods Music in the Park, completed work on a new pedestrian path through the County Park to help mitigate soil erosion, sent reminders to adult and student landing monitors, as well as sat on the Board of Directors of Friends of the St. Croix Headwaters and the Upper St. Croix Lake Association. The coordinator and several student workers also had four work days tackling many invasive plant species. The first, held June 28th in Lucius Woods County Park was in conjunction with experts from the Douglas County Forestry Department, the Northwoods Cooperative Weed Management Area, and the Lake Superior Research Institute at UW-Superior. Purple loosestrife, buckthorn, knapweed, black locust, and a certain species of honeysuckle were those plant types targeted by the group. A lake pontoon was used to collect and re-distribute beetles to combat purple loosestrife in the lake's wild rice beds. The second was held on July 27th, which was strictly a purple loosestrife eradication effort. The workers dug out the bulbs of blooming purple loosestrife from ditches and along the roadway from the village of Solon Springs all along County Road A for 5 hours. Thirty-two large contractor bags were filled with

purple loosestrife. The coordinator enlisted village workers to help dispose of the noxious weed when the blossoms were harvested. On August 8th, the coordinator and several student workers spent a second day working with Douglas County Forestry to eradicate invasive plant species from our local County Park. August 16th was the second purple loosestrife drive made by the CB/CW workers. Once again, the students dug out the bulbs of blooming purple loosestrife or cut the blossoms off of blooming purple loosestrife from the ditches and along the roadway all along the West side of the lake. Thirty-five contractor bags were collected in this 4-hour shift. Among other things, these efforts enabled the public to become more aware of the CB/CW monitoring program, solicited more volunteers, recognized the participation of local high school students as inspectors and community leaders, thanked community members who had volunteered, emphasized the importance of keeping the lake free of Eurasian Water milfoil, and solicited partnerships for continued lake vigilance. Although these efforts may not be viewed as spectacular, they clearly represent a successful fifth year effort of educating local anglers, boaters, lake property owners, and Solon Springs' community members about AIS. Most importantly, let's hope it prevented the invasion of AIS into Upper St. Croix Lake!

5.) Aquatic plant-monitoring results

Throughout the monitoring season from May 5th (fishing opener) through September 4th (Labor Day), 77 community members of Solon Springs monitored 2 boat landings for aquatic plants. On occasion, there were plant materials attached to props of watercraft upon vacating our lake, especially in the later part of the season. This prompted the intense scrutiny of each individual plant either by the student monitors or by the coordinator herself. The coordinator conducted a lesson of leaflet numbers or structure if the student monitor or monitoring adult was unsure of him/herself. The result was always either Northern Water Milfoil or Coontail, both of which are native in Upper St. Croix Lake. The landings themselves were also monitored each week by the coordinator who took a sample at each of the locations each week. Although the plant matter increased in scope, only native species were found at each site.

6.) Purple Loosestrife Work

On June 28th from 9:00 am – 3:00 pm, a group of Clean Boats/Clean Waters workers, along with Carrie Sanda, Douglas County AIS Coordinator and her intern set out to capture purple loosestrife beetles from the southwest side of Upper St. Croix Lake where they were doing significant damage to plants and release them on the south side of the lake (wild rice area) where the purple loosestrife was flourishing. The second purple loosestrife eradication effort was held on July 27th. The workers dug out the bulbs of blooming purple loosestrife from ditches and along the roadway from the village of Solon Springs all along County Road A for 5 hours. Thirty-two large contractor bags were filled with purple loosestrife. Our third effort held on August 8th was again spent in conjunction with the Douglas County Forestry to eradicate invasive plant species from our local County Park. August 16th was the second purple loosestrife cutting drive made by the CB/CW workers. Once again, the students dug out the bulbs of blooming purple

loosestrife or cut the blossoms off of blooming purple loosestrife from the ditches and along the roadway all along the West side of the lake. Thirty-five contractor bags were collected in this 4-hour shift. The strategic locations were: a wetlands native plant area which was designated years ago along Lakeshore Drive (southwest corner of the lake), Park Pond along business 53, along Railroad Street from Main Street to the entrance of Lucius Woods Park, where Park Pond dumps into Park Creek, and again, all along County Road A until the Soft Pines Resort (almost to the corner of Highway P). The coordinator took note that many of the plants had holes in them (due to the releasing of beetles from last other calendar year's efforts) but that had not deterred the blossoms from appearing (thus scattering later in the season). Fortyseven and one-half hours were devoted to the cutting, bagging, and disposing of the loosestrife blossoms. The students and the coordinator collected and disposed of 67 bags stuffed to the brim. (It should be noted that the coordinator and her sons also dug and bagged 22 additional bags of loose strife from the strategic location sites.) We hope that this work helped prevent the further spread of purple loosestrife. There is a plan in the works for the spring of 2013 regarding the dispersing of more beetles. Carrie Sanda, Douglas County AIS Coordinator and the CB/CW Coordinator, who also happens to be a local science teacher, are planning to release hundreds of beetles through a cooperative effort. This combined effort will be a part of the environmental stewardship portion of the ninth graders physical science course.