

North Central Division of the American Fisheries Society

1. Date: 11/9/2012

2. Subunit Name: Lake Superior State University

3. Number of Subunit Members (AFS members only): The LSSU Subunit currently has 36 paid members. As a fully undergraduate Subunit of both AFS and The Wildlife Society, only a fraction of Subunit members belong to the AFS parent society (6 student members), but all are members of the Michigan Chapter of AFS.

4. Officers President: Tyler Jackson

Vice President: Jason Gostiaux

Secretary: Nicholas O'Neil

Treasurer: Mathew Elya

5. Person making nomination (Name, Affiliation, Address, Telephone): Dr. Geoffrey Steinhart (Advisor and Past-President of the Michigan Chapter of the American Fisheries Society) & Tyler Jackson (Subunit President), Lake Superior State University, 650 W. Easterday Ave., Sault Ste. Marie MI 49783; gsteinhart@lssu.edu; 906-635-2093

Signature:



1. Number and Type of Meetings: The officers meet every other week to discuss upcoming activities and speakers. This meeting includes the advisor and committee chairs. Full Subunit meetings also are held every other week, are widely advertised (e.g., signs on campus, posted on the university website, Facebook and OrgSync.com), and are open to all people that are interested. The full meetings are usually 45-min long with time after for people to discuss new events and ideas for the Subunit. Meeting topics include upcoming activities, fundraising events, conferences, and speakers. The Subunit also maintains a website that lists current events, meeting minutes, bylaws, and officers along with a link to the Subunit Facebook site (161 members). (www.lssu.edu/org/fwclub).

2. Special Activities:

Fisheries techniques – members learned how to use fisheries sampling equipment and about managing lakes

- Subunit members volunteered at the Hiawatha Sportsmen's Club to conduct spring lake assessments. Skills learned during this assessment included settling and pulling fyke nets, backpack electrofishing, mark-recapture population estimation, VI-alpha tagging and recording of fish data (e.g. lengths, weights, and fish identification).
- Subunit members volunteered at the Annual Soldier Lake assessment looking at the status of yellow perch as well as fluctuating recruitment of largemouth bass. Skills learned included: setting and pulling fyke nets, mark-recapture population estimation and recording of fish data.

- Fish survey of Dr. Tom Allan's farm pond to assess stocking success. Skills learned included: setting and pulling fyke nets and recording fish data.
- Atlantic salmon brood stock capture and egg fertilization with LSSU's Aquatic Research Laboratory. Skills learned included: setting and pulling gill nets, expressing eggs and milt, classifying sea lamprey scars, collecting samples for disease testing and recording of fish data
- Student volunteers helped with lake trout brood stock sorting and egg fertilization with Sullivan Creek National Fish Hatchery.

Collaboration with government agencies and local organizations – enhanced members knowledge of collaboration amongst fisheries and conservation based organizations.

- Subunit members helped with grounds maintenance at Whitefish Point Bird Observatory.
- Subunit members worked with the LSSU Ducks Unlimited subunit to build nesting boxes.
- The Subunit has a long-standing collaboration with the Sault Area Sportsman's Club (SASC) and assisted in handling and measuring fish at the annual Salmon Slam fishing tournament.
- The Subunit also volunteered with the city of Sault Ste. Marie during the weigh-ins of the Cabelas' Walleye Masters Series.

Members frequently provide educational opportunities for local elementary and high school students. We feel that it is important that the next generations develop value for and understanding of our natural resources if they are going to preserve them in the future.

- Members provided tours of the LSSU Aquatic Research Laboratory to local elementary and high school students.
- Members gave an otolith extraction and fish aging demonstration to high school Students visiting LSSU.
- Members gave presentations at a Mind Trekkers event to promote youth involvement in scientific education. Presentations included radio telemetry, fish ID and physiology, and anatomy.
- Environmental Summit – members volunteered to educate kids about aquatic systems, human uses and pollution, aquatic insect ID, and aquifers.
- Subunit members gave presentations to K-12 students to help promote science education through the program STEM (Science, Technology, Engineering and Math) at the YES! Expo in Detroit, Michigan.
- The Subunit also assisted in recruiting events with the Admissions Office to attract college bound seniors to study Fisheries and Wildlife Management at an event called Mind Trekkers.

Members conduct and assist each other with undergraduate thesis projects. This provides valuable learning opportunities for all students involved. Several members present their research at conferences and several are in the process of publishing their thesis. The following studies were conducted in 2011-2012 and have benefited from the assistance and leadership of Subunit volunteers:

Completed

- Counting sea lamprey eggs to help with a project titled, "Changes in Sea Lamprey Size and Fecundity on the Great Lakes"
- Cutting Striped Maple for a project titled, "The Removal of Striped Maple and its Affect on White Tail Deer Habitat uses."
- Northern pike sampling, tagging, and stocking for a project titled, "Biomanipulation of yellow perch by introducing a top predator in a northern temperature bog lake."
- Electro-fishing and fish ID for a project titled, "Effects of non-native salmonids on resident stream fish communities after barrier removal."

Ongoing

- Sample processing and bomb calorimetry of round gobies for a project titled “Variation in Round Goby Energy Density in the Great Lakes
- Assessing native fish diets for a project titled, “Native fish dietary response to the Duck Lake fire in the Two Hearted River, MI.”
- Stream data collection for a project titled, “Comparing nutrient contributions of native and non-native fishes during spawning migrations.”
- Snorkel surveys and largemouth bass sampling for a project titled, “Factors affecting recruitment of largemouth bass in Soldier Lake, MI.”
- Northern Pike counting for a project titled, “Northern pike movement after barrier removal in the Potagannissing River, MI.”

Student Subunit members consistently attend and participate in professional conferences. The student Subunit and its members have received numerous awards and recognition for their outstanding contributions in professional development, scientific contributions, and outreach.

- 2012 National AFS Conference (St. Paul, MN)
 - 1 student poster presentation
 - 6 members in attendance
- 2012 MIAFS/WIAFS Joint Meeting (Marinette, WI)
 - 7 poster presentations
 - 12 members in attendance
 - Organized Raffle
- 2011 Midwest Fisheries and Wildlife Conference (Des Moines, IA)
 - 6 poster presentations
 - 16 members attended
- Several sub-unit members take active roles on state and divisional AFS committees and divisions:
 - Jason Gostiaux ('12-'13), LSSU Subunit Vice President, is a MIAFS Executive Committee member.
 - Tyler Jackson ('12-13) is a part of the Marine Fisheries Division of AFS and John Ransom ('11-12) served on the MIAFS Student Concerns Committee.

The Subunit also invited speakers to meetings to give presentations on current research

- The Club brought in Scott Collins, a Ph. D candidate from Idaho State University to talk to interested students about stream ecology, macroinvertebrates, salmon nutrient contribution, and terrestrial-aquatic linkages. Several interested members were provided with dinner with Scott to further discuss professional development and his research
- The club brought in speaker Dave Jentoff to talk about the work being by the Michigan DNR on clear-cutting and beech bark disease in wilderness areas near Sault Ste. Marie.

Finances

Funds raised by members ensure that members can attend professional conferences and meetings and contribute to various charities and organizations.

Fundraisers included:

- Raffle held at the 2011 MIAFS meeting raised over \$400
- Whitefish Dinner – raised \$1,530
- Chili Cook-off – raised \$175
- Club t-shirt and sweat shirt sales – raised over \$400

Subunit made donations to:

- Sault Ste. Marie Kid’s Fishing Pond - \$175
- Other donations and awards (<\$100 each): Thanksgiving food baskets, Subunit

- Member of the Year Award
- Members helped with fundraiser to buy fish and maintain the salt water tank in the Biology Department at LSSU

3. Membership Recruitment Activities

Members are involved in several student recruitment activities throughout the year to engage more students in the field of fisheries and wildlife management.

- Organized fun events including:
 - Spring Games (picnics with fun activities open to all LSSU students; the Subunit helps organize these events and provides the food and refreshments)
 - Organized a Facebook summer fishing tournament so that Subunit members would remain active and connected over summer break
- Tours of the Aquatic Research Lab - important for recruiting students into the Fisheries and Wildlife program
- Meeting flyers are always posted across campus and meetings are listed on the LSSU and Subunit web sites.
- The Subunit hosted a Whitefish Dinner attended by over 50 people in the community. A silent auction and raffle raised money for Subunit activities.
- The Subunit staffed a table with information on the Subunit at six LSSU orientation events, at LSSU Fall Fling.
- The club has special on campus housing (a Living, Learning Community Building) that allows the club to have a house that is only for members. This also increases the club's presence on campus. The club has held activities at the house that include a new student alumni open house for Fall Fling, social events and officer meetings. Currently 12 members live there and are a mixed of freshman, sophomores and juniors.

- 4. On a single attached sheet (one side only), describe what makes your Chapter an active and important contributor to the NCD, AFS, and the fisheries profession. Also use this sheet to expand on any of the above areas. You may also attach copies of any written or printed material (letters, newsletters, fliers, newspaper, clippings, etc.) that lend support to your nomination. This material will not be returned, and if the number of pages exceeds five, it will only be reviewed by the Awards Committee Chair to avoid excessive photocopying and mailing expenses.**

The LSSU Subunit (aka Fisheries and Wildlife Club; FWC) provides valuable experiences for young professionals while reaching out to the community and improving the visibility of both the American Fisheries Society and Wildlife Society. The LSSU Subunit is different from some other subunits in that we are centered on both fisheries and wildlife. It is becoming apparent that aquatic ecosystems cannot be viewed as being separate from terrestrial ecosystems. Linkages are well established as being important for ecosystem function. Professionally our students may be faced with managing both aquatic and terrestrial systems. Therefore, having members involved in both fisheries and wildlife strengthens our students into more well rounded professionals, who are more capable of sharing knowledge with diverse audiences and who better understand conservation and management of valuable natural resources.

In order to recruit new members and retain old members we like to have fun activities as well as professional development activities. These more entertaining activities have included bowling, watching movies, game nights, intramural sports teams, hunting and fishing trips and hiking trips to parks and wilderness areas. Having these activities has brought the club members closer together and as a result has made our club better as a whole.

We take pride in continuing our success with providing fisheries related activities to the club members again this year. By conducting two lake surveys we had multiple opportunities for the members to improve their fishery surveying techniques. Although our club does a large amount of work on campus, we have also included the community by having events with other organizations off campus as well. This fall we had volunteers help with the weigh-in at the Masters Circuit Walleye Tournament that was held on the St. Mary's River out of Sault Ste. Marie, Michigan. Superior Aquasystems is another way that the club is helping the community. Members of the club are developing an aquaculture technology company. The objective of this company is to develop a way to make a reticulating aquaculture system more profitable, sustainable and efficient. This project has utilized the many different departments on campus other than biology including: engineering, business and marketing.

We are also working on implementing more wildlife management related projects into the club's skill building activities: upcoming plans for the school year include deer population estimates, bird counts. We are also volunteering with the Sault Tribe of Chippewa Indians on several wildlife studies including pine marten trapping and a rabbit enclosure and a long-term whitetail deer habitat study with the DNR. The FWC also is considering leading a hunter safety program in conjunction with the DNR.

Our Subunit has many activities for continuing education. We welcomed Scott Collins from Idaho State University, to talk to the club about terrestrial and stream linkages in aquatic ecology and graduate school. The Subunit is also planning to continue working with the Sault High School Envirothon group, and plans to help faculty at LSSU lead a group of area high school students participating in the NOAA Ocean Sciences Quiz Bowl.

We have seen an increase in membership in the club over the last couple of years. However, presently we have decreased membership from 72 to 36 due paying members from fall 2011 to fall 2012. This is partially due to a high number of members graduating. We do not expect to see continue in future years because of high freshmen and sophomore interest, and current underclassmen that will remain active in the group. We also encourage our upperclassmen to FWC events as this will keep members involved in club activities and trigger enthusiasm in younger students. This way we can help them as AFS members develop leadership and interpersonal skills as well as advancing technically and academically.