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2024

## **Skagit Fisheries Enhancement Group Intern**

Michaela M. Provancha Western Washington University

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# COLLEGE OF THE ENVIRONMENT



Internship Title:
Organization Worked For:
Student Name:
Internship Dates:
Faculty Advisor Name
Department
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STUDENT SIGNATURE Michael Punker
DATE:

#### I. STUDENT/INTERN INFORMATION

Name: Michaela Provancha	W#: 01521597
Major:	Concentration: None
Environmental Science	
Internship Title:	
Educational Intern with Skagit Fisheries Enhancemen	nt Group
Period of Internship:	
Fall 2023 and Winter 2024	
Avg. Hours per Week: 14	Total Hours Worked: 302

#### II. HOST INSTITUTION INFORMATION

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Institution Name:	
Skagit Fisheries Enhancement Group	
Institution Address:	
1202 S 2nd St UNIT C, Mount Vernon, WA 98273	

Institution Mission:

The mission and vision of the Skagit Fisheries Enhancement Group (SFEG), according to the organization's web page (SFEG 2023) are as follows:

SFEG was formed in 1990 to involve our communities in habitat restoration and watershed stewardship in order to enhance salmon populations. As a nonprofit and non-governmental organization, we have unique cooperative relationships with local landowners, conservation groups, government agencies, and tribes. SFEG envisions a healthy watershed ecosystem with abundant and self-sustaining wild salmonid populations in our region enjoyed by present and future generations. We envision the community recognizing SFEG as a leader and integral partner in local salmon recovery. We envision our community as actively involved in the stewardship and restoration of local watersheds and supportive of our enhancement and educational programs. We envision the community understanding the interdependence of the health and well-being of our human communities with the health and well-being of ocean, estuary, and river ecosystems.

Supervisor Name and Title:
Lucy Degrace
Supervisor Contact Information:
Idegrace@skagitfisheries.org

#### **III. DESCRIPTION**

My position as the Environmental Education Intern with Skagit Fisheries Enhancement Group (SFEG) centers on two educational programs run by the organization: Kids in Creeks and Salmon in the Classroom.

During the Fall 2023 quarter, my internship focused mostly on the Salmon in the Classroom program, where elementary grade students learn about salmon and their life cycle before raising their own Coho eggs and releasing them as fry. This program runs over the course of most of the school year and ends in March with salmon release field trips. This program, more than anything, strives to create positive outdoor memories for the students that hopefully stay with them as they continue to grow older. Another main goal of this program is to introduce the idea of salmon and their life cycle to the students so that it might spark interest. The big picture goal of every educational program through SFEG is to spark the next generation of salmon-aware community members, so that as generations grow up salmon will still be present in our streams.

During the Winter 2024 quarter, Salmon in the Classroom shifted towards salmon-themed art projects and salmon release field trips. During the waiting period, while salmon eggs in the class tanks transition from eggs to fry, SFEG works with classes to do optional art projects to keep students engaged and thinking about salmon.

The Kids in Creeks program started later in Fall quarter. This program centers on educating students about riparian vegetation and what the habitat in around the stream should be for salmon to be happy and thrive. This program is taught to older kids, middle through high school, and consists of a classroom lesson and a service field trip. These field trips usually include invasive species removal or tree plantings.

#### IV. DUTIES AND RESPONSIBILITIES

My work focused almost completely on the educational events and programs hosted by SFEG. The two main activities that I took a part in were the classroom lessons and field trips. When field trips were scheduled, a big part of my job duties focused on helping to ensure the field trip ran properly from start to finish. I worked with my few SFEG education coworkers to pack supplies, set up. teach, and pack up our stations at the end of the event. Most of my duties with SFEG were centered on the students and teaching lessons about salmon in the classroom and out on the field. I have taught students ranging from 2<sup>nd</sup> grade all the way through senior year in high school. Students that I taught in the classroom were often the same ones I got to continue teaching outside while on a field trip. The lessons I taught were all centered around Pacific salmon, and the main educational program that took place this Fall quarter was Salmon in the Classroom. This program required me to learn how to teach elementary school children about the salmon life cycle in their classrooms as well as teaching them lessons on water quality parameters and habitat observation while on field trips visiting a salmon-bearing stream. As March rolled around, the educational team at SFEG started our salmon release field trips. These field trips were held in the same locations as in Fall, as the students had done the proper testing to determine that the location represented good salmon habitat. During these field trips, I was responsible for leading a variety of activities. These included helping kids to release salmon, remove blackberry bushes, and plant trees. Outside of the educational programs, other duties of mine were to help during community outreach events. I often helped to prepare supplies for events, such as tree plantings or salmon sightings, and I helped to run events when possible. I was able to help primarily with salmon sightings during Fall quarter, where I helped to run stations and educate visitors from the community about the salmon they are viewing and the stream's ecology and natural history. During Winter quarter, community outreach events turned to potting and planting parties. During these events, I helped to lead background and

instruction while ensuring volunteers enjoy their time and return for future events. Overall, my duties focused primarily on the community engagement aspect of SFEG, helping with teaching both students and community members. Another task I had through SFEG was to write blogs and newsletter entries regarding my work and updates on the organization. I completed a total of three written entries in Fall quarter and two in Winter quarter, which were used for social media posts or newsletter entries (Provancha 2023). Examples are included in Appendix II, below.

#### **V. LEARNING OBJECTIVES**

This experience has allowed me to expand my knowledge of Pacific salmon as well as gain experience in communication and teaching. I have worked with children in many different programs throughout my life, and as much as I may not want to be a teacher full time, learning how to communicate information is a necessity for any good researcher and environmental worker. I have developed proficiency in teaching students about subjects I know well, along with lessons very new to me. This internship required me to take responsibility and lead rather than observe. This experience helped me to react on my feet and be able to problem solve in the moment as unique problems arise. Teaching requires you thinking on your feet, and I have improved greatly in helping to answer questions I do not know the answer to. An example of this is when a teacher asked me why certain parts of the water were colored differently. I was able to use the background knowledge I had and bounce ideas off a coworker to provide an answer. The water was differently colored in areas of low flow due to iron absorbing into the water from the rocks and soil near and in the water. As an educational intern, I have adapted to a wide array of new situations and groups of students to provide the best experience I can provide for each unique class. I also received many opportunities to change and create curricula for students, allowing me to gain proficiency in understanding how information must be taught with one's audience in mind. Outside of student teaching, working with community members of all backgrounds has allowed me to gain more skills in communication. I often adapted how I talked to others about salmon based on their knowledge before coming to one of SFEG's events. Some people I spoke to had no prior salmon knowledge, while others had been researching salmon in that stream for decades. Being able to speak with so many different types of community members as they gather to learn about salmon has given me many more useful skills that I will be needing much more as I continue my career focused on fish and restoration efforts. I know that my educational goals will lead me to speak to many different types of people with varying opinions, and the skills I have learned through this internship will allow me to work comfortably with many different groups.

#### **VI. LITERATURE CITED**

Provancha, M. 2023. Skagit Fisheries Enhancement Group (SFEG), Tales from Field Trips by Educational Intern Michaela Provancha. <a href="https://www.skagitfisheries.org/tales-from-the-field-trip-by-intern-michaela-provancha/">https://www.skagitfisheries.org/tales-from-the-field-trip-by-intern-michaela-provancha/</a>, accessed December 11, 2023.

Skagit Fisheries Enhancement Group (SFEG). 2023. About SFEG. <a href="https://www.skagitfisheries.org/about-2/">https://www.skagitfisheries.org/about-2/</a>, accessed December 11, 2023.



As of March 23, 2024 Michaela Provancha has completed 286.25 hours toward her 300 hour internship. With two days left we anticipate she will complete a total of 300-302 hours by March 30, 2024. A statement will be completed and submitted within a week of that completion date.

Sincerely,

Lucy DeGrace

Outreach Manager

Skagit Fisheries Enhancement Group

#### **APPENDIX II. SUPPORTING DOCUMENTS**

Write up #1:

## Tales from Field Trips by Education Intern Michaela Provancha

My time with Skagit Fisheries Enhancement Group as an educational intern so far has pushed me to grow my skill set and interests. I have had the opportunity to work with SFEG on both classroom lessons and field trips in order to teach students about salmon and their life cycle. Living in the Pacific Northwest, many students will hear about salmon throughout their childhoods yet may not understand their importance or uniqueness. It has been so rewarding to engage with students about a topic that is often new to them and to see new interests arise surrounding salmon and marine life.



Michaela leading a test of the dissolved oxygen in Hansen Creek

In the classroom lessons I start by introducing the SFEG program Salmon in Schools. This program connects with hundreds of students across many schools to teach about salmon and their life cycles through teaching and hands-on experience. Students not only learn about salmon, they also raise 200 salmon eggs in their classes and release them into a stream months later.

After students are familiar with the Salmon in Schools program, I give them an introduction into the five local Pacific salmon, then lead them through a bracelet activity representing the salmon life cycle. I have enjoyed how excited kids get for crafts and their ability to link that fun to an educational experience. Shortly after students learn about salmon in the classroom, they get to take a field trip out to a river where their salmon will be released later on in the school year. Many of them will show up with their salmon life cycle bracelets and it has been so rewarding to see how many remember the information we taught them and their excitement.

When I started this internship, I already had a lot of interest and background information on Pacific salmon. I often bother my friends and family with fun salmon facts and love to tell other people why I love salmon so much. Once the internship started, I realized that teaching a classroom of young kids is terrifying. This was my first experience teaching students and it was difficult to stand in front of the class and teach at first. Through these experiences, I am confident in teaching students now and I even lead volunteers through teaching as well.

In a few more months, it will be time for the salmon eggs to be delivered to the schools and students will be able to start watching their eggs grow into little fish. I am beyond excited to continue in this internship and see interest grow in marine life for many young students.

#### Write up 2:

A reflection from Educational Intern Michaela Provancha:

In the last couple months here at Skagit Fisheries I have gotten the opportunity to broaden my horizons and interact with people about salmon in new ways. Salmon sightings are well underway, and I was lucky enough to help out and talk to people about chum salmon as they passed through Oyster Creek. I loved seeing curiosity spark as people watched the salmon migrate upstream, and I enjoyed it even more when I could help to give insight into the amazing species and their behaviors.

Another new experience for me has been helping salmon by planting trees in riparian zones. Planting trees with students is part of the Kids in Creeks program here at Skagit Fisheries, and I am beyond excited for it to continue. Just recently, students from Conway went out and planted tree cuttings shortly after a lesson teaching the importance of riparian vegetation. During the event, every student was having a good time and putting hard work into planting trees. Not only was everyone enjoying themselves at the planting, students and Skagit Fisheries crew alike left feeling good about the work we had done. As the school year continues, I can't wait to help teach more interested students about salmon and stream health and learn much more from Skagit Fisheries along the way.

#### Write up 3:

Learning from the Fascinating Fish Community: a Fall Reflection from Educational Intern Michaela Provancha

As the Fall quarter is ending and things at Skagit Fisheries are slowing down for the holidays, I find myself waiting in anticipation for all I know the new year will bring with this organization. As an educational intern I have so much to look forward to, with salmon eggs being delivered to schools soon and new projects underway. Outside of the educational programs, this

internship has been amazing in giving me opportunities to experience other jobs done at SFEG. I was recently able to join in on a stewardship day, where a site visit is done to steward the land and assess the state of the property. On another day, I was able to tag along and learn how the spawner surveys are done at Skagit Fisheries. Both adventures took place in the middle of the early December flooding in Skagit county and made for quite the journey. The wild weather made the experiences more exciting, as I had the opportunity to see the impacts of heavy rainfall and flooding in different environments. During the spawner survey, we were able to see record high numbers of salmon in Innis creek due to the increased stream flow, an amazing sight I am lucky I got to witness. I loved being able to be back out in nature observing the different streams as well as different jobs at SFEG.

My internship this Fall with Skagit Fisheries has taught me so much that I never anticipated I would learn from this experience. More than anything else, I have had my eyes opened to the vast and seemingly endless community surrounding fish in the PNW. The more I can engage with students and members of the community, the more aware I am of how many interests and fields exist to be explored. I have always been drawn to working with the natural environment and fish are a big interest and focus of mine. As I have continued to work with fellow SFEG staff and community members, I have learned so many ways I can work in this field that I had never previously imagined. Everyone engaged with SFEG works consistently on new projects, upkeep, education, outreach, and so much more. During this first quarter of my educational internship, I feel I've been given a sneak preview into this organization and community surrounding it and I can't wait to learn much more as I continue.

#### Write up 4:

Watching the Salmon and Students Grow: A reflection by educational intern Michaela Provancha

As this new year started, hundreds of students from different schools looked at their fish tanks anticipating the hatching of their little alevin. Before winter break, my coworkers and I at Skagit Fisheries Enhancement Group (SFEG) delivered 200 Coho salmon eggs to 13 different schools, along with a tank at the local Skagit Children's Museum. The educational team here at Skagit Fisheries drove up daily for a little over a week to retrieve the salmon eggs from MarbleMount Hatchery and deliver them to each school. Seeing the faces of students as they placed their salmon eggs in the tank made these trips a highlight for me. Each egg delivery took very little time, and yet so many students were able to physically interact with salmon eggs and place them in their fish tank, with many naming their eggs as well. As we returned from holiday break along with the students, our job turned to checking in on the tank health and placing covers on the tank filters to protect the little alevin once they hatched. While traveling to each school for art projects, I had the chance to speak to students outside of classes about the salmon eggs in their tanks. Many of the schools have their fish tank in a location accessible by students of all grades, meaning that any student can observe the salmon as they grow from egg to fry. I find it really encouraging when younger students ask about the fish tank because it gets them excited for later when it's their turn to raise salmon eggs and release them.

Over the time I have been working with Skagit Fisheries as an educational intern, I have spoken to many adults who share fond memories of raising salmon in their schools when they were young. It motivates me to hear about how these lessons are memorable for students and provide a positive memory even in adulthood. No matter what amount of information the students remember, if the experience is positive and memorable, I feel I have accomplished what I set out to

do through this internship. Linking students to salmon locally through a fun and educational program will encourage them to connect back to the experience later in life.

#### Write up 5:

Using my fishtincts: A final reflection from Educational Intern Michaela Provancha

As my internship is ending, my days are filled with salmon release field trips. This day for each school is the final time that our educational team at Skagit Fisheries gets to interact with these groups of students through our Salmon in Schools program. Up until now we have been focused on teaching the classes about salmon species, life cycles, habitat, and environmental needs. Over the last few months, these students have been able to watch as their salmon eggs grow to fry and wait in anticipation for the day they get to release them. The more salmon release field trips I have been on this spring, the more I become excited for the future of the fish and more importantly, the students. There are many students in each class, no matter the school, who display genuine interest and fascination with the juvenile salmon they have raised and the new journey they are helping them start. Even if many students cannot recall specific reasons why trees and salmon are important to each other, they enjoy planting trees and understand that their participation is helping the local environment and salmon. Each student is encouraged to name their fish, with many receiving multiple names by the time they are set free. It is so amazing to see the pride students have in taking care of their salmon and planting trees. It always surprises me how many students happily request to remove blackberry bushes, an activity most adults can agree on as being less than desirable. Kids have a natural motivation to work towards an activity they are passionate about or find interesting. I have found it very motivating for myself being able to work with different age groups, finding new problems to solve on a consistent basis. I am sad to move on from my internship with Skagit Fisheries, yet I feel more prepared than ever to face new challenges as I graduate college and move into my future careers.