

Friday Harbor Labs Science Outreach Program



Friday Harbor Labs Science Outreach Program

- **FHLSOP** is a unique science education program that brings exciting, inquiry-based and relevant environmental science into the (K-12) classrooms of San Juan Island.



FHLSOP

**Involves students in the process
of science, with hands on
projects in the field, lab,
classroom & RV Centennial**

Friday Harbor Labs

Science Outreach Program

- **Established in 2001**
- **Structured as a partnership**
 - **UW-Friday Harbor Laboratories**
 - **San Juan Island School District**
 - **Spring Street International School**
 - **San Juan Islands Conservation District (2001-2008)**



SPECIAL THANK YOU

**to the following people and
organizations for their**

ONGOING SUPPORT!

Dr. Carolyn Haugen

Wells Fargo Foundation

San Juan Island Community Foundation

San Juan Public School Foundation

Port of Friday Harbor

Friday Harbor Elementary School PTA

Friday Harbor Labs Science Outreach Staff



Jenny Roberts
Program Director,
Coordinator & Educator



Kari Koski
Assistant Coordinator,
& Educator

Elementary School Projects

FHLSOP and the Friday Harbor Elementary School



Kindergarten – How are we alike?

Sea Stars, Scallops & Me!



FHES 1st Graders - The Eye Spy Activity



Magnifying your world

5 X



Working with our UW Marine Biology student mentors

**What else
does it
remind you
of?**



What else does it feel like?
Why is it like that?



2nd Grade – Is it a plant or animal?



Does it move?

How does it get its food?



What does it look like?



3rd Grade – What do marine organisms need to survive?



Partners in Science (2004)

FHLSOP joins with

San Juan Nature Institute



for funding from



The Russell Family Foundation

This Grant (2011-12) Provides Support for

- Diver for a Day
- Friday Harbor Marina Water Quality Monitoring
- Watershed Projects

3rd Grade - Diver for a Day

On board the Research Vessel Centennial



Preparing for Scuba Diving



Into the water



Diver contact and communication



Submerged Views



Salish Sea Water Dynamics



What happens when freshwater meets saltwater?



The touch tank



Who has tube-feet?



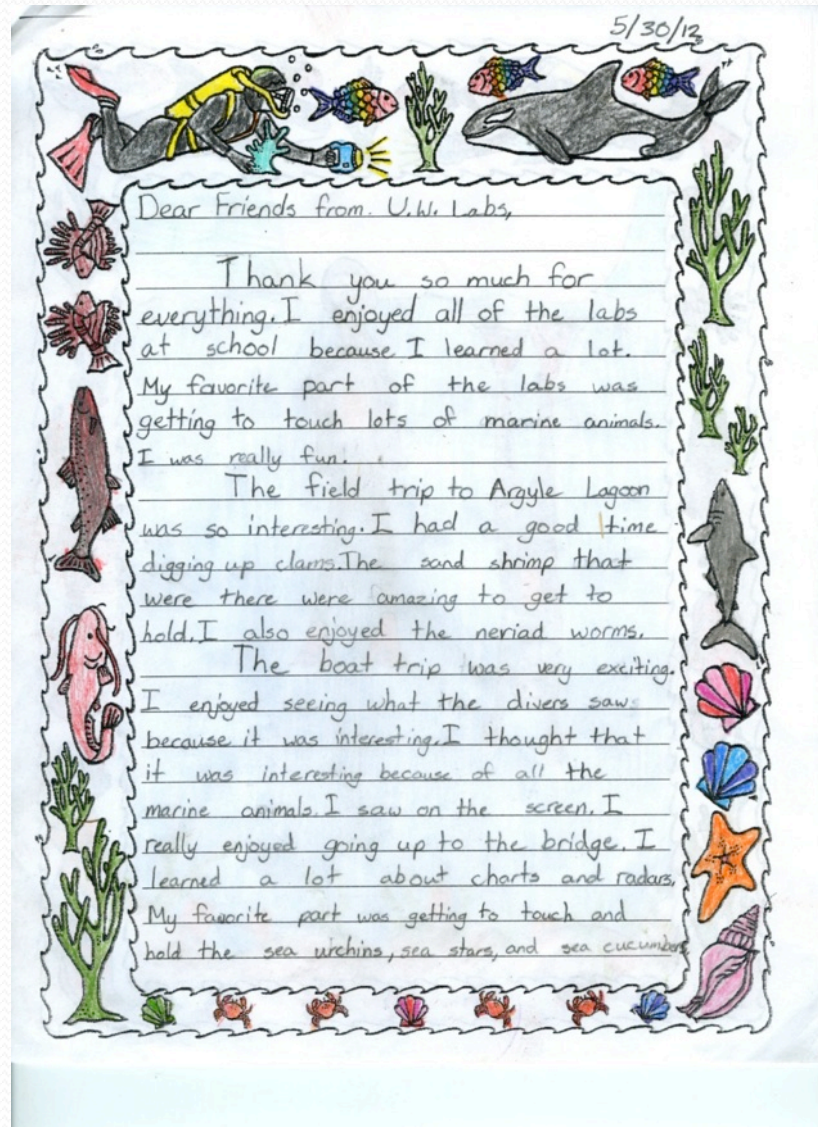
More touch tank



Visiting the Centennial Captain



3rd Grade Student Thank You



4th Grade – Dissolved Oxygen Lab preparing for salmon release



Salmon Release Day



Preparing for Beach Seining



One fish, two fish Beach Seining & Eelgrass Bed Investigation



Maybe we'll get a Starry Flounder?



Look at what we caught!



Student Scientists Collecting Data



Well Equipped!



Some of the Fish Experts & Parent Volunteers



Students Present Beach Seine Results!



5th Grade – Friday Harbor Marina Water Quality Monitoring



Fieldwork and Labwork



FHES 6th Grade Marine Biology Expert Day



Soft Sediments Field Trip



Rocky Intertidal Field Trip



Help from UW ZooBots Students



Projects with Friday Harbor Middle School & Spring Street International School



FHMS 7th Grade Science

DNA Extraction Lab



SSIS 6th, 7th, & 8th Science Classes

Stream Surveys



SSIS 6th & 7th Watershed Sampling



SSIS 7th Grade – Sampling Benthic Macroinvertebrates (insects)



SSIS 7th Grade – Sorting Benthic Macroinvertebrates



Students' Thank You for all the watershed activities



FHMS 7th Grade Science Class

Gray Whale Assemblage



FHMS 7th Grade

Whale Adventure Days

Island Geography, Salmon Games, Orca Identification & Conservation



Whale Adventure Days

Conservation K9's



Orca poop!



SSIS 8th Grade

Invert Observations & Inquiry



FHMS 8th Grade

Invertebrate Observations



Invertebrate Inquiry Experiments



Field Experience

Argyle Stream

Hi Flow vs. Lo Flow



Field Experience

FHL Dock

Exposed vs. Unexposed



Field Experience

FHL Beach Crab Study

Hi Zone vs. Lo Zone



Field Experience RV Centennial Trawl Investigation



SSIS 8th Grade Science: Know the Kelp & Algae



Projects with Friday Harbor High School & Spring Street International School



FHHS Chemistry Class

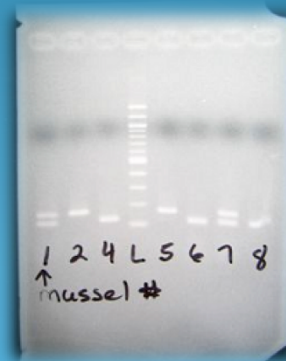
Electrophoresis Exploration & Dye Lab



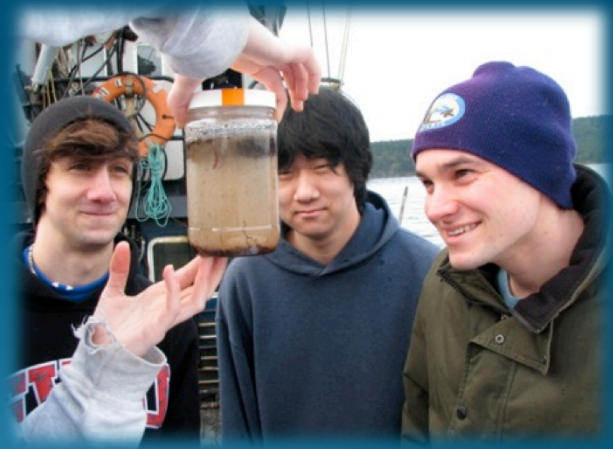
FHHS & SSIS Biology Classes - The Invasive Mussel Project



Creating a mussel DNA “fingerprint”



Sampling on the RV Centennial



The University of Washington's Friday Harbor Laboratories presents...



The Young Investigator Prize

The Young Investigator's Prize is awarded every year to local high school juniors showing exceptional promise in the fields of Science and Mathematics. The winner is selected by committee and is awarded a cash prize and UW / FHL internship.

2012 Recipients:

Michael Barsamian & Graham Crawbuck



2013 YIP Award Winner:
Emily Guard

THANK YOU

2013 Jazz at the Labs FHLSOP Sponsors!!

- Luxel Corporation
- Cask and Schooner Restaurant
- Olshefsky Family
- George & Pauline Mulligan
- Wilson Motors of Bellingham
- Friday Harbor Drug
- Island Petroleum Services
- Islanders Insurance
- Roche Harbor Resort
- San Juan Vineyards
- Wells Fargo Bank
- San Juan Propane



THANK YOU

JAZZ at the Labs Audience!!



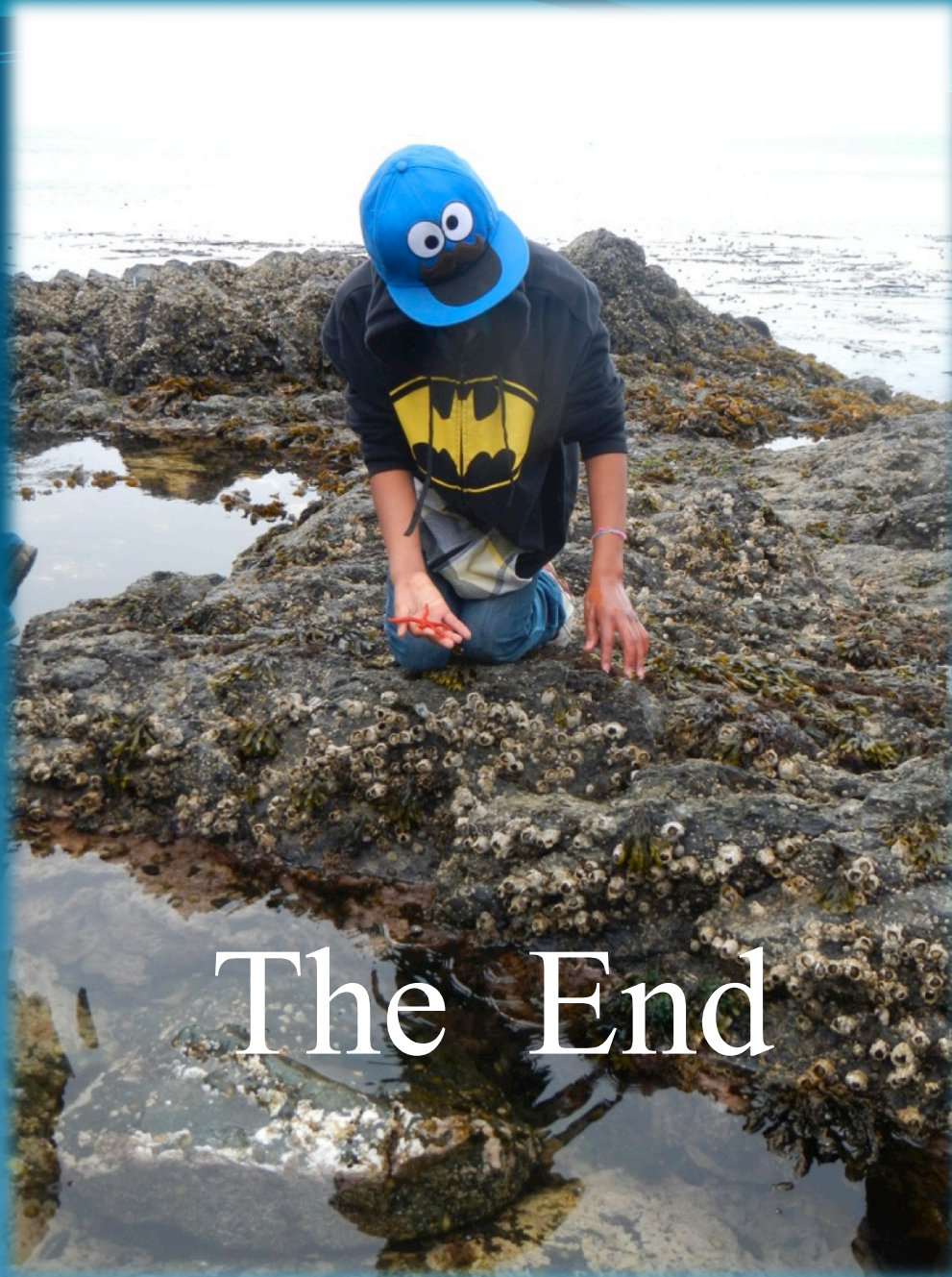
For more information about



please visit our website:
depts.washington.edu/fhlk12

Or search for: **FHL Science Outreach Program**

Contact email: **fhlk12@uw.edu**



The End