Submitted by Elizabeth Draper

Interpreting the Journey-922604

Written summary of grant activities

"Interpreting the Journey" encompassed many varied activities during the course of the eighteen month period of funding. Students and families increased their environmental awareness and stewardship towards land and water. Activities took place out in the community, as well as in the classroom environment. Our classrooms were able to establish partnerships with key organizational, environmental and educational members of the community, critical partnerships that I anticipate will continue in the coming months and years. All of the enriching experiences benefited our students and families in countless ways. The following is a summary of grant activities that include progressive steps on how the project was completed.

Winter 2001-Stage 1

In January 2001, my third through eighth graders worked together to monitor the salmon tank in the main hall of the Co-op school. Terry Olson, from OSU ext. took several hours coming out to school to work on the set up of the salmon tank and provided us with all of the equipment we needed in order to have a successful experience with the salmon eggs. Dick Caldwell, from U.S. Fish and Wildlife provided us with 55 fall chinook salmon eggs.

Daily my students monitored the temperature, growth and or mortality of the eggs and alevins. They recorded and graphed the daily temperature and accumulated temperature units. (ATU's) predicting when the fry would be ready for release. Students in grades 3-8 journaled their observations of the maturity of the eggs and what changes occurred. My students and parents helped release them into the Willamette River.

Stephanie Wagner, executive director of Tryon Creek State Park worked with my students both in the field learning appropriate water monitoring techniques and in the classroom. Stephanie built on my students' prior knowledge and provided them with materials for building healthy stream or river models.

Stephanie came into the classroom and shared her artistic /scientific expertise with my third and fourth graders. My students created steelhead models, the process took a month of focused studying of the anatomy, function, and uniqueness of this andromous species. They incorporated many

the ocean. We tested and compared water samples from each body of water. Our experience was unique and rich in information. My students were able to draw from previous studies and knowledge gained throughout the course of the year to help make this field study trip more memorable and meaningful. We toured a potential site of a future park and discussed possibilities for interpretive signage. Friday late afternoon was spent visiting Jim Bergeron who kept everyone enthralled by his knowledge and artifacts. Both trips were met with enthusiasm and new understandings.

Stage 4

Elisabeth Neely, (Metro naturalist) presented to the 6-8 graders the need for an interpretive sign in Oxbow regional Park. My students unanimously voted to accept this undertaking with Elisabeth's guidance. Deb Scrivens, (Metro educ. Coordinator) visited the classroom to introduce my students to Oxbow's interpretive themes and the necessary steps taken during the development of an interpretive sign. Elisabeth, Rex Ettlin, (Zoo ed. Prog. Manager) and I organized a field study trip to the Oregon zoo to critique the zoo's animal exhibits and signs. My students took this task very seriously and were quite thorough in their evaluations. In conclusion, they discussed their feedback with Rex. We were all impressed to see how astute my students were as they considered the signs reading/viewing audience and what worked and did not work for the audience. My students tried to incorporate information gained through this learning opportunity to our own work and interpretive sign that would eventually become a flip book.

With the assistance of Elisabeth Neely they brainstormed possible stories and themes for the flip book. They broke into teams to work on developing text and illustrations for each theme. This whole process took more time than was available- Elisabeth spent many hours of editing, cutting and pasting and helping to direct their energies before the project was passed on to metro's Creative Services staff, who scanned it and worked on the layout. My students were amazed to see the work involved from beginning to end of such a project. After two drafts were reviewed and reconfigured by Elisabeth, Creative Services staff and myself the final version of the flip book was sent to the sign fabricators in Canada. My students were definitely stunned by the research and intensive work involved with creating and designing a prototype.

Stage 5

Volunteers from the middle school class attended The Stewards of the Environment Festival at Portland State University. They used this opportunity to share with the greater community their frustrations and successes related to creating a prototype for an interpretive display.

Written Evaluation and Comments

To anyone who undertakes a project that involves interpretive signage, I would recommend they are realistic regarding the amount of time that is available for students to actually do meaningful work on the project. As professionals, Elisabeth Neely and I needed to keep in mind what information we wanted conveyed in the signage, we also needed to make sure that it was done in an articulate manner. We wanted to allow the students to experience and play an obvious role in the making of the flip book. This type of project requires a large investment of time, energy and planning. Rex Ettlin and Deb Scrivens contributed a lot in preparing the students with the technical background they would need.

"The students did very well with our guidance, and I think if we had had the time we originally thought we would have with them, they would have been able to work through some of the later drafts as well. As it was I spent quite a bit of time revising and working on the text, but I had expected to be doing some of that. In the end we were successful in our balancing act and the product is a unique interpretive sign that serves the park's needs and also truly represents the students' work." Elisabeth Neely

For those that are planning overnight trips or any plantings it is important to make plenty of advanced preparations. Make arrangements plenty of time in advance; check on things twice, never take for granted that one connection/confirmation is enough. Be flexible. Understand that there are many roles for the educator who takes on the responsibility of applying for and receiving a grant: administrator, coordinator, scheduler, teacher, facilitator, summarizer and person who connects everything so that it flows and there is a vision from beginning to end. Enlist team help. I realized that delegating does not come easily to me. Make sure that one person is in charge of specific activities, constantly review responsibilities and

expectations, and respect the structure that works. For project activities, bring in different perspectives and personalities. In addition, expand resources and encourage teachers to take on supportive roles, rather than being the main facilitator on all occasions. I would also suggest to grantees to purchase god quality equipment so it lasts rather than always going for the bargains to save a few dollars, know what you are purchasing, do a little research before making a large investment. Extra professional individuals enabled us to feel successful with the project and gave the students a sense of satisfaction and accomplishment. The need for reliable volunteers was essential for me to make this project work. Lastly, to anyone who undertakes a project like this remember to have fun, especially with your students.

Did You?

Did you see the evil wrath of pollution?
Did you feel the sand sifting through your hand?
Did you smell the stench of fish and salt water?
Did you greet the waves raveling around you?
Did you travel the waters path of existence?
Did you sense your surroundings ....mud, grass, water?
Did you enjoy the feeling of helping nature?
Did you like the feeling of hot water on sandy skin?
Did you dislike the knowledge that your kind was doing so much to harm?
Do you remember that trip to the beach?!!!

By Eli Boyce Bixby
Fourth grade, SFCS

Professional Services:

$ 1610.24	Elisabeth Neely, 74 hours @ $21.76/hr=$1610.24
$4092.00	Elizabeth Draper, 132 hours @ 31.00/hr=$4092.00
$2800.00	Kathy Deal and Kathy Fors (Graphic Artists), 70 hours @ $40.00/hr= $2800.00
$205.00	Deb Scrivens, 7 hours @ $29.30/hr= $205.00
$150.00	Rex Ettlin, 5 hours @ approximately $30.00/hr=$150.00
$265.00	Oxbow Regional Park staff, 10 hours @26.50/hr=$265.00
$808.50	Neil Maine, Coastal Studies and Technology Center staff, 21 hours @$38.50/hr=$808.50
$180.00	Jim Bergeron, Clatsop County Extension Agent, 5 hours @ $36.00/hr=$180.00
$214.00	Cindy Clark, Teacher assistant on overnight, 33 hours @ $6.50/hr=$214.50
$577.50	Roneete Levy, Teacher, 21 hours @ $27.50/hr= $577.50
$638.00	Heather Kingham, Teacher, 22 hours @ $29.00/hr=$638.00
$266.00	Jan Edwards, Artist, 7 hours @ $38.00/hr=$266.00
$300.00	Alan Dietrich, OSU Sea ext. 4 hours @ 23.75/hr= $300.00
$135.00	Peter Paquet, Northwest Planning Council Board, 3 hours @ $45.00/hr=$135.00
$207.00	Mike Brown, Teacher, CSTC 6 hours @ $34.50/hr= $207.00
$96.00	Terry Olson, OSU ext. 7 hours @ $12.00/hr=$96.00
$66.00	Daniella Brod, Portland Water Bureau, 3 hours @ $22.00/hr= $66.00

$12,609 Total Match of Professional/Personnel Services

Volunteer Labor:

April 19 & 20, 2001- Third/Fourth grade Overnight to Seaside
These parents accompanied us on our trip, 33 hours @ $6.50=$214.50
$214.50 x7=$1501.50
Blake Lemons
Joan Findlay
Phil Sylvester
Polly Christopher
Arianne Newton
Amy Corbett
Mary Jo Long

May 3 & 4, 2001- 6-8 grade Overnight to Seaside
These parents accompanied us on our trip, 33 hours @ $6.50=$214.50
$214.50x7=$1501.50
Dave Porter
Rebecca Pepper
James Cumming
Diane Tweten
John Conniff
Ramona Fischer
James Nestlen

The Seaside trip totaled $3003.00 of volunteer labor.
Four plantings along the Springwater Corridor: March 4, March 7, Oct. 11, Oct. 24
One planting in Oaks Bottom-Feb.6
Each planting lasted 3 hours @$6.50=$19.50x7 parents=$136.50
5 plantings x $136.50=$682.50

All day field trip to Oxbow- 6 parents volunteered for 4 hours
4 x $6.50=$26.00 $26.00 x 6 parents= $156.00

Steelhead Art with Stephanie Wagner - 4 sessions 2 hours each
3 parents each session - 2 hours @ $6.50 = $13.00 x 4 sessions =$52.00
$52,00 x 3 parents = $178.00

All day field trip to Cascade Streamwatch with Wolftree-Nov.8
6 hours with 5 parents
6 x $6.50 $39.00 x 5 parents = $195.00

Field trip to Tryon Creek State Park-Sept. 29
3 hours at $6.50 = $19.50 x 5 parents = $97.50

Emily/Hanna's extra hours on the flip book
12 hours each @ $6.50 = $156.00

Flip book Celebration and unveiling Sep.27
15 parents 4.5 hours 4.5 hours x $6.50 x 15 parents =$438.75

Total volunteer labor: $4,906.75 and many more hours that were not included!

Donations from Metro for program and entrance fee waivers=$172.00

$4,906.75 (volunteer labor) + $172.00 (entrance fees to Oxbow) = $5078.75

Donation from Portland Parks and Recreation for the use of one 15 passenger van on each overnight trip to Seaside. Valued at $220.00 for each trip. $220 x 2 (overnights) = $440.00

$5078.75 + $440.00 (vans) = $5518.75

Professional/personnel services- $12,609.00

Materials and Supplies from OSU ext.- $1,500

Total in kind match- $ 19,627.75

OSU EXTENSION SERVICE

MULTNOMAH COUNTY Office

OREGON STATE UNIVERSITY

4-H Youth Development
404 SE 80th Avenue
Portland, 97215-1597

4-H Wildlife Stewards

Tel: (503) 725-2027

Fax: (503) 258-0231

June 28, 2002

To Whom It May Concern:

Liz Draper participated in the 4-H Fish Stewards program in the 2000-2001 school year.

We provided her with the following:

Training: value $50.00

Technical Support (Volunteer and Staff) time: 9 Hours (Current value of volunteer time is over $14.00 per hour. Staff time with benefits is considerably more.)

Loaned equipment (40 gallon tank, chiller, miscellaneous, aquatic testing chemicals, aeration system): value $1,500.00

500 fertilized fish eggs donated through Oregon Department of Fish and Wildlife (Dick Caldwell).

Joan Engeldinger
OSU Faculty
4-H Youth Development
503-725-2048
joan.engeldinger@oregonstate.edu

From: "Elisabeth Neely" <neelye@metro.dst.or.us>
To: <edraper@juno.com>
Date: Sun, 03 Mar 2002 13:25:10 -0800
Subject: Re: hours

Hi Elizabeth!
What a glorious day outside (Sunday)! Here is what I have come up with for you. I have attached a breakdown of in-kind donations that I used for our grant reimbursement for the cost of the flip book fabrication (so definitely take a look at that) and also my final report (minus the pictures). I am not clear which grant you are currently working on or how you figure this in-kind stuff for the two projects (ee and salmonid)--I guess there are a few places it might overlap (e.g. your time)? I assume you have this in mind but let me know if I can help sort this out.
From my end, for the flip book project, the in-kind donations I recorded are actually all staff time, no materials or anything else. Because we were so far over what we needed anyway, I did not think to include the entrance or program fees to the park for your field trips, though I could have. But, I think you can use them even if I did not, don't see why not. SO....
Here is how to calculate the entrance and program fees for your field trips:
1. The entrance fee to the park is $3 per car. Your class came out twice for the flip book project, once in October 2000 for the salmonviewing field trip and once in the September 2001 for the unveiling. (You said 3 trips--did you come another time on your own or with CaW or something?) Estimating that you came out twice and there were about 30 people the first time and about 50 people the second, and you carpooled at about 4 people per car, I am going to say that is probably 20 cars. That would be $60 in entrance fees that Metro waived for your 2 trips combined. If you have different car numbers you can make the adjustment.
2. The program fee for Metro education field trips is usually $2 per child (adults don't pay). So if there were say 28 kids, that would be $56 in program fees, multiplied by 2 trips = $112 in program fees that Metro waived for your two trips.
3. According to these calculations, then, our grand total for all the fees donated to the project is $172.
Is this what you needed?? Let me know any questions you have about this or if there is anything I can clarify or help with!! I will be in the office on Monday all day, and on Tuesday in the late afternoon. After that it's sketchy this week. ALSO let me know if you need your photos and kids' art back this week!
Ta ta,
Lis

From: "Mike Brown" <mbrown@seaside.k12.or.us>
To: "Elizabeth A Draper" <edraper@juno.com>
Date: Tue, 1 May 2001 14:27:48 -0700
Subject: RE: re. April 20

Elizabeth, Thank you for coming over to visit us and bringing your students.
They did a wonderful job and my students enjoyed working with them very much. Thank you also for the $125.00 that you paid the Coastal Studies and
Technology Center for the experience. That helps us continue to buy supplies for other projects like yours. Thanks!

Mike Brown
Director, Coastal Studies and Technology Center
Seaside High School
1901 N. Holladay Dr.
Seaside, OR 97138

-----Original Message-----
From: Elizabeth A Draper [mailto:edraper@juno.com]
Sent: Tuesday, May 01, 2001 2:45 PM
To: mbrown@seaside.k12.or.us
Subject: re. April 20

Mike,
Could I trouble you to send me via e-mail a confirmation of the fact that I paid the Coastal Studies and Technology Center $125.00 on April 20th? I forgot that I need a receipt for getting reimbursement from the grant.
Thank you for all of your hard work!
Take care, Elizabeth

at Oxbow Regional Park

Grant program funds salmon flip-book

Visitors to Metro's Oxbow Regional Park will enjoy great salmon information and artwork packed into an outdoor flip-book, which will be installed this October at the river overlook near picnic area D. The book is the result of a collaboration between Metro naturalist Elisabeth Neely and students from Elizabeth Draper's seventh and eighth grade science class at Sunnyside Family Co-op School.

The salmon flip-book was made possible by a grant from the Metropolitan Greenspaces Program, a partnership between Metro and the U.S. Fish and Wildlife Service. Environmental education grants for up to $10,000 are offered to build environmental education programs around urban natural areas that encourage hands-on learning experiences for citizens of all ages. Conservation and restoration grants for up to $40,000 are also available.

Application materials and more information are available on the Metro web site at www.metro-region.org. For help with an environmental education grant application (due Sept. 25), call Deb Scrivens at (503) 797-1852 or send e-mail to scrivensd@metro.dst.or.us. For help with a conservation and restoration grant application, call Jennifer Thompson at (503) 231-6179 or send e-mail to Jennifer_Thompson@fws.gov.

Salmon Field Trip Leader Training

10 a.m. to 3:30 p.m.
Sunday, Sept. 30

Are you interested in inspiring children to learn about salmon, wildlife and healthy rivers? Join us this fall as we welcome migrating salmon returning to the Sandy River. Working with Oxbow Regional Park naturalists, volunteers will help lead a minimum of two weekday school field trips in October and November. Natural history or teaching experience is helpful but not necessary; training is provided. Call Metro at (503) 797-1850 option 7 for more information.

SALMON FESTIVAL HELP WANTED

Volunteer Classifieds

A large part of the spirit of the Salmon Festival comes from the generosity and stewardship of more than 250 volunteers who contribute their time and energy every year to making it a success. Volunteer shifts are 3.5 hours. Volunteers receive free admission to the festival and a token of appreciation. Call (503) 797-1850 option 5 for more information.

Food tent
Assist in preparing and serving salmon dinners and keeping the dining area clean.

Information booth
Provide general festival information about activities, events, facilities and sale of merchandise. Individuals who like to interact with the public are encouraged to participate.

Children's activity tent
Assist with arts and crafts projects and games for youngsters, and help them get dressed up in animal costumes in the story-telling tent.

Booth sitters
Be a big relief for the exhibitors who come to display their materials at the Salmon Festival. Get a chance to "booth sit" a variety of booths so the owners can take 15-minute breaks.

"Passport" volunteers
Encourage young visitors to take a passport with them to stations throughout the festival and discover answers to the fun and educational questions inside. Then be there at the end to award them a prize for their completed passport.

Event set-up and takedown
For those with some time available during the week and an interest in some light physical work. Assist park staff with exhibitor move-in, seating area set-up and other duties.

School of Fish instructors
The School of Fish, located at the riverbank, is a series of fun, fast-paced activities designed to teach people about watersheds and the life cycle of salmon. Energetic volunteers who enjoy talking with youth and adults are needed. Training, script and props are provided.

Salmon Walk leaders
Lead groups to the salmon viewing areas and discuss life cycle and spawning behavior, history of the runs and causes of decline, and the importance of the riparian zone. Training, props and a script are provided.

Parking management
Assist with parking of vehicles and public safety and security.

Expectations of Adult Assistants

In the Field

Please make sure your group understands the inquiry question in which they should be addressing as they fill out the data sheets in each ecological site.

Please help to keep your group focussed. The more observations they make about each ecological site the better they will understand the comprehension of the watershed.

At Seaside International Hostel

Please help corral students to do their specific duties whether it be making dinner or cleaning up.

Please encourage the students to be responsible about cleaning up after themselves.

Please ***do not*** do their duties for them but rather be a facilitator to make sure the duties are accomplished.

If you want to help please feel free.

They will be getting up early on Friday so the closer to 10:00 they get to bed the better.....so if you could help to make this happen that would be great.

Friday morning after breakfast each person will be responsible for a chore to do at the hostel and to pack up and load their things into a vehicle. We can't leave until everything is all cleaned up.

We are going to leave the hostel promptly at 9:30a.m. for Chapman Point Rocks

Please remind whatever group of students you are staying with that they need to remember to wear their hiking or walking shoes, and to keep their backpack out....they should have a lunch in it with a bottle of water and a snack if they wish.

THANK YOU FOR BEING WILLING TO COME AND HELP OUT!!

Schedule for May 3 and 4
6th, 7th, and 8th graders trip

May 3

9:30 Leave Sunnyside
11:15 Arrive in Seaside
Use restroom/have an early lunch
Split into five groups of five with an adult responsible for each
Sign up for Dinner
Sign up for cleaning up after dinner
Sign up for Breakfast
Sign up for cleaning up after Breakfast including vacuuming the dining room
Sign up for making lunches for Friday
12:15 Meet Neil
1:00 Seaside Heights Elementary-Community Watershed Demo.
Split into 5 groups of 5
Approximately 35 minutes at each ecological site with an additional 5 minutes for a whole group wrap up
Each group will answer their inquiry question as it applies to the data collected.
The following are the ecological sites within the watershed system we are going to be spending time.
Upland forest
Coho stream corridor
Wetlands (fresh water)
Saltwater wetlands
3:45 Orientation at the Mill Ponds (snack)
5:00 Orientation to the hostel and room assignments (if this has not already been accomplished)
5:30 Prepare dinner/free time for those not helping with dinner
6:30 Dinner/clean up
7:45 Campfire or movie
10:00 Lights out

May 4

7:30 Prepare breakfast
8:00 Breakfast- Cereal, juice, bagels, bananas, eggs....
Clean up dorms including hostel duty
9:30 Neil will meet us at the hostel/we leave for Chapman Point Rocks

Students will need their backpacks, be wearing their hiking shoes, have their lunch packed with water bottle, binos and camera if they have either

10:00-12:00 Hike to Chapman Point Rocks
12:30/12:45ish Mill Ponds (study macroinvertebrates/field testing, comparing the freshwater/saltwater ponds)
2:00 Arrive at Jim Bergeron's
3:15 Head home
5:15-5:30 Arrive back at Sunnyside

Elizabeth

Inquiry Questions-Group #1

Upland Forest

1) How do the wildlife interact with and affect the plant, insect and tree species at the site?

Fill out Wildlife Ecology Data Sheet while making observations and filling out the data sheet think about your question.

Stream Corridor

2) What kind of human activities affect water temperature in the watershed?

Think about this question as well:

How do the ecosystems components like streamflow, water source, plant cover, and streambed materials affect the water temperature?

Think about these questions as you fill out the ***temperature*** part of the Water Quality Data Sheet.

Wetlands (fresh)

3) What types of organisms use wetland ecosystems?

Please think about this question as you fill out the Wetland Data Sheet.

Saltwater Wetlands

4) How are macroinvertebrates and plankton important to the wetland ecosystem?

Please think about this question as you fill out the Wetland Data Sheet.

Inquiry Questions- Group#2

Upland Forest

1) How might the area's disturbance history have affected the trees you examined?

Fill out Forest Ecology Data Sheet while making observations and filling out the data sheet think about your question.

Stream Corridor

2) How do seasonal, storm related, and other changes in streamflow impact aquatic organisms?

Fill out the Streamflow Data Sheet while making observations and filling out the data sheet think about you question.

Wetland (fresh)

3)What is a wetland and why is it important?

Please think about this question as you fill out the Wetland Data Sheet.

Saltwater Wetlands

4) What did the pollution sensitivity of the macroinvertebrates tell you about your system?

Please think about this question as you fill out the Wetland Data Sheet.

Inquiry Questions-Group #4

Upland Forest

1) How do these plants fit into the overall food web of the ecosystem?

Fill out Plant Data Sheet while making observations and filling out the data sheet think about your question.

Stream Corridor

2) What kinds of substrate are found in slower depositing sections of your stream? What kinds are found in fast eroding sections?

Fill out the Streamflow Data Sheet while making observations and filling out the data sheet think about you question.

Wetland (fresh)

3) How are macroinvertebrates and plankton important to the wetland ecosystem?
Please think about this question as you fill out the Wetland Data Sheet.

Saltwater Wetlands

4) How do the different body parts of macroinvertebrates-their shape (skinny and flat, or round and large), presence or absence of wings, mouthparts, special appendages, outside covering—relate to what they eat, where they were found, and how they live?
Please think about this question as you fill out the Wetland Data Sheet.

Inquiry Questions-Group #5

Upland Forest

1) How are the plants at the site adapted specifically to the biotic and abiotic conditions?

Fill out Plant Data Sheet while making observations and filling out the data sheet think about your question.

Stream Corridor

2) How do evergreen or deciduous trees in the riparian area affect stream habitat?

Fill out the Streamflow Data Sheet while making observations and filling out the data sheet think about you question.

Wetland (fresh)

3) What is a wetland and why are they important?

Please think about this question as you fill out the Wetland Data Sheet.

Saltwater Wetlands

4) How are the different macroinvertebrates you sampled connected to other organisms in the aquatic ecosystem?

Please think about this question as you fill out the Wetland Data Sheet.

Interpreting the Journey Scavenger Hunt
Good Luck!

Read over the Scavenger Hunt to see what sort of things you should be looking for on your trip to Astoria. Check off the items as you and your friends find them. Work together because otherwise you might miss some important items.

1) Find a sign for a Toll Ferry…..ask your driver what a toll ferry is if you do not know.
2) Find as many flying T.V.'s as possible…hmmm, what do ***you*** think a flying T.V. is?
3) Find a creek named after an invertebrate. What is the name of the creek?

4) Can you find a creek that is the opposite of "found"?

5) How many different county lines did we cross on our trip to Seaside? What are the county names?
6) Find a restaurant named after Barb. What town is it in?

7) Find the original source and producer of wool.
8) Find evidence of at least two clear cuts….how can you tell the trees have been clear cut? Explain.

9) Find a state park with a man's name. What is the name?

10)Find the signs for an Eagle Sanctuary. What do you think a "sanctuary" is?

11)Find a road named after a tendon. What is it?
12) Locate the site of a nuclear power plant. What is the name of it? Is it still being used for power? Find out from your driver.
13) Find a creek named after our state animal. What is the name?

14) Find the town and name of a road that is named after a mountain…what is it?
15)How many different types of animals did your group find? Did you find a llama? What else? Be prepared to share in Seaside.
Have FUN! See you at the hatchery!

Zoo Sign Survey

Your name:_____

Go to at least five signs in your animal areas on your tour route and answer the questions on the next pages, answer all the questions for each sign you choose:

While in your animal area:
Look at a flip book sign*, does it help you find the animal? If it does, describe how:

If you still have time after you look at five signs, look for and describe a sign which tells you about how you can help wildlife:

After you've been through your animal area

Put a ☺ by the sign you like the best

Put a ☹ by the sign that was the worst

Tour routes:

A	B	C	D	E
mt goat *flip book at pika leopard tiger lorikeets insect zoo	steller cove *flip book in lab polar bear sun bear penguin	cascades *flip book in marsh aviary elk tundra	primates elephant museum elephants *flip book in Vollum Aviary	rainforest *flip book in bats, kongo ranger, swamp, weaver birds savanna tree kangaroo

Everyone meet back at the old "Elephant Trunk" gift shop (it's vacant) <u>at 11:10</u>.

Animal area:
1. What do you think visitors should learn about these animals?
2. Is there something that would make people stop and read the sign, what is it?
3. What are you suppose to learn from this sign?
4. What do you like about this sign?
5. Is there the right amount of information, too much, not enough?
6. What do you not like, why?
7. Did this sign tell you what you wanted to know about the animal? If not, what did you want to know?
8. Is the sign readable, do you like the font, why or why not?
9. Does this sign make you care about the animal? If it does, how?
10. Are the illustrations helpful, why or why not?
11. What would make this sign better?

SCIENCE PICTURES

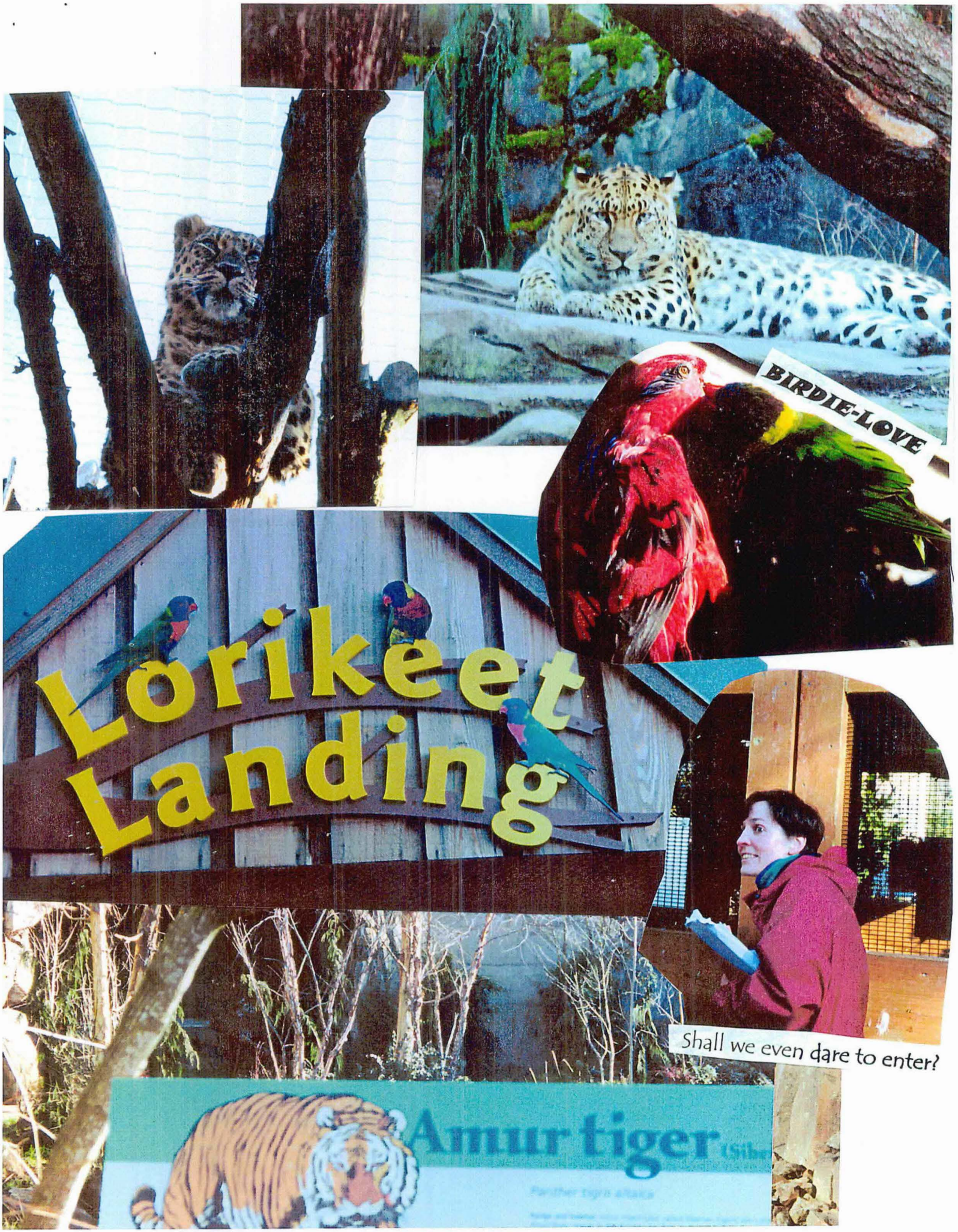
Oxbow - Scoping out + observing our surroundings and the Sandy Water Shed

Zoo - critiquing interpertive signs, taking notes on how they're presented

Emily Lemons
8th grade


3 30 '98

Is it still alive??

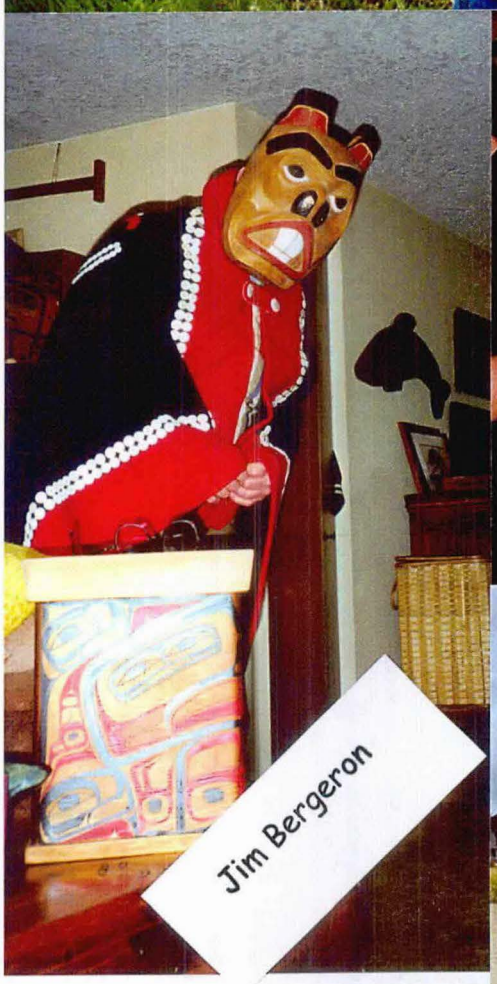

BIRDIE-LOVE
Lorikeet Landing
Shall we even dare to enter?
Amur tiger


ZOO
EXIT

Megan holding her Steelhead art, learning about lateral lines and chemoreception

Ian is concentrating on gluing the lateral line onto his steelhead

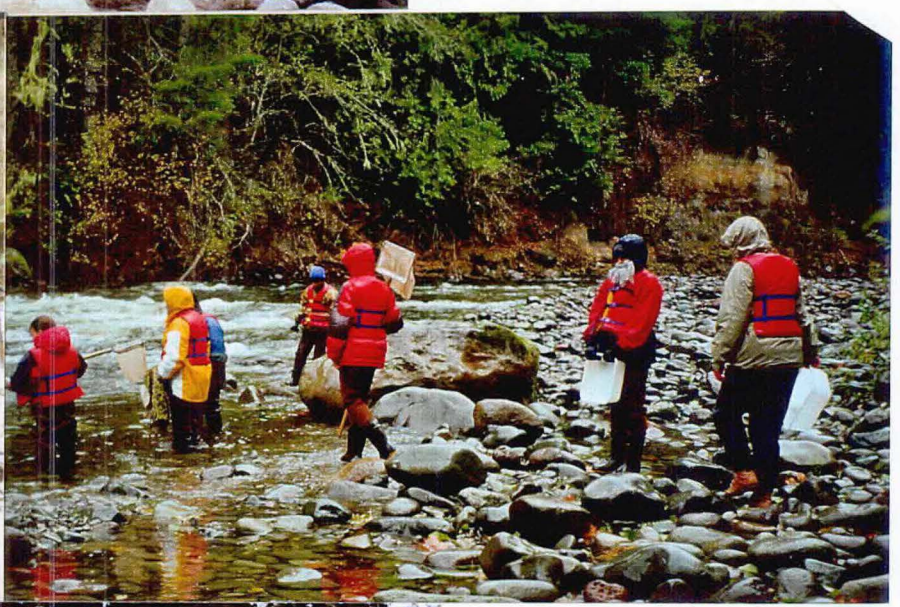
Third and fourth graders on Seaside overnight trip



Jim Bergeron

SPRINGWATER CORRIDOR PLANTINGS

6-8 graders-Sampling water in the Sandy River, Salmon River, Pond syste
at Errol Heights and the pond system at Mill Ponds, Seaside

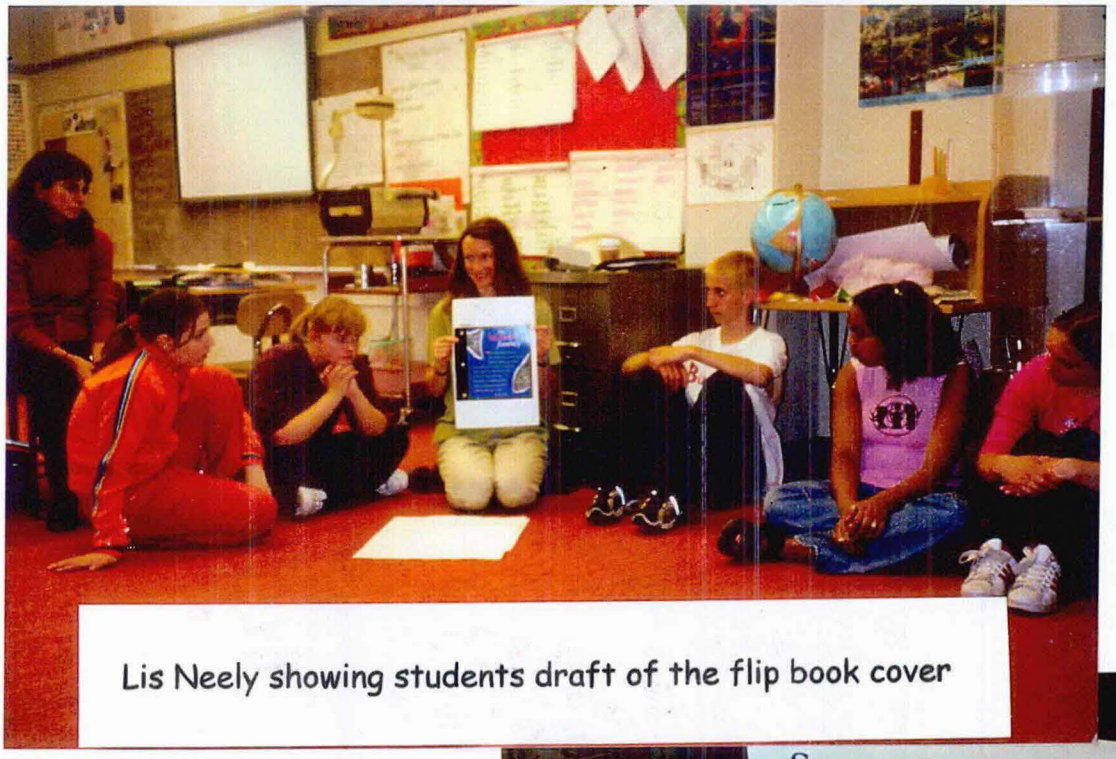


Sixth -Eighth grade Seaside overnight trip

Neil Maine working with
my students at Chapman Pt.
and the Mill Ponds

Rex Ettlin describing interpretive signage

Lis, Hanna and Emily at Oxbow during unveiling ceremony



Lis Neely showing students draft of the flip book cover

Pages from the flip book