

Information and Education Program: Columbia River Fisheries Program Office

FY 2011 Annual Report

Donna Allard and Marci Koski

*U.S. Fish and Wildlife Service
Columbia River Fisheries Program Office
1211 SE Cardinal Court, Suite 100
Vancouver, Washington, 98683*

April 2012

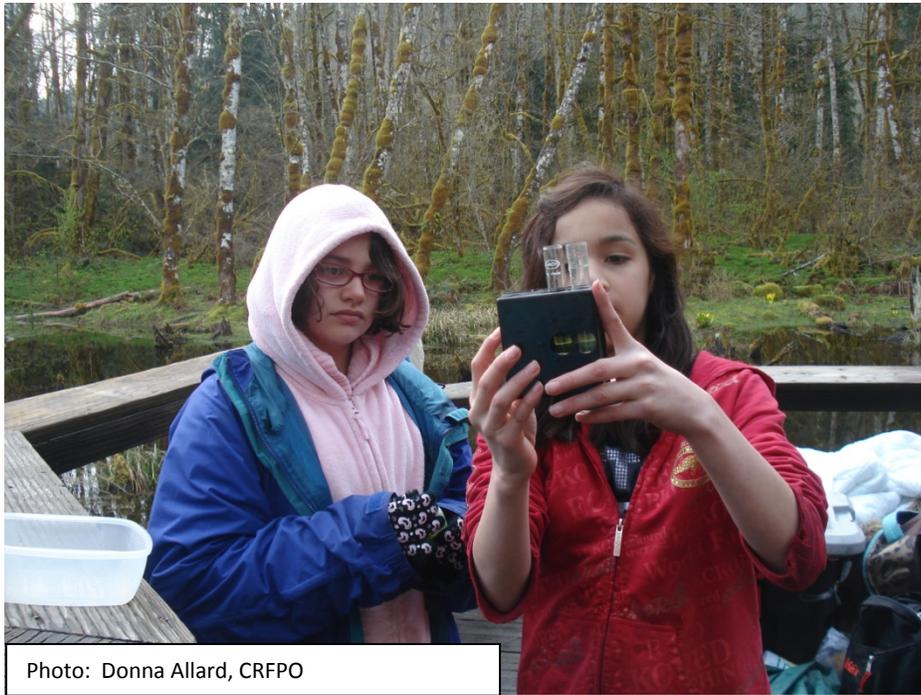


Photo: Donna Allard, CRFPO

Introduction

The goal of the Columbia River Fisheries Program Office (CRFPO) Information and Education Program (I&E) is to foster support for conservation activities through education and promotion of public stewardship for fish and wildlife resources. Toward that end, CRFPO works with other US Fish and Wildlife Service (Service) offices, the public, local agencies, and community groups throughout the year. The I&E program accomplishes this goal through the following objectives: 1) Developing and distributing education and outreach materials related to fisheries and other aquatic conservation issues, 2) Providing aquatic education to students and teachers and participating in outreach events, 3) Maintaining a web presence, and 4) Promoting CRFPO activities and fisheries related research.

This annual report describes I&E program activities and products for the 2011 fiscal year. Many of these activities directly relate to a 2008 initiative launched by the Service called “Connecting People with Nature”. This initiative incorporates natural resource conservation, environmental quality, and human health by encouraging people to go outside and enjoy nature.

Approach

This section provides information on the general activities performed by the I&E program each year.

The I&E Program is staffed by Fish Biologist, Donna Allard (1.0 FTE) and Marci Koski (approximately 0.1 FTE). In addition to dedicated I&E staff, all CRFPO staff are directed to spend 4 to 8 hours of outreach time with kindergarten through college-age students during the year. All CRFPO staff are also requested to contribute to the CRFPO blog once each year. In FY11 the CRFPO I&E Program focused on four main activities:



Donna Allard, I&E Staff

Photo: Cheri Anderson, USFWS

1. Education/Outreach Materials Development

Education and outreach materials are developed through the I&E Program. Materials target students, educators, and the general public. Student materials include educational activities for the kid’s activity page of the CRFPO website, and various booklets highlighting endangered, threatened, and aquatic species.

Handouts such as bookmarks, informational booklets, and similar items are available to teachers through the I&E Program. The I&E Program also develops and maintains a set of educational trunks and other materials available for check out to teachers and other educators. These include:

- Lewis and Clark – a trunk of activities and materials to introduce students to some of the central themes and contributions of the Lewis and Clark expedition
- Macroinvertebrates – a trunk designed to introduce students to macroinvertebrates as indicators of stream health
- Macroinvertebrate Costumes – A few of the more popular macroinvertebrates in larger than life form for use in educational skits



Mayfly Nymph, courtesy Islandwood.org



Mayfly Nymph Costume

Photo: Donna Allard, CRFPO

- Tracks Curricula – an activity introducing students to the basics of track identification and interpretation
- Fish of the Columbia River – a trunk containing information and activities which allow students to investigate and learn more about some of the lesser known species in the Columbia River: cutthroat trout, Pacific lamprey, freshwater mussels, and aquatic nuisance species.
- Fin Bin – a trunk of materials investigating salmon
- Bats – a trunk of materials that teaches students about bat adaptations, habitats, and importance to the ecosystem through a variety of activities incorporating math, science, and conservation
- Composting / Worm Bin – materials help students learn and understand the process of composting
- Of People and Fish – an educational trunk designed to allow students to explore the scientific and cultural history of events leading to the “salmon crisis”
- Cargo for Conservation – teaches about the illegal practice of wildlife smuggling

- Watershed Model – a watershed model which enables students to visually see the effects of siltation and storm runoff due to agricultural, farming, and urban development

2. Education Outreach and Activities

Partnerships have been formed both within the Service and with external agencies and organizations to carry out natural resource education programs. These external agencies and organizations include:

- City of Vancouver Watershed Stewards
- Clark County Department of Environmental Services
- Clark County Public Utilities
- Clark County Watershed Monitoring Program
- Columbia Springs Environmental Education Center
- Vancouver Watersheds Council
- Vancouver Water Resources Education Center
- Student Watershed Restoration Program

The CRFPO I&E Program provides conservation education assistance by working with students and teachers both in the classroom and in the field, providing educational opportunities to teachers, and attending student outreach events such as teacher workshops or student forums. Requests from educators, agencies and organizations, and the general public are handled by the I&E Program throughout the year. These can include questions or requests for materials such as coloring books or bookmarks.

Classroom Visits and Field Trips

Typically each year, staff visits one to five classrooms. Usually these visits entail a fish dissection or similar demonstrations. Other classroom visits include speaking at green career fairs, or teaching students about lamprey, salmon, climate change, or aquatic insects.

Field trips with students consist of determining the health of a watershed either through water



Students dissection fish.

quality tests, aquatic insect collection and identification, in outdoor programs sponsored by the non-profit organization Wolfree, or by individual school requests. They are a non-profit organization whose mission is to serve people and their communities through science education, ecosystem restoration and ecological research. Wolfree sponsors two programs: Cascade Stream Watch (CSW) and Project-Based Science (PBS). CSW is a program which brings students out into the field for a day to conduct water quality tests, collect aquatic insects, learn about forestry, and explore the great outdoors. I&E staff joins Wolfree staff on location for these programs and works individually with small groups of students, guiding them in their exploration and learning. The PBS program brings students into the field to do similar activities for three to four days. Through this program, I&E staff may help prepare students for their field studies in the classroom and then joins them at the field site and guides them in their learning. These students also have a special interest as well; e.g. studying flying squirrels, looking for freshwater mussels, or studying an urban natural area. They present their findings at a student summit at Timberline lodge.

Education for Teachers

In addition to providing educational material to teachers, the I&E staff gives presentations at teacher workshops on aquatic or conservation topics such as invasive species and fisheries. These workshops are sponsored through Clark County Department of Environmental Services and occur four to six times throughout the school year.



Student Outreach Events

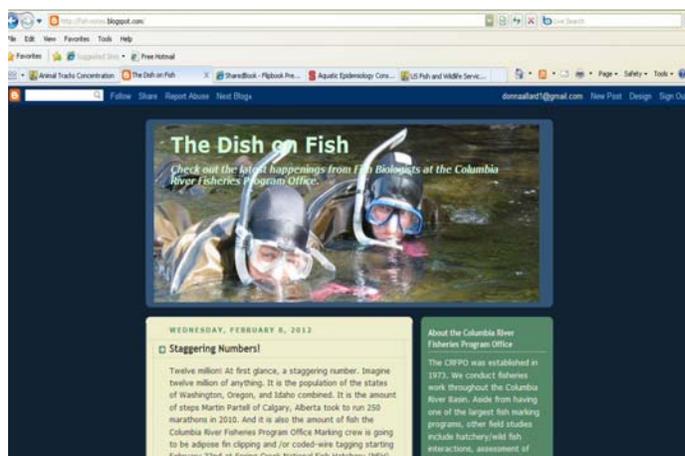
Each year, several partners sponsor the Columbia River Watershed Festival, a three day event held for 4th grade students in Clark County. The sponsors include Clark Public Utilities, Columbia Springs, City of Vancouver, Clark County Department of Environmental Services, and the Service. The students rotate through 4 activities throughout the day. I&E staff participates in this event both as a planner and presenter. As a presenter, staff presents on topics such as tree identification, the salmon life cycle, and animal track identification and interpretation. All these presentations include a hands-on or physical activity demonstrating some aspect of the topic. For example, following the short presentation on the salmon life cycle, the students use different colors and shapes of beads to make their own salmon life cycle bracelet.

I&E staff also participate in a variety of student forums. Watershed Congress is the culmination of the watershed monitoring network in Clark County. This event is sponsored by the city of Vancouver through the Water resources center and Clark County. Student summits are another forum in which students who have been studying a watershed by conducting tests, collecting insects, or doing restoration are able to present their findings in front of their peers. One such summit happens each year at Timberline and is sponsored through WolfTree (described above). Another summit happens at the University of Portland and allows students who have been involved in Student Watershed Restoration Project (SWRP) to share their data with other students. SWRP is a self support program of PSU's Environmental Science and Management Department which uses the cooperation of teachers, students, businesses, government agencies, and community groups to couple watershed education with the collection of high quality data. At these student events, I&E staff facilitates student sessions with introductions, time keeping, and encouraging questions from the audience and other students. At other events, staff may sit on a panel with other community members or experts and ask students questions about the research that was presented. They also provide feedback to the students such as presentation quality.

General Outreach Events

The I&E Program participates in two annual outreach events: the Clark County Home and Garden Show and the Recycled Arts Festival. These events allow CRFPO biologists to interact one on one with the general public about specific fisheries issues or general conservation issues. Various displays highlighting different projects or programs are set up at these events. The displays change from year to year but have in the past highlighted aquatic nuisance species, connecting children with nature, Pacific lamprey information and conservation, and hatchery highlights.

3. CRFPO Web Presence



Columbia River Fisheries Program Office "Dish on Fish" Blog

Three websites and one blog are maintained through the I&E Program. The websites include the Columbia River Fisheries Program Office site, the Pacific salmon webcam site, the Pacific Northwest Native Freshwater Mussel Workgroup site, and The Dish on Fish (the CRFPO blog). The CRFPO web site includes general information about

current programs and activities, a list of publications, a staff directory, a schedule of project presentations, and an education page listing all materials and services available to teachers as well as a page filled with kid's activities. The Dish on Fish blog is meant to complement the CRFPO website with up to date notes about current activities presented by employees of the CRFPO in an informal easy to read format. The Pacific salmon webcam site provides a live snapshot every 15 seconds of adult salmon returning to the Little White Salmon National Fish Hatchery as well as a few video clips of salmon. The webcam is located in the Little White Salmon River from April through October and then moved into a raceway where it records juvenile salmon. All of these sites are directly associated with the Service. The Mussel Workgroup is an independent organization. However, because freshwater mussels are one of the Service's trust species, their site is also maintained by the CRFPO I&E program. Although public, it is targeted towards those people with an interest specifically in freshwater mussels. These websites are maintained and updated when necessary. The blog is updated with new entries approximately once every two weeks.

4. Outreach and Promotion of Conservation through CRFPO Activities

General promotion of conservation through CRFPO activities and functions is provided to the public through emails, flyers, or other written material. Promotional materials such as annual hatchery fact sheets, posters, brochures, and websites are developed to highlight individual projects or programs.

In FY11, CRFPO opened its doors to a group of high school students to provide them with information on careers in the fisheries field. The students learned hands-on with biologists how to do everyday fisheries tasks such as radio tracking and aging fish. This will be an annual event expanding to more than one group of students for multiple days.

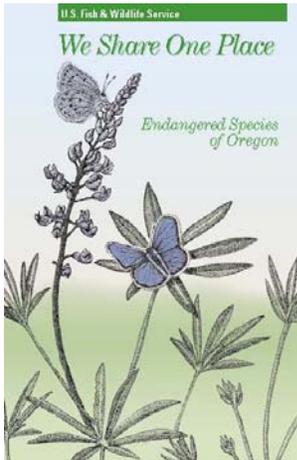


Students looking at coded-wire tags.

Accomplishments

This section outlines the details of the general activities for FY11.

1. Education/Outreach Materials Development



The book, "We Share One Place: Endangered Species of Oregon" was finalized and printed. This project was initiated by the Oregon Fish and Wildlife Office (OFWO) in 2003 but was never completed. After receiving numerous requests for endangered species materials from local teachers, I&E staff found that no one comprehensive handout or book existed that was up to date. In 2010, CRFPO I&E staff and OFWO staff took the draft book, updated the content and finished the project. The book is targeted towards 4th – 6th grade students. It contains information on every species which is listed as endangered or threatened under the Endangered Species Act in Oregon. The life history requirements of the species, threats facing the species, and dates of listing can be found in the book. It also contains success stories of species which have been delisted. The books have been distributed to nine classrooms in Oregon.

A draft of the first booklet in a series of books highlighting various types of aquatic species was finished in FY2011. These books will serve as informational material for students and adults, and will include information about life history and interesting facts, as well as the role each animal plays in the aquatic environment. One book will be completed and released each year. The first book highlights sturgeon. In future years we plan to highlight macroinvertebrates, coastal cutthroat trout, and freshwater mussels.

Printed materials were provided to other agencies and Tribes for educational use at outreach events. The materials most often requested focused on Pacific lamprey and included bookmarks, fact sheets, activities for children such as games and the Pacific Lamprey Experience book, as well as graphics for use in displays. The graphics were taken from the Pacific Lamprey Experience book. Requests for the Endangered Species of Oregon and the Pacific Northwest Freshwater Mussel Field guide were also popular. I&E staff responded to approximately 50 such requests in FY2011.

Education trunks were checked out by teachers and other educators throughout the year (Table 1). The trunks are listed on the CRFPO education webpage and have been



Contents of Cargo for Conservation Trunk

Photo: Danna Allard AllardAllardAllardAllardAllard

advertised in Greenlines, a newsletter from the Columbia Springs, an environmental education organization. The newsletter is distributed to every teacher in Clark County. As in past years, the Lewis and Clark trunk remains most popular with the teachers.

Table 1. Education Trunk Checkouts during FY 2011

Trunk	School checkout/# Classes
Lewis and Clark	3/10
Fin Bin	3/6
Macroinvertebrates	3/5
The Bat Trunk	1/1
Of People and Fish	1/1
The Columbia River Trunk	1/1
Composting/Worm Bin	1/1

2. Education Outreach and Activities

Classroom Visits and Field Trips



Making Fish Prints at Cape Horn Skye

Photo: Donna Allard, CRFPO

In FY 2011, I&E staff provided aquatic education to students in a variety of ways including classroom visits and hands-on field studies. A classroom visit to Firwood Elementary School in Oregon prepared the students for a future field day at Wildwood Recreation Area. During this visit, I&E staff worked with a small group of students as they decided what information they planned to collect in the field and how to design their data sheet. The students were studying not only beaver, but macroinvertebrates and water chemistry.

I&E staff also led a program for 55, 1st graders at Cape Horn Skye School in Washington. The program consisted of a “Creatures of the Night” presentation, followed by owl pellet dissection.

The students were then shown a salmon and learned a bit about their life cycle. The program ended with students making their own gyotaku print.



Photo: Donna Allard, CRFPO

Students studying macroinvertebrates.

I&E staff mentored students in aquatic field studies a total of 11 times during the year. Most of these days were spent at Wildwood helping Wolfree provide outdoor education at various locations. During these field days, staff discussed how biologists can use macroinvertebrates to assess the health of a stream. After students collected some insects, CRFPO staff assisted in the identification of the macroinvertebrates and an overall assessment of the stream’s water quality based upon the results. Table 5 summarizes these events.

Table 5. I&E Staff Education and Outreach

	Number of Events	Number of Students	Hours
Classroom Visits	4	130	13.5
Field Trips/Studies	11	280	193

During FY11, ten CRFPO staff members spent a total of 52.5 hours in the classroom (see the Cape Horn Skye School lesson described above) or on a field trip and reached 181 students and 12 adults. Field studies included mentoring with Wolfree and guiding students in their macroinvertebrate or water chemistry studies, teaching students about fish and wildlife at Ridgefield National Wildlife Refuge, instructing at an outdoor school day, and an introductory GPS training session for students. Table 6 summarizes these events.

Table 6. CRFPO Staff (outside of the I&E Program) I & E Activities

	Number of Events	Number of Students	Hours
Classroom Visits	1	55	22.5
Cape Horn Skye School	1	55	22.5
Field Trips/Studies	5	127	30
Wolfree	2	50	16
Ridgefield NWR	1	50	4
Bird Track Campground	1	24	8
Water Resources Education Center	1	3	2

Education for Teachers

I&E staff presented at one teacher's workshop called "Invasive Species", sponsored by Columbia Springs Environmental Education Center and funded through Clark County Department of Environmental Services. The CRFPO presentation focused on aquatic nuisance species. Thirty teachers attended this workshop. The Oregon Science Teacher's Convention, held in Colton, Oregon, this year provided a great opportunity for the Service to reach about 300 teachers from throughout the state. In addition to providing posters, bookmarks, bird field guides, and FWS brochures to the teachers, CRFPO I&E staff was available to discuss the new "Endangered Species of Oregon" book soon to be printed. Teachers could peruse a copy of the book and sign up for a classroom set if they were interested in using it in their classrooms. Eleven teachers signed up asking for more information about the book.



Photo: Donna Allard, CRFPO

Service Booth at the Oregon Science Teacher's Convention

Student Outreach Events



Students at the Watershed Festival

Photo: Donna Allard, CRFPO

The I&E Program participated in two large educational events during FY2011. First, the Columbia River Watershed Festival was held at Lewisville Park this year, with about 1,200 students and almost 200 teachers and parents in attendance. CRFPO I&E staff participated in planning this event which entailed recruiting volunteers and presenters as well as assisting in park layout for the event. During the event, CRFPO staff were available as class guides. Second, one day was spent in Underwater, Washington at a local event called the Water

Jam. About 400 students were led through the salmon migration mini golf course during this 2 day event. Staff and volunteers from the Columbia River Gorge hatcheries and the CRFPO I&E program manned the golf course and provided instruction and information at each hole.

The I&E Program also facilitated a session at the 13th Annual Watershed Congress this year. At the congress, I&E staff was the lead facilitator for 5 groups of students who were presenting the culmination of the year's studies. As lead facilitator, I&E staff opened up the session, led the introductions, kept time, and encouraged questions and discussion for each presentation. Over 200 students from 3rd to 12th grade representing 24 schools, 55 teachers, and 3,000 students did presentations about sites they monitored throughout the year in Clark County.

I&E staff participated at the 19th Annual SWRP Student Summit as well. There, staff sat on a panel with five other people with varying degrees of expertise about the topic material. Each group of students presented their research, which ranged from determining the health of a stream by conducting water chemistry tests to monitoring changes in the macroinvertebrate population after streambank stabilization. After the presentation, the panel as well as other students or teachers in the room asked questions of the presenters. Members of the panel were also asked to provide written feedback to the student presenters about their presentation. About 350 people attended this event, of which 300 were students and teachers. These students presented the results of their research to their peers as well and displayed posters of the projects they were involved with through the year.

General Outreach Events

Also in FY2011, I&E staff helped plan and participated at the Recycled Arts Festival, a public event sponsored by Clark County Environmental Services. This event draws in almost 10,000 people each year. In addition to choosing the various artists and entertainment before hand, I&E staff assisted in the set-up of the park during the festival and responded to requests from the public or the artists during the show. Staff did not have a booth at the festival this year due to other obligations.

Additionally, CRFPO staff helped at our booth at the Clark County Home and Garden Show this year as well. The salmon migration mini golf course was set up at the fairgrounds and children learned all about the hazards salmon encounter throughout their migration. Other materials such as hatchery brochures, various bookmarks, and other Fish and Wildlife Service information were handed out to the people visiting our booth. A total of 48 hours of CRFPO staff time was devoted to this event through which we reached about 300 adults and children. The fair typically draws in about 5000 people total.

Other Activities (non-I&E staff)

During the year, three staff members and one volunteer hosted a workshop at CRFPO for 25 fisheries professionals with the Fish Passage Center, Smolt Monitoring Program. The purpose of the workshop was to aid these adults in larval lamprey identification.

Most high schools now require seniors to finish a senior project in order to graduate. The project is twofold. The seniors must write a paper on a topic of their choice as well as perform so many hours (it varies from 15 to 30 hours depending on the school) in a position related to that topic. For instance, a student who writes a paper on salmon conservation, may volunteer at a hatchery for service hours. The student must then make a presentation to three to five community members about their service hours. The community members ask questions of the student and then grade the student on this portion of the project. Two staff members participated in these high school senior project evaluations and grading. The schools included Hockinson and Ridgefield High Schools.

Four members of the CRFPO marking program participated in one 'open house' event at Spring Creek NFH and the Salmon Fest at Leavenworth NFH this year. They set up and demonstrated how the mass marking trailer works as well as other means of marking our hatchery fish. A total of 61 hours were spent on this education and outreach opportunity to educate 500 students and 600 adults about the CRFPO marking program.

One staff member spent three hours at the Service booth at the Festival of Nations this year. The event had about 50 attendees.

All of the education and outreach activities can be found in Appendix A.

3. CRFPO Web Presence

The three websites managed by the I&E Program are: the Columbia River Fisheries Program Office website, the Pacific Region salmon webcam, and the Pacific Northwest Native Freshwater Mussel Workgroup site. The CRFPO website was updated to reflect changes in staff; highlight new projects on the main page; and adding new publications to the Publications page. Approximately 18 new publications were posted in FY 2011. The salmon webcam website was updated to reflect the different species of fish being viewed as time passed and the camera was moved from the river to the raceway. The Pacific Northwest Native Freshwater Mussel Workgroup's webpage was redesigned during the year through the I&E Program.

All Service websites must be maintained in accordance with Service and Department of Interior policies. Twenty one design and content criteria must be met for each website, and certified annually every March. Among the most important criteria is the requirement of each Project Leader to certify the content of his/her website. The Columbia River FPO and Pacific salmon webcam websites met the Pacific Region Website Content Accuracy and Accountability standards that were required Region 1 by March 30, 2011. CRFPO website hits are outlined in Table 2 for October 2010 to February 2011. Table 3 summarizes website hits for the Pacific salmon webcam website (reports that summarize visits to the CRFPO website were discontinued after February 2011 due to a hardware change on the Denver server). The number of hits describes how many times a web page is opened. It is usually much higher than the total visitors count because it also includes each piece of information on that single page such as images and other non-text displays. The number of total visitors includes multiple visits from all visitors.

During these months, five of the most popular pages on the CRFPO website were the kid’s activities such as the fish name word search and a concentration game with animal tracks. The kid’s activities contain simple games but the player has the opportunity to learn more about the subject matter or take a quiz to test their knowledge of what they learned. Other popular pages include the homepage, publications page, and staff page.

Table 2. FY11 CRFPO Website Statistics

Month	Total Hits	Total Visitors	Avg. Visitor/Day	Avg. Page Views/Day
Oct-10	45,093	3,212	107	129
Nov-10	42,140	3,705	123	131
Dec-10	35,222	2,285	73	77
Jan-11	42,938	2,652	85	101
Feb-11	38,383	2,545	94	100

Table 3. FY11 Pacific Salmon Webcam Website Statistics

Month	Total Hits	Total Visitors	Avg. Visitor/Day	Avg. Page Views/Day
Oct-10	1,196	314	10	14
Nov-10	817	230	7	12
Dec-10	878	355	11	5
Jan-11	771	291	9	5
Feb-11	2,068	386	14	12

In FY 2011, a total of 32 blog entries were posted on The Dish on Fish blog by various CRFPO staff (Table 4). Thirteen of those blogs were posted by I&E staff. The blog had 14 followers and had an average of 417 visitors per month last year (Table 5). The number of returning and first time visitors held steady throughout the year (Figure 1).

Table 4. Blog Entries by Team

Team	Number of Blogs
Administration	4
Conservation Assessment Team	7
Executive	1
Hatchery Team	3
Hatchery and Harvest Biometrics	1
Marking Team	1
Water Management Team	2
I&E Staff	13

Table 5. The Dish on Fish Blog Statistics

Month	Page Loads	Unique Visits	First Time Visits	Returning Visits
Oct-10	480	365	248	117
Nov-10	473	337	261	76
Dec-10	584	431	242	189
Jan-11	645	482	349	133
Feb-11	636	491	363	128
Mar-11	571	433	347	86
Apr-11	452	328	260	68
May-11	532	394	294	100
Jun-11	533	441	288	153
Jul-11	487	376	252	124
Aug-11	628	455	323	132
Sep-11	626	472	321	151

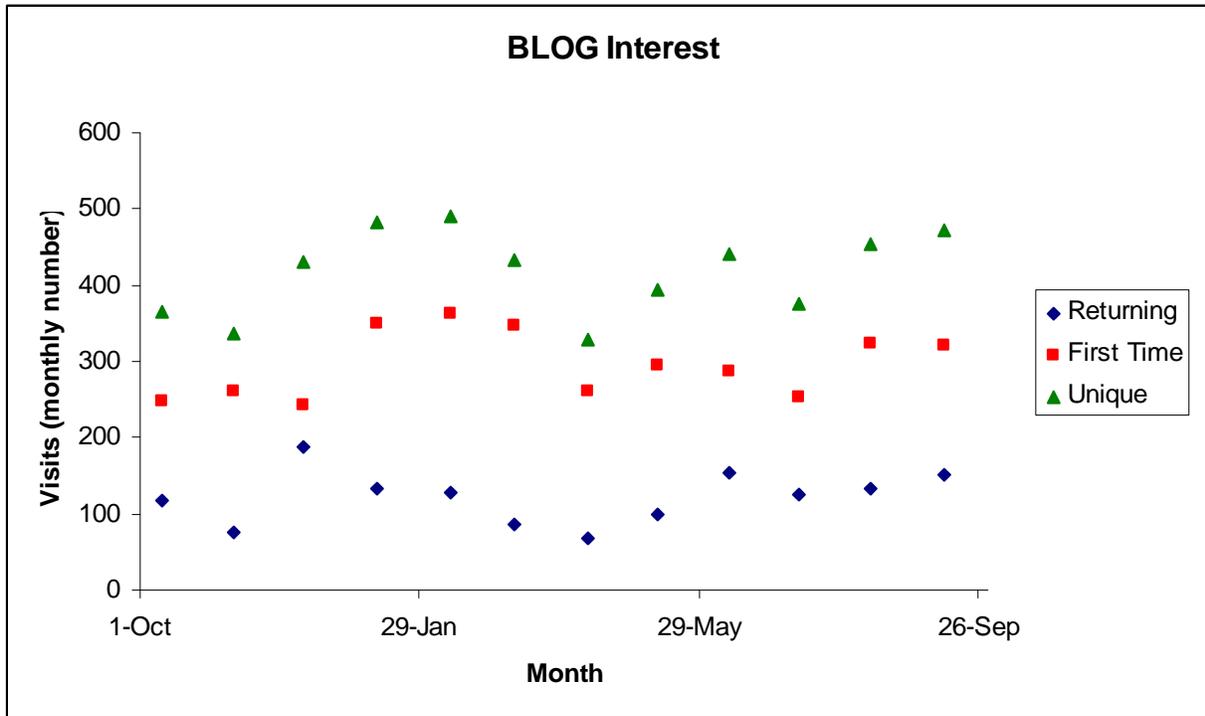


Figure 1. Interest in The Dish On Fish.

4. Outreach and Promotion of Conservation through CRFPO Activities

General promotion of CRFPO activities were handled through email. Each time a new publication is posted on the CRFPO website or a new blog is written on The Dish on Fish, an email is sent out to CRFPO employees as well as an email list. The list includes Regional Office staff, Information and Education staff from other FWS offices, and other educators who are interested in a particular topic. A total of 50 emails were sent out to a list of about 30 people.

Numerous Fact Sheets were developed. Hatchery Fact Sheets for Carson, Little White Salmon, Willard, Spring Creek, and Eagle Creek NFHs were updated this year. Information presented in these sheets include fish species reared at the hatchery and annual production and return goals. Graphs illustrating the age composition of the fish as well as numbers of harvested fish and areas where these fisheries occur are updated yearly. Any special studies at the hatcheries are highlighted as well. The sheets were emailed to a list of about 80 people including elected officials, State agencies, Tribes, educators, and other FWS offices. In FY11, two CRFPO project fact sheets were finished in draft form. One fact sheet highlighted the activities on Deer Island using the Strategic Habitat Conservation approach. Our work in Tryon Creek was the topic of the second fact sheet. It was updated from a previous year's version and includes new

information about our ongoing activities and findings in Tryon Creek as a result of restoration activities.

This year, the first CRFPO open house was facilitated through the I&E Program. Forty high school students from two schools visited our facilities and participated in four activities: radio tracking, fish scale/coded-wire tag reading, fish identification, and a population estimate simulation. By holding an open house event for students, the CRFPO demonstrated some of our activities and showed students options for a career in the fisheries field. Out of 47 full time staff, 30 CRFPO staff spent a total of about 112



Photo: Joe Skalicky, CRFPO.

Students learning how to radio track.

hours in preparation and carrying out this event. The students and teacher all had positive feedback and expressed interest in joining us again. At least one of the students came back during the year to work with one of our biometricians and learned some modeling techniques.

Findings

1. Education/Outreach Materials Development

- We Share One Place: Endangered Species of Oregon – Finalized and Printed
- Aquatic Species Educational Booklet Series – Sturgeon (draft)
- Educational Trunk Checkout – 7 trunks a total of 13 times

2. Education Outreach/Activities (Appendix A)

- Classroom Visits – 4 (130 student contacts)
- Field Trips – 11 (280 student contacts)
- CRFPO Staff Outreach Time – 30 Staff Participated a total of 301 Hours
- I&E Staff Outreach Time – 223 hours
- Teacher Workshops – 1 (30 contacts)
- Student Forums – 2 (500 student contacts)
- Educational Events – 2 (1600 student contacts)

3. CRFPO Web Presence

- Pacific Northwest Native Freshwater Mussel Workgroup – Updated and Redesigned
- CRFPO Website – Maintained and Updated

- Salmon Webcam Website – Maintained and Updated
- Blog – Maintained timely posts

4. Outreach and Promotion of CRFPO Fisheries Research and Activities

- Hatchery Fact Sheets – 5
- CRFPO Open House – 40 students, 4 adults
- Clark County Home and Garden Show – 300 contacts
- CRFPO Program Highlight Fact Sheets – 2 (in draft)

Summary

The information and education program was expanded considerably this year due to CRFPO staff participation. A complete listing of staff participation at all events is included in Appendix A. This participation is integral to the success of the program. Having contact directly with students whether it be in the field, classroom, student forums, or open houses seems to be the most effective part of the program and falls directly in line with the “Connecting People with Nature” initiative. CRFPO should continue to improve this portion of the program in future years.

Appendix A

Table A1. Description of type of outreach hours performed by team in FY 2011.

Team	Time (hours)	Audience Reached (Students, Adults)	Activity Description
Executive			
Tim Roth	4	30 students, 4 adults	Facilitator/Advisor
	12	6 students, 8 adults	Senior Project Judging/Paper Reviews/Q & A/Discussion
Christina Luzier	2	25 adults	Lamprey Identification Training
Administration			
Larry Fishler	10	30 students, 4 adults	Open House committee member, tour guide.
Andrea Houts	4.5	55 1st graders	Creatures of the Night/Salmon Presentation
	4	40 students	Open House
Mary McGrew	4.5	55 1st graders	Creatures of the Night/Salmon Presentation
	4	40 students	Open House
	8	300 adults and children	Salmon Migration Golf Course
Bob Haverkate	5	300 adults and children	Salmon migration Golf course/exhibit
	4.5	55 1st graders	Creatures of the Night/Salmon Presentation
Melissa Kennedy	7	300 adults and children	Salmon Migration Golf course/Exhibit
Ruby Bourne	4.5	55 1st graders	Creatures of the Night/Salmon Presentation
Valerie Sinesky	4	300 adults and children	Salmon migration golf course/exhibit
	4.5	55 1st graders	Creatures of the Night/Salmon Presentation

Team	Time (hours)	Audience Reached (Students, Adults)	Activity Description
Conservation Assessment			
Tim Whitesel	4	50 students	Mentoring - Fish and Wildlife /Ridgefield
	12	40 students	Fish Identification/Open House
	6	8 students	Mentoring during Development of Community Based Monitoring Plan
Brook Silver	6	40 students	Population Estimate/Open House
Donna Allard	8	300 teachers	FWS Booth at Oregon Science Teacher's Convention
	8	25 students	Macroinvertebrates Collection and Identification
	8	25 students	Mussels
	8	25 students	Mussels
	8	28 students	Macroinvertebrates Collection and Identification
	8	22 teachers	Invasive Species Workshop
	5.5	75 students	Mentoring - Beaver Study/Classroom
	28	75 students	Beaver Study/Field
	8	300 adults and children	Salmon migration golf course/exhibit
	8	55 1st graders	Creatures of the Night/Salmon Presentation
	36	30 students 4 adults	Facilitator/Coordinator
	9	12 students 1 adult	Aquatic Studies/Field Exploration
	7	160 students	Salmon migration golf course/exhibit
	7	200 students, 35 teachers	Facilitator - Watershed Congress/Student Forum
	8	21 students, 3 teachers	Macroinvertebrates Collection and Identification
	16	thousands people	Organizer
	6	16 students	Tree Identification/Smith Bybee Lakes
	9	24 1st graders FAIS	Exploration Field Day
	27	~1200 4th graders	Watershed Activities
Greg Silver	2	25 adults	Lamprey Identification Training
	4	40 students	Lamprey Collection/Open House

Team	Time (hours)	Audience Reached (Students, Adults)	Activity Description
Conservation Assessment			
Jeff Jolley	2	25 adults	Lamprey Identification Training
	10	40 students	Lamprey Collection/Fish Identification - Open House
Marci Koski	8.5	300 adults and children	Salmon migration golf course/exhibit
	4	40 students	Ageing fish scales, reading CWTs/Open House
Michael Hudson	8	40 students	Fish Identification - Open House
Michaela Satter (Volunteer)	2	25 adults	Lamprey Identification Training
Hatchery Evaluation			
Doug Olson	8	25 students	Aquatic Macroinvertebrates
Maureen Kavanagh	4	40 students	Radio-Telemetry - Open House
Hatchery/Harvest Biometrics			
Henry Yuen	3	about 50 festival attendees	USFWS Booth - Festival of Nations
Marking			
Jesse Rivera	16	500 students/50 adults	Salmonfest
	4	40 students	CWT and PIT Tagging - Open House
	6	100 general public	Biosampling and Spawning Activities
Steven Lazzini	4	40 students	CWT and scale reading
	6	100 general public	Biosampling and Spawning Activities
Pat Kemper	5	100 general public	AutoFish Trailer

Team	Time (hours)	Audience Reached (Students, Adults)	Activity Description
Water Management			
Don Anglin	4	40 students	Tour guide/advisor
	6	12 students, 6 adults	Senior Project Evaluation, discussion, career advice
Courtney Newlon	8	25 students	Aquatic Macroinvertebrates
	8	40 students	Fish Identification - Open House
Dan Butler	24	500 students/500 adults	AutoFish Trailer
Darren Gallion	4	40 students	Open House
	8	50 adults, +Oregonian article	White Salmon River Trash Rodeo
David Wills	8.5	300 adults and children (1 day)	Salmon migration golf course/exhibit
Joe Skalicky	4	30 students 4 adults	Organizer, tour guide & advisor
Marshall Barrows	4	40 Students	Tour guide/advisor
Nadia Jones	2	2 highschool students, 1 educator	Surveying tree damage with limited GPS and distance/azimuth measurements
Paul Sankovich	8	24 students, 6 adults	Instructor