

Field Trip Registration Options
Annual Western Regional Panel Meeting
Field trips will be held on **Tuesday, September 8, 2009**

Please register for Field Trips by **August 7, 2009** (see below)

FIELD TRIP OPTION #1

USGS Western Fisheries Research Center and NOAA Northwest Fisheries Science Center: Tour and Presentation of Activities

Purpose: This is an opportunity to find out about relevant research and programs related to invasive species at the U.S. Geological Survey's Western Fisheries Research Center (WFRC) and at NOAA Fisheries' Northwest Fisheries Science Center (NWFSC). The USGS facility is engaged in biological research on critical natural resource issues facing the nation including ballast water management and invasive fish diseases. Scientists at the NWFSC are involved in a variety of invasive species projects including impacts on ESA listed salmonids, range expansion, and consequences for food web dynamics. Resource managers use the results from this research to make informed decisions about sustaining fisheries, recovering endangered and threatened species, sustaining healthy ecosystems, and reducing human health risks. The USGS WFRC has the only aquatic biosafety level 3 (BSL-3) containment laboratory in the U.S. which allows them to safely conduct research on exotic aquatic pathogens that pose a high risk to the environment.

Time: 1 p.m. to 5 p.m.; Total time = 4 hours

Host: USGS WFRC, NOAA NWFSC; **Staff:** Scott Smith, Blake Feist

Number of WRP participants: 10 to 30

Activity	Approx Time	Elapsed Time
Transit	45 mins	0.75 hour
Briefing and tour of WFRC	45 mins	1.50 hours
USGS Presentations	45 mins	2.25 hours
Break	15 mins	2.50 hours
NOAA Briefing and Presentations	45 mins	3.25 hours
Transit back to Hotel	45 mins	4.0 hours

FIELD TRIP OPTION #2

University of Washington: Tour, Presentation of Activities, Canoe Trip

Purpose: This is an opportunity to find out about research and invasive species activities at the University of Washington and to see some species first hand. The field trip includes two brief presentations, a foot tour of various invasive species eradication and restoration activities in the Union Bay Natural Area and a canoe trip through the arboretum and natural area, where we'll check a few crayfish traps. The University manages the natural area to maintain and enhance vegetation, wildlife, and landscape values while serving as an outdoor laboratory for research, teaching and public service.

Time: 12:30 p.m. to 5:30 p.m.; Total time = 5 hours

Host: UW College of Forestry, Center for Urban Horticulture, Washington Sea Grant, WRAC;

Staff: Kern Ewing, Sarah Reichard, Jeff Adams

Number of WRP participants: 10 to 30

Activity	Approx Time	Elapsed Time
Transit	30 mins	0.5 hour
Introduction	15 mins	0.75 hour
UW Presentations	45 mins	1.5 hours
Tour Union Bay Natural area	60 mins	2.5 hours
Transit (foot) to UW waterfront	15 mins	2.75 hours
Canoe trip	75-90 mins	4-4.5 hours
Transit	30 mins	5 hours

FIELD TRIP OPTION #3

Managing Invasive Tunicates In Puget Sound; Barge Trip

Purpose: This is an opportunity to see and discuss the difficulties of managing aquatic invasive species in large open systems such as Puget Sound. Invasive tunicates are small marine animals that grow in large numbers or as mat-like colonies. They smother or displace native species and outcompete them for food – changing the ecosystem. The state has listed three nonnative tunicates as species of priority concern.

It is also an opportunity to get the perspective of the shellfish industry on invasive species, in general, and invasive tunicates, in particular. The field trip includes a barge trip to a commercial mussel farm.

Get answers to questions such as: How do we communicate about a problem that people don't see? What methods do we use to manage the problem? How do we engage stakeholders?

Time: 9 a.m. to 5 p.m.; Total time = 8 hours

Location: Des Moines Marina (south of Seattle): mussel rafts (near Olympia)

Host: Des Moines: Washington Department of Fish and Wildlife, City of Des Moines

Mussel rafts: Taylor Shellfish Farms

Number of WRP participants: 10 to 30

	Activity	Approx Time	Elapsed Time
Des Moines Marina			
8:30–9:00am	Transit: Hotel to Marina – bus or vans	30 mins	0.5 hour
9:00–9:30am	Briefing about the invasion and its management	30 mins	1 hr
9:30–11:00am	Underwater eradication operations – video feed from a remotely operated underwater vehicle	1.5 hrs	2.5 hrs
11:00–12:00pm	Lunch on your own – Des Moines Marina	1 hr	3.5 hours
Taylor Shellfish Farms			
12:00–1:00pm	Transit: Des Moines to Totten Inlet	1 hr	4.5 hrs
1:00–3:00pm	Barge to mussel rafts – discuss invasive tunicate issues	2 hrs	6.5 hrs
3:00–5:00pm	Transit: Totten Inlet to hotel	2 hrs	8 hrs

WRP Field Trip Registration Form (2009)

Name:

Title:

Agency or Organization:

Address:

Phone:

E-mail:

On Tuesday, September 8th:

_____ I will be attending Field Trip #1, to the USGS Western Fisheries Research Center and NOAA Northwest Fisheries Science Center (1 p.m to 5 p.m.)

_____ I will be attending Field Trip #2, to the University of Washington and the Canoe trip (12:30 p.m. to 5:30 p.m.)

_____ I will be attending Field Trip #3, to Des Moines Marina and Barge trip to Totten Inlet (8:30 a.m. to 5:30 p.m.)

Note: There is no charge for a field trip.

Please e-mail or fax Field Trip registration by August 7, 2009 to:

Erin Williams

Fax: 303-236-8163; E-mail: erin_williams@fws.gov