



## *AQUATIC INVASIVE SPECIES NEWS*

*6/23/14*

### **DREISSENID MUSSELS**

#### **Lake Winnipeg Zebra Mussel Treatment**

[Province Adds Decontamination Units, Surveillance To Fight Against Zebra Mussels \(6/18/14\)](#)

For further information from the Manitoba Department of Conservation and Water Stewardship go to [Treatment Project Updates](#)

[Manitoba says experiment to kill off zebra mussels in four harbours worked \(6/20/14\)](#)

WINNIPEG — Manitoba has declared victory in its first battle with invading zebra mussels but says the unique treatment it used to kill the shellfish doesn't mean the province is free of them yet.

[Okanagan: Skepticism voiced over mussel eradication in Lake Winnipeg \(6/20/14\)](#)

The head of the Okanagan Basin Water Board is skeptical about the results of a potash treatment to eradicate zebra mussels from Lake Winnipeg.

#### **Lake Powell News**

[Antelope Point Public Launch Ramp Opens June 6 2014](#)

Utah and Arizona state laws require that boat owners decontaminate their vessels and conveyances to avoid the transport of quagga mussels to uninfested waters. Specific information on state laws for Utah can be found at

<http://wildlife.utah.gov/invasive-mussels.html> or for Arizona at [www.azgfd.gov/ais](http://www.azgfd.gov/ais) .

[NPS Adopts New Strategy to Stop Spread Of Lake Powell Mussels to Other Lakes, Rivers Throughout West \(5/30/14\)](#)

Officials at the National Park Service's Glen Canyon National Recreation Area announced late last week that it has developed a strategy to help reduce the spread of invasive quagga mussels from Colorado River's Lake Powell to other lakes and rivers with an emphasis on inspections of boats leaving the reservoir.

[Pesticide experiment raises hopes of killing zebra mussels \(6/11/14\)](#)

Scientists for the first time in Wisconsin plan to use a bacteria to kill zebra mussels — in this instance, in a Florence County lake. Researchers with the U.S. Geological Survey want to apply the biological pesticide next month to sections of Keyes Lake in the hope of killing off zebra mussels that have attached themselves to native mussel beds.....

Related: WI Dept. AG Press release: [Zebra Mussels Are Target for Experimental Use Pesticide Permit \(6/10/14\)](#)

[Effects of buffer and isopropanol alcohol concentration on detection of quagga mussel \(Dreissena bugensis\) birefringence and DNA \(4/28/14\)](#)

Abstract: The long term effects of sample preservation on dreissenid veliger detection by cross polarized light microscopy (CPLM) and polymerase chain reaction (PCR) is poorly understood. This study examined how buffer and isopropanol alcohol impact veliger morphology and detection. Veliger detection by CPLM was completely inhibited after 14 days in acidic deionized (DI) water without buffer or alcohol, but veligers were still detectable by PCR. Veliger detection by CPLM increased when the pH of samples was buffered with 0.2 grams of sodium bicarbonate per 100 mL of raw water sample, but long term deterioration was not completely prevented without the addition of isopropanol alcohol and buffer. After 36 days, 100% of veligers were detected by CPLM in samples preserved with 20, 50, and 70% isopropanol alcohol and 0.2 grams of sodium bicarbonate per 100 mL. This study indicates the significant role that sample preservation plays in the accurate identification of veligers in early detection sampling.

[Invasive species not welcome in B.C. \(6/8/14\)](#)

The B.C. government is taking aim at zebra mussels and invasive plants by proclaiming this week Invasive Species Week....

[Okanagan B.C. Water Board Launches Campaign Calling For Action On Mussel Prevention \(6/13/14\)](#)

After two years of calls to the province and federal government to help prevent invasive zebra and quagga mussels from being brought into Okanagan and British Columbia, the Okanagan Basin Water Board and its Okanagan WaterWise program are ramping up efforts. As of this week the local government agency, responsible for providing leadership on water issues that span the valley, has launched a “Speak out!” initiative, inviting Okanagan residents to go to [www.DontMoveAMussel.ca](http://www.DontMoveAMussel.ca) and write to their MLA and their MP and urge action....

[ID/UT: Low water levels and Quagga mussels concern for Bear Lake \(6/16/14\)](#)

Another concern for the lake is the invasive Quagga mussel. The mussels have not yet been found Bear Lake, but new regulations have been put in place to keep them out...

[How One Little Mussel Changed the Great Lakes Forever \(6/5/14\)](#)

Somewhere in the rivers of southern Ontario is a species few people have heard of, and even fewer have ever seen. It's simply named the rainbow. The rainbow is a freshwater clam that gets its name from the rich iridescent colours on its shell. It's so colourful that people once used the shells for jewelry. Like many other freshwater clams, it also has an almost unbelievable lifecycle where it recruits a fish to disperse its young by grabbing them by the head and injecting tiny baby clams into its gills. The rainbow is particularly ingenious at this, and uses a lure that looks like a delicious crayfish to attract the unsuspecting host to taxi its young to new homes....

[Midwest boaters urged to prevent the spread of aquatic invasive species across borders \(6/9/14\)](#)

Minnesota, Wisconsin and Michigan share many of the same boaters and anglers – now they're the same message to help protect their waters from aquatic invasive species (AIS), according to the Minnesota Department of Natural Resources. The states are teaming up on a new public service campaign to help carry a consistent message that encourages boaters and anglers to take steps to avoid accidentally spreading zebra mussels, spiny water fleas and other aquatic invaders when they travel between states. The 30-second spot is [available here](#).

[EarthTec QZ Launched as Zebra & Quagga Mussel Prevention for All Water Systems \(5/28/14\)](#)

Earth Science Laboratories Inc officially launched today its EarthTec QZ product to control zebra and quagga mussels in a cost-effective and environmentally friendly manner.....

### Zebra Mussel Impacting Mayflies in Lake Erie? (6/19/14)

.....Adult mayflies live less than two days and peak in numbers around the end of June. Fewer mayflies have been coming to Northern Ohio each year due to growing populations of zebra mussels in Lake Erie. The freshwater zebra mussel “cleans up” algae at the bottom of the lake, which mayflies generally eat, Shetlar said.....

### Quantifying the ecological niche overlap between two interacting invasive species: the zebra mussel and the quagga mussel (June 2014)

#### ABSTRACT

1. The zebra mussel (*Dreissena polymorpha*) and quagga mussel (*Dreissena rostriformis bugensis*) are two closely related invasive species. They usually occupy different habitats (e.g. shallow versus deep water) at a local scale, while occurring in the same broad regions at a large scale. The present study assesses the extent to which the habitat partitioning observed at local scales extends to niche partitioning at the global scale.
2. Species distribution models (SDMs, using MaxEnt) were used to model the potential distributions of both species based on a set of environmental and dispersal related predictors.
3. According to environmental SDMs calibrated with bioclimatic, geographic and geological factors, only 75% of the predicted quagga mussel distribution overlaps with the distribution of zebra mussel, demonstrating that the niches of the two species are moderately different at a global scale.
4. Quagga mussels were found to occur at higher average temperature and lower average precipitation, leading to the prediction that their niche includes Mediterranean and arid regions such as California and southern Spain, two areas currently unaffected by zebra mussel.
5. A second set of SDMs illustrated a notable influence of dispersal-related factors (e.g. human population density, closeness to commercial ports and reservoirs), on quagga mussel distribution. These models suggest that the distribution of quagga mussel is more constrained by dispersal-related factors than is the distribution of zebra mussel.
6. Evidence suggests that economic and environmental impacts can differ between the two species; joint accurate predictions may therefore prove important for targeting precautionary management plans at the right species.

## **BOAT INSPECTION NEWS**

### Dogs sniff out hidden aquatic hitchhikers (6/18/14)

The state and the Flathead Basin Commission have launched a stringent offensive in recent years against aquatic invasive species by requiring all water-bound vessels in Montana to stop at a number of checkpoints across the state. At the checkpoints, human inspectors look for tiny parts of plant and animal material that could spell economic and

ecological doom for Montana's watersheds if the vessel launches without first being decontaminated....

[Texas Boat-cleaning measures extended to entire state \(6/19/14\)](#)

Boaters at all Texas lakes will be legally required to drain their boats, among other measures, to prevent the spread of zebra mussels. Regulations that go into effect July 1 call for boaters to clean, drain and dry their boats after taking them out of the water and before launching their craft at another lake. "Clean, drain, dry — those are pretty simple steps," said Brian Van Zee, regional director with the Texas Parks and Wildlife Department's Inland Fisheries Division, adding that it doesn't take a lot of time to follow the rules....

[Minnesota doubles DNR-trained watercraft inspectors and checkpoints this summer \(6/9/14\)](#)

This summer, to help combat the spread of aquatic invasive species, the Department of Natural Resources is increasing the number of watercraft checkpoints to 36, double the number from last year. The DNR also expects to hire 146 watercraft inspectors and place 23 decontamination units at zebra mussel infested waters and high-use areas. Up to 300 additional authorized inspectors will be working for tribal and local government units throughout the state.....

[WY Boaters who get AIS inspections eligible to win \(6/3/2014\)](#)

CHEYENNE - This year, boaters who have their watercraft inspected for aquatic invasive species by the Wyoming Game and Fish Department (WGFD) will be eligible to enter a raffle.....

[Glacier Park program aims to prevent aquatic invasive species \(6/15/14\)](#)

WEST GLACIER – Glacier National Park continues its boat inspection and permit program this summer as part of an ongoing aquatic invasive species ...

[Lake George, NY boat checks required \(6/16/14\)](#)

Boaters heading to the crystal-clear waters of Lake George this summer must make one last stop before launching - at inspection stations where vessels are checked for invasive species and decontaminated if any hitchhikers are found. ...

Calif: [Environmental Update: County adopting zero-tolerance policy on quagga stickers](#)  
(5/30/14)

The Lake County Sheriff's Boat Patrol has adopted a zero-tolerance policy for boaters that don't have a current Lake County quagga mussel sticker ...

## Alberta Inspection Stations and Training

Kate Wilson, Aquatic Invasive Species Program Coordinator, (Alberta Environment & Sustainable Resource Development) reports that Inspection Stations open for business! Four inspection stations on major highways entering Alberta are open. Stations are scheduled to be open seven days a week in order to target high risk boats coming back into Alberta from out-of-province waters. There is also an **Upcoming Watercraft Inspection Training** on August 8th in Red Deer: For further information contact Kate Wilson @ [kathryn.wilson@gov.ab.ca](mailto:kathryn.wilson@gov.ab.ca)

## MARINE

### [The End is In Sight: Summer Should Bring Less Debris to Pacific NW \(5/30/14\)](#)

Our partners in the Pacific Northwest have noticed an increase in marine debris on shorelines this past month, including small vessels that likely washed out to sea during the tsunami in Japan in 2011. Four boats arrived in Washington over the Memorial Day weekend alone. The flurry of activity may seem unusual and sudden, coming after a relatively long stretch where we still saw some debris — but not this much. So what's the deal? Why are we getting a spike now?

Related: [New Wave of Suspected Tsunami Debris Washes Ashore \(5/29/14\)](#)

### [Mobile System Developed for Ballast Water Compliance \(5/28/14\)](#)

Damen Shipyards Group is set to unveil a pioneering new mobile ballast water treatment (BWT) unit at the Posidonia exhibition in Athens next week. The new in-house technology bolsters Damen's Ballast Water Centre of Excellence, which advises fleet managers on total BWT solutions for retrofits and newbuilds worldwide....

### [Canadian and American Shipowner Associations Announce Joint Principles for Ballast Water Discharge Regulations\( 6/11/14\)](#)

OTTAWA - The Canadian Shipowners Association (CSA) is pleased to announce that it has developed joint principles with the Lake Carriers' Association (LCA) for ballast water regulations on the shared waters of the Great Lakes and St. Lawrence River, Gulf of St. Lawrence, Canadian Eastern and Arctic waters to the limit of the Canadian exclusive economic zone (Operating Area)....

## WEEDS

### [CA DBW Begins 2014 Egeria Densa Control Program in Delta \(6/4/14\)](#)

Sacramento, Calif. – In June 2014 California State Parks, Division of Boating and Waterways (DBW) will begin its 2014 Egeria Densa Control Program (EDCP). A total of 2,119 acres of the Sacramento-San Joaquin Delta (Delta) will be treated for *Egeria densa* (Brazilian Elodea) through September 2014 with the herbicide called Fluridone.....

### [Alaska: Invasive species could increase as climate warms \(6/16/14\)](#)

Tim Ridle’s porch overlooks the southern shore of Sand Lake in South Anchorage, a popular destination for fishers, boaters, pilots, and nature lovers. While once relatively pristine, an invasive weed called Elodea has taken over parts of the lake. “It looks like super thick scum,” Ridle said, while examining the green, brown, and yellow muck colonizing the lake in his backyard. “It’s almost like a disaster. You can’t describe it until you see it, and the next thing you say is, ‘wholly cow, how did that happen?’”

### **The U.S. Environmental Protection Agency and U.S. Army Corps of Engineers proposed rule to clarify protection under the Clean Water Act for streams and wetlands**

Go [here](#) to see comments on how this proposed rule could potentially impact aquatic plant management activities (by Carlton Layne, Executive Director, [Aquatic Ecosystem Restoration Foundation.](#) )

### [BC: Researchers Do More than Raise a Flag about Invasive Species \(6/17/14\)](#)

Vaseux Lake, located between Okanogan Falls and Oliver on the Okanagan Highway, is home to a variety of wildlife and is a popular destination for outdoor enthusiasts. Like many BC lakes, however, Vaseux is in jeopardy due to a pretty, seemingly innocuous foe, the yellow flag iris. Due to its dense root systems and rapid seed dispersal, this ornamental water garden plant is diminishing indigenous plant species and choking aquatic environments across the Pacific Northwest ...

### [Opinion: Alternate plans to rid Sand Lake, Alaska of noxious weed are nonsense \(6/22/14\)](#)

A kettle lake surrounded by homes in west Anchorage, Sand Lake has become a battleground in the war on invasive species. Opposing forces concur that Elodea, an aquatic plant commonly used in aquariums, is present in the lake. However, both sides are far from agreement on whether Elodea is a non-native, invasive weed in Alaska....

## FISH

### [Research Finds Soybean-Asian Carp Feed Blend More Sustainable For Aquaculture Industry \(6/2/14\)](#)

Bloomington, IL—Combining soybean meal with fish meal made from invasive Asian carp produces a more nutritious, sustainable and economical option for feeding some farm-raised fish, according to recent Southern Illinois University (SIU) research.

[Goldfish and Prussian carp threaten Alberta's Bow River's ecosystem \(6/13/14\)](#)

The Bow River, famous for its trout fishing, has been inundated with a number of unwanted fish and anglers believe the invasive species have been intentionally introduced to the waterway. "There are a variety of different fish that are purchased through the pet trade that are released into the rivers and Prussian carp is one of the most common ones being found in (southern Alberta's) rivers now," explains Brian Meagher, Trout Unlimited Canada's Alberta Biologist...

[OR: Turning Around Malheur Wildlife Refuge One Carp Carcass at a Time \(6/9/14\)](#)

What could become the largest carp removal project in history got its start recently at the Malheur National Wildlife Refuge in Southeast Oregon. Commercial fishermen were brought in from the Midwest, where carp fishing is an established industry. Although these guys make a living fishing for huge volumes of carp and other invasive fish, the kind of haul they're making on this day is on whole new level...

[Red shiner eradication planned for in the Virgin River gorge, AZ/UT \(6/3/14\)](#)

PHOENIX – The Arizona Game and Fish Department, Utah Division of Wildlife Resources and Virgin River Program will conduct a fish management project using rotenone in the Virgin River Gorge in southwest Utah and northwest Arizona to remove invasive red shiner and restore habitat in the Virgin River for native fishes....

## **OTHER**

[Invasive Species Week proclaimed in B.C. \(6/6/14\)](#)

The provincial government has proclaimed June 9 to 15 Invasive Species Week in B.C. in a bid to help raise awareness of the economic and environmental damage invasive plants and animals can cause if allowed to spread in the province....

[When eradicating invasive species threatens endangered species recovery \(5/29/14\)](#)

Efforts to eradicate invasive species increasingly occur side by side with programs focused on recovery of endangered ones. But what should resource managers do when the eradication of an invasive species threatens an endangered species?

### [WA: New App Lets You Report Invasive Species \(5/28/14\)](#)

OLYMPIA – If you see an infestation of giant hogweed or a creature that looks like a wild pig but isn't, who should you call? The Washington Invasive Species Council just made it easier for concerned people to report non-native, invasive plants and wildlife with the launch of the WA Invasives app.

### [ND Officials wary of invasive species in North Dakota \(6/14/14\)](#)

Stutsman County is under attack by land, water and air by hordes of foreign invaders. Invasive species threaten the balance of ecosystems they encroach upon. The invaders compete with native species for food, destroy habitat and often reproduce at higher rates than native species....

### **ANSTF Recreation, Water Garden and Classroom Guidelines for Preventing the Introduction and Spread of Aquatic Invasive Species**

The "[Classroom Guidelines for Preventing the Introduction and Spread of Aquatic Invasive Species \(AIS\)](#)" has been posted as final in the Federal Register. It is now available for use by the public, agencies and organizations to promote practices that prevent the spread of AIS.

Earlier this month The "Voluntary Guidelines to Prevent the Introduction and Spread of Aquatic Invasive Species: Recreational Activities" and the "Voluntary Guidelines to Prevent the Introduction and Spread of Aquatic Invasive Species: Water Gardening" were also posted as final in [the Federal Register](#). These documents were developed by national committees under the direction of the Aquatic Nuisance Species Task Force (ANSTF) to provide standardized guidelines for use by the public, agencies and organizations to help combat the spread of aquatic invasive species (AIS). The guidelines are posted for use on the ANSTF Website at the bottom of the Documents page: <http://www.anstaskforce.gov/documents.php>

### [Massive bullfrog caught in small Albern-area pond \(6/12/14\)](#)

A recent unexpected catch with a bobber and worm of an American bullfrog could indicate the **invasive species** is beginning to spread around the ...

### [Invasive Chinese mitten crab transmits crayfish plague pathogen in Europe \(6/9/14\)](#)

**Abstract:** The Chinese mitten crab (*Eriocheir sinensis*) is a vector of the fatal crayfish plague pathogen (*Aphanomyces astaci*). Both species are listed among the world's 100 worst invasive species. From its origin in China the Chinese mitten crab was introduced to Europe, presumably via ballast water from ships. *A. astaci* originated in North America and is assumed to have been firstly introduced to Europe through human mediated

transportation of live specimens of North American freshwater crayfish species. While the North American crayfish species are resistant to the pathogen, it causes a fatal disease to native European crayfish species. It was generally assumed that the crayfish plague could only infect freshwater crayfish species. Until recently, the Chinese mitten crab had not been recognized as a host of the pathogen. And no study has yet been carried out to investigate if they also serve as a vector. In this study, transmission experiments are carried out in combination with subsequent species-specific molecular analysis. The results establish that the Chinese mitten crab carry the crayfish plague pathogen and can transmit it to the European noble crayfish (*Astacus astacus*). The implications of these findings are ecologically alarming, considering the high invasive potential and the catadromous life cycle of Chinese mitten crabs, facilitating the widespread distribution of the pathogen.

### [Oregon Sea Grant AIS Publication Released](#)

On the Lookout for Aquatic Invaders: This identification guide was developed to help watershed councils and other community-based groups increase their understanding of aquatic invasive species, and to initiate monitoring efforts for species of particular concern to their watersheds. The introduction provides an overview of activities that can spread invasive species, a look at their economic impacts, and suggestions for ways we can work together to prevent and control their spread. The rest of the book covers background information and key identification characteristics of many aquatic invaders that are already established or likely to become established in the West, and tells where to access additional experts and how to report sightings of invasive species. The 92-page guide is lavishly illustrated with full-color photographs to aid identification, is coil bound to lie flat when opened, and has a laminated cover for water resistance. How to Order: [Purchase online](#); [Purchase by mail](#). Price: \$8.95; Shipping & Handling: \$4.50; Length: 92 pp.; Size and Format: 8 1/2 x 5 1/2, coil bound, color, laminated cover, paper, This is an expanded revision of On the Lookout for Aquatic Invaders: ID Guide for the Pacific Northwest (ORES-U-H-08-002), which is now out of stock.

## **JOBS/RFPS**

**Grant Opportunity: Quagga-Mussel Containment in the West (Department of the Interior, Fish and Wildlife Service)**

Go to <http://www.grants.gov/web/grants/search-grants.html> and search with funding opportunity number F14AS00210

**Close date: 07/15/2014**

## **Delta Stewardship Council Ballast Water Request for Proposal (5/29/14)**

Bid #RFP 14-003 - Feasibility Study of Shore-Based Ballast Water Reception and Treatment Facilities. The RFP can be found at @ <https://www.bidsync.com/bidsync-app-web/vendor/links/BidDetail.xhtml?bidid=1961341&roundId=null>

**Bid ends: Jul 07, 2014 5:00:00 PM PDT**

[Invasive Plant Control, Inc is currently looking to fill both part time and full time positions.](#)

Every year no less than 10 college interns are hired to work on traveling teams from late May to August. Please review the job descriptions thoroughly and if interested, submit a cover letter and resume. IPC is also currently seeking full time field technicians. Please read through the job descriptions before submitting your cover letter, resume and request for an interview.

- [Team Leader](#)
- [Travel Team Technician](#)
- [Volunteers](#)

IPC is continually hiring through **August**. To Apply, Send Cover Letter and Resume to: **Steven Manning** at [steve@ipc-inc.org](mailto:steve@ipc-inc.org)

## **LEGISLATION/FEDERAL ACTIONS/BUDGET**

[Hawaii Governor Signs Bills in Support of Agriculture \(6/19/14\)](#)

[House Bill 1716](#) (Making an Appropriation for Invasive Species Prevention, Control, Outreach, Research, and Planning) appropriates \$5 million to the Hawaii Invasive Species Council.

## **President signs Water Resources Reform and Development Act**

On 6/10/2014 President Obama signed the "Water Resources Reform and Development Act" (HR 3080). For further information see <https://www.govtrack.us/congress/bills/113/hr3080/text> and <http://transportation.house.gov/wrrda/conference.htm> . WRRDA language included

**"..... the Secretary may establish watercraft inspection stations in the Columbia River Basin [CRB] to be located in the States of Idaho, Montana, Oregon, and Washington at locations, as determined by the Secretary, with**

**the highest likelihood of preventing the spread of aquatic invasive species at reservoirs operated and maintained by the Secretary.”**

The next steps for realizing the CRB AIS gains in WRRDA will be in the House and Senate energy and water appropriations committees (where the FY 2015 USACE budget is appropriated).

House action has already occurred: See [Appropriations Committee Approves Fiscal Year 2015 Energy and Water Bill](#) [watercraft inspection station language is not in the house bill]

In the Senate: See [FY15 Energy & Water Subcommittee Markup Bill Summary](#). It is in the Senate bill that the CRB AIS language and appropriations will most likely appear. However the Senate appropriations process is bogged down as the Senate Appropriations Committee on 6/19 abandoned plans to mark up an energy and water spending bill, fearing an amendment targeting Obama administration climate rules that the White House said would lead to its veto. [Reprinted from “E&E Daily” with permission from Environment & Energy Publishing, LLC. www.eenews.net. 202/628-6500]. More on the budget delay can be found [here](#).

### **President signs Texas water transfer bill (6/9/14)**

On 6/9/14 President Obama signed a measure that would authorize Texas officials to pump water that may contain invasive species out of a lake on the Oklahoma-Texas border. Under the Lacey Act, such water transfers are illegal because the law bans moving invasives over state lines. But [H.R. 4032](#) from Rep. Ralph Hall (R-Texas) exempts the North Texas Municipal Water District and the Greater Texoma Utility Authority from the act, in order to provide water to Texas locals. The water would be treated for invasives. Similar legislation specific to zebra mussels passed last Congress; this session's measure would expand the exemption to all invasives, including the quagga mussel.

Related story: [NTMWD extends gratitude for exemption \(6/19/14\)](#)

## **MEETINGS**

### **JUNE**

[2. Call for Citizen Science Invasive Species Volunteers: Join the effort to help locate and eradicate invasive plants from WA State!](#)

Saturday, June 28th, 9:30am - 12:00pm at the Naches Ranger Station in Naches, WA.  
Address: 10237 U.S. Highway 12, Naches, WA 98937

Capacity is limited

## **JULY**

**Priest Lake, ID Invasive Species Workshop and Survey** is scheduled for July 29th at the Kalispell boat ramp on Priest Lake. The workshop presents a great opportunity to learn about the invasive plants and animals that threaten Priest Lake. Following the workshop we will head out on the water to survey for aquatic invasive species. Space on boats is limited so please bring your boat if you have one available. For further information please contact Thomas Woolf, ISDA 208-608-3404, [Thomas.Woolf@agri.idaho.gov](mailto:Thomas.Woolf@agri.idaho.gov); All are welcome.

**The Pacific NorthWest Economic Region (PNWER) Annual Summit** will be held July 20 – 24, 2014 at the Whistler Fairmont Chateau in Whistler, B.C. PNWER's invasive species working group will meet July 23rd, 9:45am - 5:00pm. For further information go [here](#). For additional information on the invasive species session contact Megan Levy @ [megan.levy@pnwer.org](mailto:megan.levy@pnwer.org)

## **AUGUST**

**1. 2014 California Invasive Species Action Week Saturday, August 2 – Sunday, August 10**  
Help protect our resources by joining a volunteer effort, learning about prevention practices, attending an educational presentation or field outing, or learning to identify your local invasive species. Find nearby volunteer efforts, a schedule of events, and educational information at [www.dfg.ca.gov/invasives/actionweek](http://www.dfg.ca.gov/invasives/actionweek).

## **SEPTEMBER**

**Western Regional Panel:** The annual meeting of The Western Regional Panel on Aquatic Nuisance Species will be held in Houston September 17-19, 2014. This will be a joint meeting of The WRP and the [Gulf and South Atlantic Panel](#). The Crowne Plaza Downtown is the meeting venue and host hotel. The [WRP website](#) will have more information on hotel reservations and more in the near future.

[Meeting the Challenge: Preventing, Detecting, and Controlling Invasive Plants September 16-17, 2014, University](#) of Washington Botanic Gardens, Seattle, WA.

[Oregon - Invasive Species Cook-off 2014 - Eradication by Mastication: A](#) benefit for the Institute for Applied Ecology, Sunday, September 28, 2014, 2 pm - 7 pm, Zenith Vineyard (Salem, OR)

## OCTOBER

The Alaska Chapter of the American Fisheries Society will be meeting in Juneau, Oct. 20-24. An invasive species session is being planned. Contact Tammy Davis, ADFG, for further information @ [tammy.davis@alaska.gov](mailto:tammy.davis@alaska.gov)

[The International Invasive Sea Squirt Conference V will be held at Woods Hole Oceanographic Institution Wed-Fri Oct 29-31, 2014.](#) Conference Registration Deadline October 1, 2014.

[California Invasive Plant Council Symposium at California State University - Chico, October 8-11, 2014.](#)

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