



AQUATIC INVASIVE SPECIES NEWS

7/20/20

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RECOMMENDED

[A Big Rat in Congress Helped California Farmers in Their War Against Invasive Species \(7/5/20\)](#)

California Rep. Josh Harder needed a way to convince the U.S. House of Representatives to pay attention to his speech about invasive species during a meeting in February. So he brought in a hefty rat carcass and laid it on the table next to him.

The taxidermied rat, which Harder called "Nellie," convinced the House to unanimously pass a bill that supports eradication efforts in states infested with nutria, large rodents also known as swamp rats that are native to South America.

"I think it was the first time in congressional history that a taxidermied swamp rat made an appearance on the House floor," Harder, a Democrat, said. The bill, which will now go to the Senate, authorized the funding for efforts to fight the nutria.

The legislation would revise the Nutria Eradication and Control Act of 2003, which initially provided grants to Maryland and Louisiana, to expand nutria eradication efforts to about a dozen states, including California. The nutria has been established in 17 states.

A spokesperson for Harder said it was unclear when the bill would be introduced in the Senate. He said the pandemic has slowed down the momentum behind the bill.

[\[Full Story\]](#)

PUBLIC COMMENT

NEW SPECIES SIGHTINGS

Want to get more new species alerts?

USGS NAS: <https://nas.er.usgs.gov/AlertSystem/default.aspx>

IMAP INVASIVES: <https://www.imapinvasives.org>

DREISSENIDS

[Manitoba]

[Invasive zebra mussels discovered in Manitoba lake \(7/10/20\)](#)

The province said zebra mussels were first found in the South Basin of Lake Winnipeg in 2013. It expected that the mussels would move down the Nelson River naturally, and therefore the province designated the area as an aquatic invasive species (AIS) control zone in 2015.

[Minnesota]

[Zebra mussels confirmed in Long Lake in Becker County \(7/16/20\)](#)

The Minnesota Department of Natural Resources has confirmed a report of zebra mussels in Long Lake, near Detroit Lakes in Becker County. Other waters closely connected to Long Lake may also be added to the infested waters list. Long Lake is connected to, and upstream of, Muskrat Lake where zebra mussels were confirmed in 2017. The DNR searched Long Lake after a lake user reported a single zebra mussel. DNR invasive species specialists found two adult zebra mussels on the opposite side of the lake from the original report.

[Zebra mussels confirmed in Ball Club Lake in Itasca County \(7/6/20\)](#)

The Minnesota Department of Natural Resources has confirmed zebra mussels in Ball Club Lake, located entirely within the Leech Lake Reservation in Itasca County. Following a report from Itasca County, a DNR invasive species specialist and county staff found large populations of adult zebra mussels in several locations across the lake.

[Zebra mussels confirmed in Lake Aaron in Douglas County \(7/6/20\)](#)

The Minnesota Department of Natural Resources has confirmed a report of zebra mussels in Lake Aaron in Douglas County. Other waters closely connected to Lake Aaron may

also be added to the infested waters list. A lake user snorkeling near the Lake Aaron beach reported finding three zebra mussels attached to a rock. DNR invasive species specialists searched the lake and found seven adult zebra mussels one-quarter to one-half inch in length.

[North Dakota]

[Zebra Mussels Discovered in Lake LaMoure \(7/8/20\)](#)

The North Dakota Game and Fish Department confirmed the presence of invasive zebra mussels in Lake LaMoure after a local game warden reported the finding earlier this week. Aquatic nuisance species coordinator Ben Holen said follow-up sampling confirmed well-established populations of zebra mussels of various ages, especially near the dam. It is unknown how the small, sharp-shelled mussels were introduced, and there is no known method to completely rid a lake once they become established.

[South Dakota] [Zebra Mussels Confirmed in Pickerel Lake](#)

The South Dakota Department of Game, Fish and Parks (GFP) has confirmed the presence of adult zebra mussels in Pickerel Lake in Day County.

“A suspected adult zebra mussel was found at the west boat ramp in Pickerel State Park early this morning by Dennis Skadsen, the project manager for the Northeast Glacial Lakes Watershed Improvement and Protection Project, while working on a project for Game, Fish and Parks,” said GFP region fisheries supervisor, Mark Ermer. “After confirming it to be a zebra mussel, Dennis Skadsen, conducted additional sampling and mussels were sampled near the East Pickerel Lake State Park boat ramp and the old fish hatchery site. We currently do not know the level of infestation, but crews will be sampling the lake next week.” Pickerel Lake is now considered “infested” for zebra mussels.

This is the first documented zebra mussel in the northeast, glacial lakes region. Pickerel Lake is now classified as infested with zebra mussels.

OTHER AIS

[Texas]

[Myriophyllum spicatum \(Eurasian watermilfoil\)](#) was found in Sulphur Creek, Lampasas, TX, US [\[USGS NAS\]](#)

[Nymphoides cristata \(crested floating-heart\)](#) was found in Lake Conroe, New Waverly, TX, US [\[USGS NAS\]](#)

[Nymphoides peltata \(yellow floating-heart\)](#) was found in Horseshoe Lake, TX [\[USGS NAS\]](#)
And at Ken Good Park, Carrollton, TX, US [\[USGS NAS\]](#)

[Salvinia molesta \(giant salvinia\)](#) was found in Bringle Lake, TX [\[USGS NAS\]](#)

[Vermont]

[Invasive waterflea spotted for 1st time in Lake Champlain \(7/6/20\)](#)

An invasive species has appeared for the first time in Lake Champlain. The fishhook waterflea was first discovered in Vermont in 2018. It's a close relative of the spiny waterflea, which was discovered locally in 2014. This year, both species were spotted on fishing lines in late June and identified by boat launch stewards in Shelburne Bay.

[Washington]

[Vieja maculicauda \(Blackbelt Cichlid\)](#) was found Lake Wilderness, WA. [\[USGS NAS\]](#)

WATCH LIST

[\[Washington\] Public Asked to Protect Honey Bees by Reporting Sightings of the Invasive Asian Giant Hornet \(7/1/20\)](#)

As summer gets into full swing and people spend more time outside, state and federal officials and local beekeepers hope the public will keep their eyes open and report any sightings of Asian giant hornet.

[Tangentially related but fascinating] [The Oatmeal: Bees vs Giant Hornet](#)

[Audio/podcast] [Here's the deal with Murder Hornets, Dr. Sheldon Ramsey](#)

[Update] [Are Asian giant hornets established in Washington?](#)

[Related] ['Murder hornets' highlight the dangers of invasive species control budget cuts \(6/17/20\)](#)

DREISSENID MUSSELS

[Northeast South Dakota prepares to battle zebra mussel infestation \(7/19/20\)](#)

South Dakota Game, Fish and Parks' July 10 announcement of the zebra mussel infestation in Day County's Pickerel Lake has sounded the alarm for many people in the Glacial Lakes region. "It's one of those things you just hope is not going to arrive at your doorstep, but it did," said Dave Pearson, president of the Pickerel Lake Conservancy. "My initial reaction was I was angry and concerned. Zebra mussels are a very troublesome species. There's no known program for eradicating or managing them effectively in a freshwater lake, so once they get established, they're very difficult to control."

[\[British Columbia\] Vernon Chamber warns against mussel spread during encouraged domestic travel \(7/14/20\)](#)

Since international travel is out of the question for the foreseeable future, Canadians have been encouraged to travel within the country. But the Greater Vernon Chamber of Commerce is concerned that increased domestic travel could lead to the spread of invasive species. The Chamber has voiced their concerns to the federal minister of fisheries and oceans and the federal minister of public safety by writing a letter to each. The letter states the risks that quagga and zebra mussels could have on the Okanagan if they are brought in from other provinces.

[\[Texas\] Zebra mussels grow through the Highland Lakes, costing city millions \(7/9/20\)](#)

... Austin Water also anticipates an additional \$1.9 million to design and construct a more efficient system to help battle the mussels. That is on top of a yearly cost of more than \$130,000 for the chemical used to clear the mussels out of the pipes...

[Surge in boat sales leads to new urgency in quagga mussel education on Lake Havasu \(6/27/20\)](#)
[S]

Lake Havasu City's boating industry reported a surge in sales this year, and many of those boats have ended up in the hands of new boat owners. But now those boaters are learning about the possible threat lurking beneath the waves: The invasive quagga mussel. As of last week, boat dealers in Havasu say a large percentage of sales involved first-time boat buyers.

[Yearlong research project yields positive results in Minnesota's fight against zebra mussels \(7/20\)](#)

These preliminary findings, recently announced by the U of M's Minnesota Aquatic Invasive Species Research Center, left Waller "pleasantly surprised." They suggest that even a relatively light dose of copper sulfate, applied strategically, could significantly impact the number of zebra mussels that are able to reach adulthood and wreak havoc on a lake, Waller said.

Blackman RC, Benucci M, Donnelly RC, Hänfling B, Harper LR, Sellers GS, Lawson Handley L (2020) [Simple, sensitive and species-specific assays for detecting quagga and zebra mussels \(*Dreissena rostriformis bugensis* and *D. polymorpha*\) using environmental DNA](#). *Management of Biological Invasions* 11(2): 218–236, <https://doi.org/10.3391/mbi.2020.11.2.04>

BOAT INSPECTION/DECON/TECH NEWS

[\[Montana\] Inspection Stations Busier Than Ever](#)

As of June 30, more than 44,000 watercraft have been inspected. Watercraft inspection stations are busier than ever, with early season numbers higher than previous years. Out of state boat traffic is also higher, presenting an elevated risk of AIS transported into the state. Inspectors have intercepted 19 mussel fouled vessels at the Anaconda, Dillon, Flowing Wells, Hardin and Nashua watercraft inspection stations.

[\[BC\] No extra funding for mussel battle, gov't says \(7/7/20\)](#)

A pandemic-related request to expand a boat inspection program aimed at stopping invasive mussels at B.C.'s borders has been rejected by the provincial government. Representatives of the Okanagan Basin Water Board had asked Victoria to increase the number, staffing, and operational hours of the inspection stations. But in response Minister of Environment George Hayman says only that such proposals will be considered in the future.

[\[Utah\] 55 citations issued for quagga mussel violations over holiday weekend \(7/6/20\)](#)

A total of 55 boaters received citations, and 322 vessels were decontaminated across Utah due to quagga mussel concerns over the Fourth of July holiday weekend, state conservation officers said Monday. In all, 16,497 vessels were inspected for the invasive species between Friday and Monday, according to the Utah Division of Wildlife Resources. Nearly a quarter of the inspections happened at Lake Powell alone, which is where Utah's biggest quagga mussel problem is located. Inspections there resulted in 25 of the citations and 57 decontaminations.

[New Utah Boating Rules for Aquatic Invasive Species \(7/6/20\)](#)

As of July 1st, 2020 two new Aquatic Invasive Species laws went into effect for Utah boaters. First, all non-residents must take an online education course and pay a \$20 fee before launching in Utah waters. Second, drain plugs now must be removed on all boats while transported in Utah. That includes both rear and center drain plugs. There is also a new definition for "complex boats." Now, all wakeboard boats with ballast tanks, or boats that have an inboard/outboard motor, and considered complex by the Utah DNR.

[\[California\] Berryessa boaters need to inspect vessels for mussels \(7/2/20\)](#)

Boaters going to Lake Berryessa will have their vessels inspected for invasive mussel species. The Solano County Water Agency runs the free Lake Berryessa Mussel Prevention Program in coordination with the U.S. Bureau of Reclamation, concessionaires, and state Department of Fish and Wildlife. It is an effort to keep the destructive zebra and quagga mussels from getting a foothold in the lake.

[These Quebec students are trying to keep invasive zebra mussels out of B.C. Interior lakes \(7/1/20\)](#)

While conservation officers use sniffer dogs to try to stop invasive zebra mussels from contaminating lakes in the Interior, a new tool in the battle to keep B.C. mussel free is being developed in Quebec. A group of Sherbrooke University students are cleaning out boat ballasts to rid them of mussel larvae that might otherwise slip by the sniffer dogs. "This summer we're finalizing the technology," Olivier Liberge, communications manager for Ozero, told iNFOnews.ca. "We want to improve it so it's easier to operate and try to put it all in a trailer to go from municipality to municipality. We hope some municipalities will be interested in buying our system." Ozero was co-founded by the six students who recently won an Okanagan Basin Water Board grant competition.

[Boat inspection keeps invasive species out of Oregon \(6/26/20\)](#)

...Last year, the Brookings inspection station ran from April 16 to after Labor Day, with 2,907 inspections conducted. The Brookings station has the highest rate of non-compliance of all of the Oregon inspection stations. About 45% of boats being transported by the station are not inspected because their owners (or haulers) do not stop, even though required to do so by law...

BALLAST WATER/BIOFOULING

[Cargo Ship and Container Discovered With Potentially Dangerous \[Japanese Gypsy\] Moths \(7/13/20\)](#)

U.S. Customs and Border Protection agriculture specialists reported two incidents of the discovery of highly invasive species of moths on a container and ship arriving in the port of Baltimore, Maryland. Not known to be in the United States, the moths are considered potentially very destructive to trees and plants.

[De Nora aims to expand water treatment portfolio through new entity \(7/6/20\)](#)

De Nora has launched De Nora Marine Technologies LLC to develop advanced water treatment technologies in line with increasingly stringent environmental regulations

MARINE

[Invasive crabs threaten fish and fish habitat on west coast of Vancouver Island \(7/13/20\)](#)

In the waters near Tofino, an alarming number of European green crabs are showing up in traps. “We’ve already caught three green crabs in a place where they’ve never previously been identified before so it’s pretty troubling,” said Josh Temple of the Coastal Restoration Society. Temple has been seeing an increasing number of green crabs showing up in coastal waters.

Related: [‘A grave concern’: European green crabs discovered on Haida Gwaii: Aggressive invasive species discovered in Skidegate Inlet; working group formed to decide next steps \(7/18/20\)](#)

[\[Washington\] Boots on the ground: Local scientists resume modified field work \(7/5/20\)](#)

...For staff of the Samish Natural Resources Department, watching for invasive species is a large focus of field work this summer. Within the past two weeks, staff for the first time this year set and retrieved traps for two of those species: the European green crab and the Asian giant hornet...

[\[Hawaii\] Aggressive seaweed smothers one of world's most remote reefs \(7/9/20\)](#)

Researchers say a recently discovered species of seaweed is killing large patches of coral on once-pristine reefs and is rapidly spreading across one of the most remote and protected ocean environments on earth. A study from the University of Hawaii and others says the seaweed is spreading more rapidly than anything they've seen in the Northwestern Hawaiian Islands, a nature reserve that stretches more than 1,300 miles north of the main Hawaiian Islands.

[Study] Alison R. Sherwood , John M. Huisman, Monica O. Paiano, Taylor M. Williams, Randall K. Kosaki, Celia M. Smith, Louise Giuseffi, Heather L. Spalding. 2020. [Taxonomic determination of the cryptogenic red alga, *Chondria tumulosa* sp. nov., \(Rhodomelaceae, Rhodophyta\) from Papahānaumokuākea Marine National Monument, Hawai‘i, USA: A new species displaying invasive characteristics.](#) PLOSOne. July 7, 2020 <https://doi.org/10.1371/journal.pone.0234358>

A.F.Neves, Clarissa Naveira, Igor Christo Miyahira, Samira G.M. Portugal, Natascha Krepsky, Luciano N.Santos. 2020 [Are invasive species always negative to aquatic ecosystem services? The role of dark false mussel for water quality improvement in a multi-impacted urban coastal lagoon.](#) Water Research. <https://doi.org/10.1016/j.watres.2020.116108>

LeBlanc F, Belliveau V, Watson E, Coomber C, Simard N, DiBacco C, Bernier R, Gagné N (2020) [Environmental DNA \(eDNA\) detection of marine aquatic invasive species \(AIS\) in Eastern Canada using a targeted species-specific qPCR approach.](#) Management of Biological Invasions 11(2): 201–217, <https://doi.org/10.3391/mbi.2020.11.2.03>

AQUACULTURE

[Conservation group challenging Cooke Aquaculture for area leases \(7/15/20\)](#)

As the 15-year leases held by Cooke Aquaculture to operate net pen facilities in Port Angeles Harbor and elsewhere in the Puget Sound approach their expiration date, a conservation group has formally submitted a proposal to lease those same sites themselves and restore them for public use. On Wednesday, Wild Fish Conservancy submitted applications to the Department of Natural Resources and Commissioner of Public Lands Hilary Franz ahead of next year’s expiration of Cooke’s four existing leases on state-owned aquatic lands. Cooke will also have to reapply.

[Lumpfish study counters cleaner fish critics \(7/3/20\)](#)

The efficacy of using lumpfish in net pen salmon farms may have been questioned by a number of academics recently, but a [new review](#) offers strong support for their ability to reduce *Caligus elongatus* numbers on farmed salmon.

[Cermaq to trial closed containment in BC waters \(6/30/20\)](#)

Cermaq Canada is to trial a semi-closed containment system at its British Columbia operations, the first such technology to be deployed outside of Norway.

[AquaBounty Commences Commercial Harvest of Conventional Atlantic Salmon Raised in its Land-based Farm in Indiana \(6/30/20\)](#)

Successful First Harvest Provides Roadmap for Scaling Secure, Domestic Source of Farm-raised Salmon Using Land-based Aquaculture Systems

FISH

[Use of bait and spearfishing for smallmouth bass temporarily allowed on Coquille River system \(7/7/20\)](#)

The use of bait, spears, and spear guns to harvest smallmouth bass is now allowed in Oregon's Coquille River system July 15 through October 31, 2020. The temporary rule aims to reduce impacts of illegally introduced smallmouth bass on native fall chinook salmon. The temporary regulation applies in the mainstem Coquille River and the East, Middle, North, and South forks of the Coquille River. In the South Fork Coquille River, the regulation applies from the mouth to the U.S. Forest Service boundary near Powers.

[\[Montana\] FWP seeks input on North Fork Blackfoot River westslope cutthroat project; online public meeting planned for July 22 \(7/14/20\)](#)

Montana Fish, Wildlife & Parks is seeking input on a proposed fisheries conservation project on the North Fork Blackfoot River that would establish a conservation population of native westslope cutthroat trout upstream of North Fork Falls. FWP will host an online meeting Wednesday, July 22, beginning at 6:30 p.m., to discuss the proposal, answer questions and take comment. The proposal calls for first reducing the number of hybrid trout above North Fork Falls to the extent possible with substance called rotenone. Rotenone is a naturally derived, commonly used substance that is toxic to gill-breathing animals and breaks down quickly following the use of a deactivation agent. The area currently contains hybridized rainbow and cutthroat trout.

[Fishing biologists kept invasive fish species \[common carp\] out of popular south central ND lake \(7/11/20\)](#)

Fisheries biologists were busy this spring keeping invasive fish species out of a popular lake in south central North Dakota. It's hard to imagine only a decade ago, Rice Lake in Emmons County was 20 feet lower than it is today. Rising water this spring caused state Game and Fish Department fisheries crews to act quickly. "We've installed a drop structure on the outlet from Rice Lake. Rice Lake, this spring reached its natural outlet for the first time really since North Dakota was first settled by European settlers. And that presented some problems. Usually more water means good things for fish. But in some cases, the water levels rise too much and can cause some problems by allowing some invasive species to access these lakes," said Paul.

[Something To Carp About: New Efforts To Remove Invasive Fish From Illinois River Underway \(7/2/20\)](#)

For many years there have been a number of fruitless efforts to remove the invasive Asian carp from the Illinois River. But a renewed sense of excitement exists with a new initiative set to open this summer along the riverbank in East Peoria.

Caleb S. Blanton Joshua S. Perkin Nick Menchaca Kristy A. Kollaus. 2020. [A Gap in the Armor: Spearfishing Reduces Biomass of Invasive Suckermouth Armored Catfish](#). Fisheries.

Ivan, L.N., Mason, D.M., Zhang, H. et al. [Potential establishment and ecological effects of bighead and silver carp in a productive embayment of the Laurentian Great Lakes](#). Biol Invasions 22, 2473–2495 (2020). <https://doi.org/10.1007/s10530-020-02263-z>

Bzonek PA, Kim J, Mandrak NE (2020) [Short-term behavioural response of common carp, *Cyprinus carpio*, to acoustic and stroboscopic stimuli](#). Management of Biological Invasions 11(2): 279–292, <https://doi.org/10.3391/mbi.2020.11.2.07>

AQUATIC PLANTS

[WDFW to treat Mattoon Lake near Ellensburg for noxious weeds week of July 20 \(7/16/20\)](#)

The Washington Department of Fish and Wildlife (WDFW) will use herbicide treatments to control noxious weeds at Mattoon Lake in Kittitas County the week of July 20. Treatment work will not impact fishing or other recreation at the lake per the herbicide labels and the Washington Department of Ecology permit requirements. Signs will be posted at the lake advising visitors of the treatment work. The western end of Mattoon Lake will be treated with the herbicide ProcellaCOR to control Eurasian and hybrid watermilfoils. WDFW will also treat the lake shoreline with the herbicide imazapyr to control yellow flag iris, an emergent plant that impedes casting access for anglers.

[New case of invasive plant infestation in Texas causes concern for Arkansas fisheries biologists \(7/9/20\)](#)

Another documented report of giant salvinia along the Texas-Arkansas border was confirmed by Texas Parks and Wildlife last week, creating additional concern from Arkansas Game and Fish Commission biologists about the nuisance plant's spread into The Natural State.

FRESHWATER

[\[California\] Egads! Crawdads \(7/12/20\)](#)

The signal crayfish is a prolific crustacean found in Lake County. Many of the crawdads that you find in our lakes and streams today are descendants of those brought in around 1912 from Oregon and Washington. Some species may have made their way west from southern states during the Gold Rush era when miners had a hankering for some vittles from home.

[Least Wanted: Potential Great Lakes invasive species are little known but still a big problem \(6/25/20\)](#)

In May, the self-cloning marbled crayfish clawed Michigan and regional headlines by officially becoming an outlaw. And even though the little bugger—a popular species for aquarium aficionados—hasn't committed any offenses in Michigan yet, wildlife authorities are hoping to stay one step ahead of the critters. And the same goes for many others.

Savaya A, De Leo G, Aalto E, Levy T, Rosen O, Manor R, Aflalo ED, Tricarico E, Sagi A (2020) [The IAG gene in the invasive crayfish *Procambarus clarkii* – towards sex manipulations for biocontrol and aquaculture](#). Management of Biological Invasions 11(2): 237–258, <https://doi.org/10.3391/mbi.2020.11.2.05>

Fredricks KT, Tix JA, Smerud JR, Cupp AR (2020) [Laboratory trials to evaluate carbon dioxide as a potential behavioral control method for invasive red swamp \(*Procambarus clarkii*\) and rusty crayfish \(*Faxonius rusticus*\)](#). Management of Biological Invasions 11(2): 259–278, <https://doi.org/10.3391/mbi.2020.11.2.06>

CLIMATE CHANGE

[Climate warming increases Asian carp threat to Lake Michigan by offsetting quagga mussel 'ecological barrier' \(7/7/2020\)](#)

The ongoing warming of Lake Michigan increases its susceptibility to Asian carp, in part by reducing the capacity of quagga mussels to act as an ecological barrier against the voracious algae-eating fish, according to a new [University of Michigan-led study](#). Asian carp and the trillions of quagga mussels that carpet the bottom of Lake Michigan would compete for the same food—algae and other types of plankton. Some Great Lakes researchers have suggested that the fingernail-size mollusks could help prevent the invasive fish from gaining a foothold.

OTHER

Brunner, J.L. [Pooled samples and eDNA-based detection can facilitate the “clean trade” of aquatic animals](#). Sci Rep 10, 10280 (2020). <https://doi.org/10.1038/s41598-020-66280-7>

The regional and international trade of live animals facilitates the movement, spillover, and emergence of zoonotic and epizootic pathogens around the world. Detecting pathogens in trade is critical for preventing their continued movement and introduction but screening a sufficient fraction to ensure rare infections are detected is simply infeasible for many taxa and settings because of the vast numbers of animals involved—hundreds of millions of live animals are imported into the U.S.A. alone every year. Batch processing pools of individual samples or using environmental DNA (eDNA)—the

genetic material shed into an organism's environment—collected from whole consignments of animals may substantially reduce the time and cost associated with pathogen surveillance. Both approaches, however, lack a framework with which to determine sampling requirements and interpret results. Here I present formulae for pooled individual samples (e.g. swabs) and eDNA samples collected from finite populations and discuss key assumptions and considerations for their use with a focus on detecting *Batrachochytrium salamandrivorans*, an emerging pathogen that threatens global salamander diversity. While empirical validation is key, these formulae illustrate the potential for eDNA-based detection in particular to reduce sample sizes and help bring clean trade into reach for a greater number of taxa, places, and contexts.

[International team of scientists warns of increasing threats posed by invasive species \(6/26/20\)](#)

In a new study, scientists from around the world -- including a professor at the University of Rhode Island -- warn that the threats posed by invasive alien species are increasing. They say that urgent action is required to prevent, detect and control invaders at both local and global levels. [\[Full Paper\]](#)

Funk, J.L., Parker, I.M., Matzek, V. et al. [Keys to enhancing the value of invasion ecology research for management](#). Biol Invasions 22, 2431–2445 (2020). <https://doi.org/10.1007/s10530-020-02267-9> [\$]

JOBS/GRANTS

[Tahoe Regional Planning Agency: Environmental Improvement Program, Aquatic Invasive Species REQUEST FOR PROPOSALS\(RFP\) Taylor Tallac Restoration, Project RFP #2100015](#)

Deadline for Proposal Submissions: August 6, 2020

Project Description: The Taylor and Tallac Restoration project area is characterized by a variety of sensitive habitats (e.g., barrier beaches, wetlands, meadows, stream channels) that have been adversely affected by historical grazing, recreation infrastructure construction, erosion and the spread of aquatic invasive weeds. The degraded hydrologic condition has promoted the introduction of aquatic invasive weeds to these creeks and marshes that threatens native species and alters the natural ecosystem of the project area. The presence of aquatic invasive weeds in the swale, marsh, and creek habitats is a primary driver of the proposed restoration. The containment and localized eradication of aquatic invasive weeds in the Taylor and Tallac Creek watershed is the first phase in a larger, comprehensive Taylor and Tallac Restoration Project. Project objectives include containing and eradicating aquatic invasive weed species including Eurasian watermilfoil (EWM) and curly-leaf pondweed in Taylor and Tallac marsh and creek systems.

The Utah Department of Natural Resources, Division of Wildlife Resources:

- [Wildlife Technician I \(Aquatic Invasive Species\)](#)

UT Division
Lake Powell, UT, US

- [Wildlife Technician I \(Aquatic Invasive Species\)](#)
UT Division
Utah Lake, UT, US
- [Wildlife Technician I \(Aquatic Invasive Species\)](#)
UT Division
Heber City, UT, US
- [Wildlife Technician II \(Aquatic Invasive Species\)](#)
UT Division
Logan, UT, US

U.S Fish and Wildlife Service – Whitney Genetics Laboratory Project Leader position

Closes: July 29, 2020

The links are:

<https://www.usajobs.gov/GetJob/ViewDetails/573205100>

<https://www.usajobs.gov/GetJob/ViewDetails/573204800>

This position is a Supervisory Geneticist, GS- 0440-13 working in Onalaska, WI, for the R3-Whitney Genetics Laboratory located at the Midwest Fisheries Center. The job is located in beautiful LaCrosse, Wisconsin on the Mississippi River and is part of the Midwest Fisheries Center Complex (with the LaCrosse FWCO and LaCrosse Fish Health Center).

Duties include:

Direct supervision of the technical and professional staff in the Whitney Genetics Laboratory.

Serves as the region's technical expert on genetics programs for USFWS. Works closely with supervisor, regional leadership, and the eDNA Coordinator to manage genetics projects across multiple sub-basins across regions. Works with others on the national coordination of eDNA management. Advises on changes to the USFWS eDNA Program.

USAJOBS:

[USFWS Wildlife Biologist GS9](#) **Open & closing dates 07/09/2020 to 07/22/2020** This vacancy announcement is part of the U.S. Fish & Wildlife Service coordinated advertisement for 5 positions as a Wildlife Biologist, GS- 0486-9 working in one of the locations listed below:

Cambridge, MD

Annapolis, MD

Rock Hall, MD

Midway Atoll

Bismarck, ND (preferred, but location negotiable)

[California Sea Grant State Fellowship 2021](#)

The California Sea Grant College Program is soliciting applications for the 2021 California State Fellows Program. The State Fellows Program provides a unique educational opportunity for graduate students who are interested in marine, coastal, and/or watershed resources and in the decisions affecting those resources in California. Modeled after the highly successful Knauss Marine Policy Fellowship Program, the State Fellows Program provides an opportunity to acquire hands-on experience in the planning, implementation and management of marine, coastal, and/or watershed resource policies and programs in the state of California. The program matches highly motivated and qualified graduate students and recent graduates with hosts in state, federal or municipal agencies in California for a 12-month paid fellowship (\$4,022 per month). **Application Deadline: July 27, 2020**

FEDERAL/STATE/PROVINCIAL LEGISLATION, RULES, ACTIONS

[State/Province](#)

[Judicial](#)

[Sea Grant Law Center's Summary and Analysis of Ruling Nationwide Permit 48 in Washington State. \(7/6/20\)](#)

On June 11, 2020, Judge Robert S. Lasnik of the U.S. District Court for the Western District of Washington issued a court order that vacated (i.e., set aside) Nationwide Permit 48 in the State of Washington. Nationwide Permit 48 streamlines the permitting process for certain **commercial shellfish aquaculture** activities by eliminating the need for operators to apply for individual permits. This decision, therefore, has profound implications for shellfish aquaculture operations in the Evergreen State and across the nation.

[Executive](#)

[Uniform National Discharge Standards for Vessels of the Armed Forces— Phase II Batch Two](#)

AGENCY: Environmental Protection Agency and Department of Defense.
40 CFR Part 1700 [EPA–HQ–OW–2016–0351; FRL–10009–46– OW] RIN 2040–AF53
ACTION: Final rule.

Congressional

Recovering America's Wildlife Act Passes House as Amendment to Environment and Transportation Bill (07/01/20)

[HR 2](#) “Moving Forward Act”. Was passed by the House of Representatives on 07/01/20 by a vote Yeas and Nays: 233 - 188 ([Roll no. 138](#)). It’s [proponents](#) say that the Moving Forward Act, “creates millions of jobs by investing in our Nation's roads, bridges, transit, rail, schools, housing, broadband, clean energy future, and more.” An [amendment](#) to the bill included [H.R. 3742](#), the *Recovering America’s Wildlife Act*:

PAGE 16: 9. Dingell (MI), Fortenberry (NE), Raskin (MD): Adds the bipartisan natural infrastructure bill H.R. 3742, the Recovering America’s Wildlife Act, which will enable States, Territories, and Tribes to complete habitat restoration and natural infrastructure projects, specified in Congressionally-mandated Wildlife Action Plans, to re-cover more than 12,000 wildlife, fish, and plant species of greatest conservation need, build recreational and educational infrastructure, and bolster community resilience through natural defenses.

As a reminder on benefits to invasive species management in HR 3742:

Title I—Wildlife Conservation And Restoration Sec. 101. Wildlife Conservation And Restoration Subaccount. 11(a) In General. Section 3 of the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669b) is amended in subsection (c)—

“(1) ESTABLISHMENT OF SUBACCOUNT.

“(C) DEPOSITS INTO SUBACCOUNT. Beginning in fiscal year 2020, the Secretary of the Treasury shall transfer **\$1,300,000,000** from the general fund of the treasury each fiscal year to the fund for deposit in the Subaccount.

“(4) USE OF FUNDS.—Funds apportioned from the Subaccount—

“(F) **may be used to manage, control, and prevent invasive and nuisance species**, disease, and other risks to species of greatest conservation need; and

NOW WHAT:

According to the [Wildlife Society](#):

“House passage of the Recovering America’s Wildlife Act is a victory for proactive fish and wildlife conservation and the professionals tasked with conserving the full diversity of wildlife,” said Caroline Murphy, The Wildlife Society’s government relations managers. “The Wildlife Society thanks our champions in the House for recognizing the benefits of this legislation in empowering wildlife professionals to conserve at-risk species.” Language authorizing the Recovering America’s Wildlife Act was included as part of a package of amendments to the Moving Forward Act (H.R. 2), the House’s \$1.5

trillion transportation and infrastructure package. Because of the nature of the legislative package, the authorizing language does not include dedicated, mandatory funding — a key piece of the original Recovering America’s Wildlife Act. TWS and other partners in the [Alliance for America’s Fish and Wildlife](#) will now focus on adding dedicated, permanent funding back into the bill as it continues to advance in Congress..... “We look forward to working with our partners and seeing this bill approved by the Senate,” Murphy said. [Note: A RAWA like bill has not been introduced in the Senate]

An AIS federal legislative table is posted on the web on the www.westernais.org website. Go to <https://www.westernais.org/regulations> and scroll all the way to the bottom

WRDA Reauthorization

[Bipartisan WRDA 2020 Voted Favorably Out of Committee, Heads to House Floor for a Vote \(7/15/20\)](#)

Washington, D.C. - Today, the House Committee on Transportation and Infrastructure voted the Water Resources Development Act of 2020 (WRDA 2020, [H.R.7575](#)) favorably out of Committee, where it now heads to the House Floor for a vote. This legislation provides authority for the U.S. Army Corps of Engineers (Corps) to carry out water resources development projects and studies, as well as policy direction to the Corps for implementation of its Civil Works missions.

Background on WRDA can be found [HERE](#). AIS language in the [bill](#) is as follows:

PAGE 128: SEC. 305. *Watercraft Inspection Stations*

Section 104(d)(1)(A) of the River and Harbor Act of 1958 (33 U.S.C. 610(d)(1)(A)) is amended— (1) in clause (ii), by striking “; and” and inserting a semicolon; (2) in clause (iii), by striking “**Arizona River Basins.**” and inserting “**Arkansas River Basins; and**”; and (3) by adding at the end the following: “(iv) to protect the **Russian River Basin, California.**”.

PAGE 56: Sec. 129. *Update on Invasive Species Policy Guidance. (A) In General*

The Secretary shall periodically update the Invasive Species Policy Guidance, developed under section 104 of the River and Harbor Act of 1958 (33 U.S.C. 610) and the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (16 U.S.C. 4701 et seq.), in accordance with the most recent National Invasive Species Council Management Plan developed pursuant to Executive Order 13112. (b) INCLUSION.—The Secretary may include in the 14updated guidance invasive species specific efforts at federally authorized water resources development projects lo-16cated in— (1) high-altitude lakes; and (2) the Tennessee and Cumberland River basins.

Now What: The House is expected to quickly take up the traditionally popular package once it clears T&I, with Majority Leader Steny Hoyer teeing it up for consideration during **the week of**

July 27. [Source: Reprinted from E&E NEWS PM, 7/15/20, with permission from Environment & Energy Publishing, www.eenews.net; 202/628-6500].

REPORT language for HR 7575 has not yet been released...stay tuned

SENATE: The Senate Environment and Public Works Committee in May approved two bipartisan water bills, including [S.3591 - America's Water Infrastructure Act of 2020](#). The Senate bill would provide \$17 billion in new authorization for EPA and Army Corps projects and programs, and calls for deepening ports, maintaining navigability of inland waterways, fixing aging dams and irrigation systems, and upgrading wastewater systems across the nation. For AIS related sections of the [S.3591](#) see the [May 4 AIS News](#).

Related

[U.S. House panel backs Asian carp barrier project \(7/15/20\)](#)

The transportation and infrastructure committee of the U.S. House of Representatives on Wednesday passed legislation to build a system to prevent Asian carp from penetrating the Brandon Road Lock and Dam in Illinois and entering the Great Lakes.

APPROPRIATIONS

NOAA

[Appropriations Committee Approves Fiscal Year 2021 Commerce-Justice-Science Funding Bill \(7/14/20\)](#)

The House Appropriations Committee today approved the fiscal year 2021 Commerce, Justice, Science, and Related Agencies bill [[H.R.7667](#)] on a vote of 30 to 22. The bill funds the Departments of Commerce and Justice, the National Aeronautics and Space Administration (NASA), the National Science Foundation (NSF), and other related agencies.

AIS provisions can be found in the [REPORT](#) language and is summarized below.

Page 37: Lionfish.—The Committee encourages NOAA to award competitive grants to address invasive Lionfish in the Atlantic Ocean and Gulf of Mexico.

Page 51:Regional Biosecurity Plan.—The Department shall continue to submit a report alongside its annual budget justifications describing the activities of the Department during the prior fiscal year to implement the Regional Biosecurity Plan for Micronesia and Hawaii—a strategic plan developed jointly by the Department and other Federal and non-Federal entities to prevent and control the introduction of invasive species in the U.S. Pacific region. The re-port shall include an update of the Departmental activities accomplished in implementation of the plan and next steps and planned activities for further execution of the plan, including estimates of funding that will be obligated towards the implementation and future year requirements.

Interior- Environment

[Appropriations Committee Approves Fiscal Year 2021 Interior-Environment Funding Bill](#) (7/10/20)

The House Appropriations Committee today approved the fiscal year 2021 Interior, Environment, and Related Agencies bill on a vote of 30 to 19. ([H.R. 7612](#)). AIS provisions can be found in the [report language](#) and is summarized below.

United States Fish And Wildlife Service

Page 20: *Wildlife and Habitat Management*

The recommendation includes \$243,461,000, \$4,849,000 above the enacted level and \$6,004,000 below the budget request. The Committee does not support the proposed increases or reductions in the budget request except for fixed costs and the ethics transfer and provides an increase of \$2,000,000 over the enacted level for Invasive Species Strike Teams. In fiscal year 2020, the Service strategically funded 12 Invasive Species Strike Teams spread across the Refuge System, including one team dedicated to the Pacific Islands, to focus on early detection and rapid response.

Page 27: *USFWS - Aquatic Invasive Species*

The recommendation includes \$40,576,000, of which no less than \$2,834,000 is to help States implement plans required by the National Invasive Species Act (NISA); \$1,566,000 is for NISA coordination; \$4,088,000 is to implement subsection 5(d)(2) of the Lake Tahoe Restoration Act; \$25,000,000 is for controlling Asian carp as outlined in the Explanatory Statement accompanying H.R. 1865, the Further Consolidated Appropriations Act, 2020; \$1,011,000 is for Sea Lamprey administration costs; and \$3,000,000 is to prevent the spread of quagga and zebra mussels in the West. Of the amount recommended for Asian carp control and prevention, \$3,000,000 is to expand and perfect the combined use of contract fishing and deterrents to extirpate Asian carp, including grass carp, where already established, pursuant to individual State laws and regulations and as called for in management plans to prevent a sustainable population from establishing in the Great Lakes. Contract fishing has proven to be an extremely effective management tool and it is not meant to develop a sustainable commercial fishery. The Service shall continue to work with its State partners to gather data to analyze the impacts of contract fishing to control abundance and movement of Asian carp, including grass carp, and to make sure adequate resources are provided to support the efforts of the Asian Carp Regional Coordinating Committee. The Service is encouraged to pursue technologies to aid in the elimination, mitigation, or control of aquatic nuisance species and invasive species that do not result in the addition of chemical agents to the ecosystem that can lead to harmful by-products such as algal blooms.

National Park Service

Page 32: *Resource Stewardship*

The Committee recommends \$366,674,000 for resource stewardship. The recommendation includes \$3,925,000 for the Partnership Wild & Scenic Rivers program, \$3,000,000 for Quagga and Zebra Mussel Programs, and \$800,000 for Cave and Karst Ecosystem Research. The recommendation includes a program increase of \$800,000 for the National Trails System. Additionally, the recommendation provides \$1,500,000 for the national networks, which include the National Underground Railroad Network to Freedom, the African American Civil Rights Network, the Reconstruction Era National Historic Network, and the World War II Heritage Cities Network.

Page 35: *Glen Canyon National Recreation Area*

The significant threat that quagga mussel infestations pose to the health of the Colorado River ecosystem and its tributaries is concerning. There is a need for adequate monitoring of recreational boating activities carried out subsequent to leaving the National Recreation Area. The Service is encouraged to consider a pilot program at Glen Canyon National Recreation Area to assist in better monitoring and cleaning of recreational boating.

United States Geological Survey

Page 44: *Biological Threats and Invasive Species Research Program*

The recommendation renames the proposed Biological Threats Research Program to the Biological Threats and Invasive Species Research Program to provide more clarity about the research funded in this program. The recommendation provides \$37,666,000, \$9,125,000 above the request. This funding level provides \$10,620,000 to continue critical research for Asian Carp, including \$3,000,000 for research to contain or eradicate grass carp such as the Survey's ongoing work to develop species-specific toxicants for grass carp. The recommendation provides \$2,720,000, \$1,000,000 above the enacted level, for research on chronic wasting disease in wild populations of cervids. The Survey should continue to collaborate with partners, including institutions of higher education that have expertise in biology, ecology, and epidemiology of prion diseases, to develop early detection tools and compounds to disrupt transmission of the disease. Funding for research on Coral Disease, White Nose Syndrome, and Greater Everglades Invasive species is maintained at the enacted level. The Survey is encouraged to continue to inform monitoring and management efforts for the Emerald Ash Borer.

Page 48: The Water Resources Research Act was designed to provide more effective coordination of the Nation's water research by establishing Water Resources Research Institutes at universities in each State, territory, and the District of Columbia. These institutes provide vital support to stakeholders, States, and Federal agencies for long term water planning, policy development, and resource management. The recommendation does not accept the proposed elimination of funding for this program and provides \$11,000,000, \$1,000,000 above the enacted level. Research initiated in fiscal year 2020

on aquatic invasive species in the Upper Mississippi River region to address a critical need for multi-state research is maintained at no less than the enacted level. The Committee encourages the continuation of the development of multi-state research teams to coordinate needed research for aquatic invasive species in the basin and requests a briefing on the aquatic invasive species hydrologic research proposals that are approved. The Survey is encouraged to use the additional resources provided in the recommendation to support PFAS research.

Bureau Of Indian Affairs Operation Of Indian Programs

Page 58: *Agriculture and Range Program*

The recommendation includes \$36,215,000 for the Agriculture and Range Program, \$901,000 above the enacted level and \$10,795,000 above to the budget request. Within this amount, the Committee recommends \$10,842,000 for Invasive Species inclusive of fixed costs as requested and \$25,373,000 for Agriculture Program (TPA). The Committee rejects the proposed FTE decrease.

Office of The Secretary Departmental Operations (Including Transfer Of Funds)

Page 73: *Insular Affairs Assistance to Territories: Biosecurity Report*

The Department is directed to include in its annual budget submission an updated report describing the activities of the Department during the preceding fiscal year to implement the Regional Biosecurity Plan for Micronesia and Hawaii, as developed jointly by the Department and other Federal and non-Federal entities to prevent and control the introduction of invasive species in the United States Pacific Region. The report shall also include next steps and planned activities of the Department for further implementation of the plan, including estimates of additional funding to be used or needed for such next steps and planned activities.

Page 77: *Working Capital Fund*

The Committee recommends \$64,798,000 for the Working Capital Fund appropriation, \$9,063,000 above the enacted level and \$13,715,000 below the budget request. The recommendation adopts the proposed increases for cybersecurity and FBMS activities. Within available funds the Committee directs that \$1,200,000 be available for the Invasive Species Council.

Title III —Environmental Protection Agency

Page 91: *Great Lakes Restoration Initiative*

The Committee recommends \$335,000,000 for the Great Lakes Restoration Initiative (GLRI), \$15,000,000 above the enacted level and the budget request. Such projects include, but are not limited to, remediating and delisting Areas of Concern, reducing nutrient runoff, preventing and controlling invasive species, and strategies and techniques

which restore and protect streambanks, and natural coastlines and shorelines in order to enhance riparian habitats, improve water quality, and increase coast-al resiliency.

Page 92: *Great Lakes and Lake Champlain Invasive Species Program*

The Committee looks forward to reviewing the plan directed in P.L. 116–94 on the Agency’s expected actions in fiscal year 2020 to implement the Great Lakes and Lake Champlain Invasive Species Program as authorized by the Vessel Incident Discharge Act (P.L. 115–282). In fiscal year 2021, the Committee directs the Agency to use funds from the appropriate Geographic Program to build on these implementation efforts to reduce the risk of introduction of invasive species into the Great Lakes and Lake Champlain. The Agency is directed to include details of these amounts as part of the Agency’s operating plan.

Title III—Related Agencies

Department Of Agriculture

Office Of The Under Secretary For Natural Resources And environment

Forest And Rangeland Research

Page 114: The Committee notes the interest of Members of Congress, States, and stakeholders in funding specific research laboratories, programs, and projects, including those noted below. This report emphasizes some of the research activities of importance to the Committee and expects the Forest Service to develop a research program that reflects these priorities as well as the other activities and programs most critical to forest health, particularly with respect to climate change adaption, preventing the spread of disease and invasive species, and watershed improvement.

Related: [House to Consider Four-Bill Appropriations Minibus Next Week \(7/16/20\)](#)

NOW WHAT: The House hopes to approve its eight remaining spending bills, including the Energy-Water plan, before leaving for August recess early next month. The Senate, meanwhile, has yet to mark up any spending bills, amid an impasse over a truce to limit policy provisions. Congress is unlikely to have many spending bills signed into law before the new fiscal year begins on Oct. 1. As a result, lawmakers will have to pass a stopgap measure, known as a continuing resolution, to keep agencies funded at current levels and avert a shutdown. [Source: Reprinted from *E&E Daily*, 7/20/20, with permission from *Environment & Energy Publishing*, www.eenews.net; 202/628-6500].

APPROPRIATIONS

Energy and Water (WRDA/USACE)

HOUSE

[Appropriations Committee Approves Fiscal Year 2021 Energy and Water Development Funding Bill \(7/13/20\)](#)

WASHINGTON — The House Appropriations Committee today approved the fiscal year 2021 Energy and Water Development and Related Agencies bill on a vote of 30 to 21. The legislation funds the U.S. Army Corps of Engineers, Department of the Interior programs, the Department of Energy, and other related agencies.

AIS provision in the bill from the [REPORT](#) language are as follows:

PAGE 17: *Asian Carp*

The Great Lakes and Mississippi River Interbasin Study was authorized by Congress under Section 3061(d) of the Water Resources Development Act of 2007 (Public Law 110–114). The Committee notes that the Brandon Road Lock and Dam in Joliet, Illinois, is critical to keeping Asian carp out of the Chicago Area Waterways System, which is the only continuous connection between the Great Lakes and Mississippi River basins. The Committee appreciates that the project received a positive recommendation in the Report of the Chief of Engineers.

As the Corps prioritizes projects, it shall consider critical projects to prevent the spread of invasive species. The Corps is reminded that this project is eligible to compete for additional funding within the Investigations account. The Corps shall expeditiously work with the non-federal sponsor to execute a design agreement to commence preconstruction engineering and design. The Corps is directed to provide to the Committee quarterly updates on the progress and status of efforts to prevent the further spread of Asian carp, including the Brandon Road Recommended Plan; design agreement; the location and density of carp populations; the use of emergency procedures previously authorized by Congress; and the development, consideration, and implementation of new technological and structural countermeasures. The Corps shall continue to collaborate at levels commensurate with previous years with the U.S. Coast Guard, the U.S. Fish and Wildlife Service, the State of Illinois, and members of the Asian Carp Regional Coordinating Committee, including identifying navigation protocols that would be beneficial or effective in reducing the risk of vessels inadvertently carrying aquatic invasive species, including Asian carp, through the Brandon Road Lock and Dam in Joliet, Illinois. Any findings of such an evaluation shall be included in the quarterly briefings to the Committee. The Corps is further directed to implement navigation protocols shown to be effective at reducing the risk of entrainment without jeopardizing the safety of vessels and crews. The Corps and other federal and state agencies are conducting ongoing research on additional potential Asian Carp solutions. The Corps shall brief the Committee not later than 30 days after enactment of this Act on such navigation protocols and potential solutions.

PAGE 33: *Aquatic Plant Control Program*

Of the additional funding provided for the Aquatic Plant Control Program, \$15,000,000 shall be for watercraft inspection stations, as authorized in section 104 of the River and Harbor Act of 1958, equally distributed to carry out subsections (d)(1)(A)(i), (d)(1)(A)(ii), and (d)(1)(A)(iii), and \$3,000,000 shall be for related monitoring. Additional funding is also provided for nationwide research and development to address invasive aquatic plants, and activities for monitoring, surveys, and control of flowering rush and hydrilla **verticillate**. [Editor's note: Should read *verticillata*] The Committee recognizes that mechanical harvesting technologies and other non-chemical methods can be used to combat the spread invasive aquatic plant species. The Committee directs the Corps to investigate the use of mechanical harvesting technologies to control invasive species and to brief the Committee not later than 90 days after enactment of this Act on its findings.

PAGE 63: *Aquatic Nuisance Research Program*

The recommendation pro-vides \$3,000,000 to supplement activities related to harmful algal blooms and directs the Corps to target freshwater ecosystems. The recommendation also provides \$3,000,000 to supplement activities related to harmful algal blooms, and the Committee directs the Corps to work collaboratively with appropriate university partners to address harmful algal blooms formation, detection, and remediation to enhance protection of vital U.S. water resources. The Committee is aware of the need to develop next generation ecological models to maintain inland and intracoastal waterways and provides \$7,325,000 for this purpose. Within additional funds provided, the Corps is encouraged to support research that will identify and develop improved strategies for early detection, prevention, and management techniques and procedures to reduce the occurrence and impacts of harmful algal blooms in the nation's water resources. The Corps shall submit to the Committee not later than 60 days after enactment of this Act a report on these activities. The Committee encourages the Corps to facilitate collaboration with university partners to assess the impacts of environmental triggers in riverine ecosystems to advance prediction, avoidance, and remediation efforts for harmful algal blooms.

PAGE 64: *Asian Carp Dispersal Barrier*

The Committee notes the Asian Carp dispersal barrier at Des Plaines River is a key control mechanism for protecting the Great Lakes from the invasive bighead Asian carp. Over the last decade, the Corps has invested significant resources in building a permanent electric barrier on the Chicago Area Waterways System. However, in the fiscal year 2020 work plan, funding was not included for the final phase of the project, and the Corps was unable to complete the remaining testing required to bring the barrier online. The Committee notes that ample additional funds have been provided in this account, for which this project can compete. The dispersal barrier is of great importance to the Great Lakes fishery and proceeding through the next phase of construction is a national priority.

TRAININGS, WEBINARS, CONFERENCES AND MEETINGS

Archived Materials

Marine Coatings and Ballast Water Webinar Weeks: The webinars and documents are now available to view on demand [here](#). Please [login](#) to your Riviera account or [register](#) to watch any of our on demand webinars and access premium website features. Also includes [Ballast Water Webinar Week](#)

Events: Webinars, Trainings, Conferences and Meetings

Watercraft Inspection Training

For more information, go to website links or contact Quagga D @ (702)236-3814 or quaggadee@cox.net

Because of concerns due to the rapid spread of COVID-19 upcoming meetings and events listed below may be postponed, cancelled or converted to teleconferencing events. Please check directly with the organizers of these events for the most up-to-date information. Stay at home if you can, wear a mask, and help flatten the curve.

2020

July

The Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS), Aquaculture Team invites you to attend a ZOOM meeting on Monday, July 27 at 3:00 p.m. EDT for an overview of Veterinary Export Health Certification System (VEHCS) specifically for aquatic animal/aquaculture producers, exporters and their veterinarians. Attendees will be provided an opportunity to ask questions.

Meeting URL:

<https://ufl.zoom.us/j/91439255038?pwd=OEFEaFFHazduSGJ6MkpxOGVuVW52Zz09>

Meeting ID: 914 3925 5038

Password: aquatic

August

[2020 105th Ecological Society of America Annual Meeting](#)

Date: Aug 02, 2020 to Aug 07, 2020. **UPDATE:** ESA will be holding a totally virtual Annual Meeting this year from August 3–6 in response to the pandemic. The virtual meeting will provide four days of inspiration and community, an opportunity to focus on your research and your career, and a way to connect with colleagues and leaders from across the field.

<https://www.esa.org/saltlake/>

The Invasive Species Council of BC (ISCBC) [Invasive Species Research Conference 2020](#) - Turning Science into Action, taking place in Kelowna, BC, August 18 - 20, 2020. →

Unfortunately, we are postponing until 2021, but are hosting small virtual event focused on research. → We have opened registration for our FREE short virtual invasive species research event to be held via Zoom on August 19, 2020 from 9am – 12pm PST. The event website:

<https://events.bcinvases.ca/minisymposium/about>

[\[Webinar\] NAISMA: August 19 How Biocontrol Agents are Approved and How to Access Them for Your Invasive Species Management Needs](#)

September

The WRP Virtual Annual Meeting will be held the week of September 14-18. The WRP is reopening the submission period for abstracts. With the virtual format, geographic and financial limitations will have less of an impact on who is able to attend and who can present. There will be four sessions: invertebrates (mussels, crayfish, etc.), coastal issues, invasive fish, and aquatic invasive plants. If you are interested in presenting during one of these sessions, please submit an abstract through the following link:

<https://docs.google.com/forms/d/1RSIPLIFksO9ozbJG4t6THokMX2NbIbrs37BNA-rBbfY/edit>

[Washington Invasive Species Council](#) Meeting Sept 24th Information Coming Soon.

[Webinar] NAISMA: [September 16 – Ken Donnelly, Beyond Attitude Consulting: Leaps and Bounds – How to jump over the barriers to preventing the spread of invasive species](#)

October

[Virtual NAISMA Conference: Transboundary Cooperation](#) October 6-8, The only invasive species management conference to... Bridge geographic divides between West and East, North and South, land and water, Connect science to action through research, policy, and outreach initiatives and opportunities across North America.

[World Fisheries Congress](#) 11-15 October, 2020 Adelaide, Australia

[2020 15th Annual Biocontrol Industry Meeting](#): Date: Oct 19, 2020 to Oct 21, 2020.

Venue: Congress Center Basel. Location: Basel, Switzerland

Announcing [UMISC 2020 Pathways to Success: Partnerships and Purpose](#)

[Return to top](#)

Oct. 12 - 14, Duluth, MN

[\[Webinar\] NAISMA: October 21 TBA](#)

November

Dear friends of the [Upper Midwest Invasive Species Conference](#), As we make the pivot to an online event this fall, the UMISC Executive Committee decided to adjust our dates to avoid overlap with other relevant conferences and field season. UMISC Online will be held November 2 - November 6, 2020. We are expanding to a whole week to accommodate the breadth of content the UMISC audience expects with sufficient time for breaks and networking. If polls are open on Election Day, there will be extra free-time that day for voting! We are also extending the call for abstracts deadline a final time to **June 19th**.

[\[Webinar\] NAISMA: November 25 TBA](#)

December

[Washington Invasive Species Council Meeting](#) December 10th Information Coming Soon.

[Innovations in Invasive Species Management Conference and Training](#) December 14-17th, 2020, Nashville, TN

2021

May

[International Conference on Marine Bioinvasions XI](#) Annapolis, Maryland, USA, May 10-14, 2021

The Society for the Study of Marine Bioinvasions (SSMB) is excited to invite you to attend the XIth International Conference on Marine Bioinvasions in Annapolis, Maryland, USA. The meeting dates will be May 10-14th, 2021 (including associated activities), and the conference will be hosted by the Smithsonian Environmental Research Center's Marine Invasions Lab. We are actively working with the SSMB Scientific Steering Committee to create a stimulating and productive program. Information on meeting themes, guest speakers, special events, student travel funds, and local attractions will be posted on our website over the coming months:

<http://www.marinebioinvasions.info>

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