

AQUATIC INVASIVE SPECIES NEWS

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SPOTLIGHT:

Scientists are renaming the 'gypsy moth' as part of broader push to root out offensive monikers (7/11/21)

The fluttering bug known as the "gypsy moth" is in the market for a new name after the world's largest organization of insect experts announced it would stop using the moniker because it contains an ethnic slur.

The Entomological Society of America's recent announcement is part of a broader discussion within the scientific community about equity in naming. Ornithologists are grappling with whether to change the names of birds that commemorate enslavers and supremacists. Schools and buildings named after eugenicists are searching for new innovators to claim.

The decision to rename both the "gypsy moth" and the "gypsy ant" coincides with the launch of the organization's Better Common Names Project. Though the change is specific to the society and its publications, it's anticipated to ripple outward.

[cont. reading]

PUBLIC COMMENT

NOAA's Draft Mitigation Policy for Trust Resources Available for Public Comment

NOAA has released its draft <u>Mitigation Policy for Trust Resources (PDF, 170KB)</u> for public comment. The purpose of the draft mitigation policy is to improve conservation of NOAA's trust resources through more effective mitigation of adverse impacts to those trust resources.

NOAA has various authorities to conserve and manage a broad range of fish, wildlife, and cultural "trust" resources. NOAA's management and conservation activities may include mitigation. Mitigation is the practice of avoiding, minimizing, or compensating for impacts resulting from regulated actions or injury to resources such as fish, wildlife, plants, and their habitats. Impacts or injuries for which mitigation may be recommended or required include those resulting from a federal action (such as the issuance of a federal permit) or an injury (such as an oil spill or ship grounding).

The public comment period is extended through July 30, 2021.

Washington Department of Ecology: Marine Finfish Net Pen Guidance

The Department of Ecology is now accepting public comments on draft guidance designed to improve how commercial marine net pens are authorized, overseen, and managed in Washington.

This guidance was developed by the state departments that have a role in authorizing or permitting net pen activities in state inland marine waters: Agriculture, Ecology, Fish and Wildlife, and Natural Resources.

On behalf of this interagency team, we are accepting comments on the draft <u>Guidance for Marine</u>
<u>Net Pen Aquaculture in Washington State: Regulations, Risks and Management.</u>

We are interested in getting your feedback during this comment period. Please note that we have extended the public comment period that began June 1, 2021. We will continue accepting comments through August 5, 2021.

Please visit our Marine Net Pen webpage for additional details.

NOAA Fisheries Seeking Comments on draft Programmatic Environmental Impact Statement (PEIS) for offshore aquaculture in federal waters of the Pacific Islands Region

NOAA Fisheries is seeking comments on a draft Programmatic Environmental Impact Statement (PEIS) evaluating the potential environmental impacts of a management program for offshore aquaculture in federal waters of the Pacific Islands Region. The draft PEIS is available at: https://www.regulations.gov/docket/NOAA-NMFS-2021-0044

The agency is accepting comments through August 5, 2021

Aquaculture plays an important role in the region's and the nation's fisheries, contributing to seafood supply, fostering economic growth and development, restoring fish habitats, and helping preserve indigenous cultural practices.

The draft PEIS analyzes the potential direct, indirect, and cumulative effects of several management alternatives on the human, physical, and biological environment. This is an opportunity for the public to provide input on the environmental analysis and alternatives within the PEIS, which NOAA Fisheries will consider in any final PEIS and within any future management action by NOAA Fisheries and the Western Pacific Fishery Management Council.

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

[Minnesota] Zebra mussels confirmed in Big Lake in Beltrami County (7/9/21)

The Minnesota Department of Natural Resources has confirmed a report of zebra mussels in Big Lake, southeast of Bemidji in Beltrami County.

A Beltrami County aquatic invasive species inspector reported an adult zebra mussel attached to a native mussel near the Big Lake public access. A DNR invasive species specialist found another adult zebra mussel in the same area during a snorkel search.

[Minnesota] Zebra mussels confirmed in Pine Mountain Lake in Cass County (7/2/21)

The Minnesota Department of Natural Resources has confirmed a report of zebra mussels in Pine Mountain Lake, adjacent to Backus in Cass County. A swimmer contacted the DNR after finding a zebra mussel attached to a native mussel on a sandbar along the southern shoreline of the lake. DNR invasive species specialists found three more zebra mussels during a snorkel search in the same area.

[Minnesota] Zebra mussels confirmed in Roe Mine Pit in Crow Wing County (7/2/21)

The Minnesota Department of Natural Resources has confirmed zebra mussels in Roe Mine Pit, near Riverton in Crow Wing County. A property owner contacted the DNR after finding zebra mussels in Roe Mine Pit, which is a 24-acre lake with a public access. Roe Mine Pit is less than 100 feet across Rowe Road from Little Rabbit Lake, where zebra mussels were confirmed in 2006.

[North Dakota] Zebra Mussels Discovered in Twin Lakes (7/5/21)

The North Dakota Game and Fish Department has confirmed the presence of invasive zebra mussels in Twin Lakes, LaMoure County, after a local cabin owner reported adult mussels attached to a floating log over the weekend. Aquatic nuisance species coordinator Ben Holen said subsequent follow-up sampling found a few other zebra mussels attached to woody debris. In addition, Game and Fish Department ANS staff processed plankton tow net samples collected from Twin Lakes June 22, and zebra mussel veligers were detected in those samples indicating a breeding population of mussels within the lake. [USGS NAS]

OTHER AIS

[British Columbia]

Invasive European Green Crab found in Ladysmith harbour (6/23/21)

Dr. Thomas Therriault, a research scientist with the DFO confirmed that the crab found was a European Green Crab. He said that the crab is a large male and although the finding is concerning, there's no evidence to suggest that there's local reproduction of European Green Crabs in Ladysmith.

[Kansas]

Hypophthalmichthys nobilis (Bighead Carp) was found in KDOT East Lake [USGS NAS]

[Minnesota] Starry stonewort confirmed in Pimushe Lake in Beltrami County (7/25/21)

The Minnesota Department of Natural Resources has confirmed the invasive algae starry stonewort in Pimushe Lake, about 20 miles northeast of Bemidji in Beltrami County. Beltrami County Environmental Services contacted the DNR after finding starry stonewort during an early access detection check. The DNR is conducting searches to determine the locations and extent of starry stonewort in the lake.

[Texas] <u>Hypophthalmichthys molitrix</u> (Silver Carp) was found in Choctaw Creek, Grayson TX [<u>USGS NAS</u>]

WATCH LIST

State to trap Asian giant hornets in Whatcom County. Citizen-scientist trappers are welcomed (6/1/21)

Montana Wants Help From Public In Reporting Snapping Turtle Sightings West Of Divide (5/20/21)

DFO wants people to report sightings of European Green Crabs in the Salish Sea. Sightings can be reported to AISPACIFIC@dfo-mpo.gc.ca

DREISSENID MUSSELS

[North Dakota] Zebra mussel incident raises concerns over waterway safety (6/30/21)

An invasive species was recently discovered on a pontoon boat planning to enter Lake Audubon. The incident has raised concerns among environmental advocates about the impact these could have on North Dakota's bodies of water. North Dakota Game & Fish Department removed an infestation of zebra mussels. Those mussels store toxins that can be harmful to birds and fish that eat them and could also be harmful to humans if they were to get into any dam intakes.

Municipal waste water negative for zebra mussels after pet store scare (6/27/21)

After zebra mussels were detected on decorative aquarium moss balls sold in Wyoming pet stores, more than four months of tests have all come back negative for the harmful and invasive mussel. At a Joint Travel, Recreation, Wildlife and Cultural Resources Committee meeting in May, state officials told lawmakers that the state was negative for zebra mussels, but testing of waste water was still ongoing at the time.

Are zebra mussels eating or helping toxic algae? (6/24/21)

While invasive zebra mussels consume small plant-like organisms called phytoplankton, Michigan State University researchers discovered during a long-term study that zebra mussels can actually increase Microcystis, a type of phytoplankton known as "blue-green algae" or cyanobacteria, that forms harmful floating blooms.

Texas lakes infested with invasive zebra mussel species (6/21/21)

Lake Brownwood, Inks Lake, and Medina Lake in the Colorado and San Antonio river basins have been reported to be infested with zebra mussels, according to the Texas Parks and Wildlife Department (TPWD)... "Unfortunately, zebra mussels have now spread to 32 Texas lakes, with 27 fully infested, but there are far more lakes that still haven't been invaded and are at risk," said Brian Van Zee, TPWD Inland Fisheries Regional Director.

BOAT INSPECTION/DECON/TECH NEWS

[Montana] FWP Announces First Annual Watercraft Inspector Appreciation Week (7/9/21)

Watercraft inspection stations are the first line of defense to protect Montana's water from the harmful impacts of aquatic invasive species (AIS). Montana Fish, Wildlife & Parks is introducing the first annual Watercraft Inspector Appreciation Week on August 2-8. Inspectors work at more than 20 roadside watercraft inspection stations located across the state that are operated by FWP and partner organizations.

"Watercraft inspectors are incredibly important to the AIS prevention program," says Tom Woolf, AIS bureau chief for FWP. "They deserve a big thank you for all the long hours they work in remote locations under some extreme weather conditions."

[British Columbia] Public in Columbia Shuswap warned of dangers of invasive mussels (7/6/21) People urged to clean, drain and dry their watercraft, including paddleboards and canoes

Montana inspectors find invasive mussels on record number of boats (7/1/21)

Efforts to prevent invasive aquatic species like zebra and quagga mussels in Montana waters are ramping up as the state just broke the record for the amount of mussel-infested boats intercepted at check stations—and that was before July 1... The 2020 Montana Fish, Wildlife & Parks annual watercraft inspection station report shows those stations intercepted 35 mussel infested boats out of nearly 175,000 checks last year—both all-time records. Before we even made it to July 1, 2021, the state dashboard showed 36 intercepted infested boats.

[California] A new threat to our recreational waters (6/28/21)

We need your help to prevent the introduction and establishment of invasive Quagga and Zebra Mussels in the ponds at Mill Creek County Park. When introduced into water bodies, these invasive mussels have negatively impacted fish and waterfowl populations, increased maintenance costs to drinking water and dam infrastructure, and altered ecosystem functions in detrimental and unmanageable ways. By participating in a 3-minute survey on-line or in person with District staff, you are providing valuable information on how we can prevent the spread of Quagga and Zebra Mussels into Mendocino County. No personal information will be gathered; we are simply interested in your knowledge and perspective about invasive mussels! The event is co-sponsored by the Mendocino County Water Agency, the California Division of Boating and Waterways, and the Mendocino County Resource Conservation District.

[Montana] Mussel Boats #35 And #36 Intercepted At Watercraft Inspection Stations (6/28/21)

On Sunday, June 27, watercraft inspection stations in eastern Montana intercepted two boats entering the state carrying invasive mussels, making it the 35th and 36th mussel-fouled boats intercepted this year. This surpasses the total number of 35 mussel-fouled boats intercepted in 2020.

Shortly after noon on Sunday, the Wibaux station found mussels on a used inboard ballast boat that had been recently purchase in Michigan and was destined for Billings. Inspectors decontaminated the hull and locked the boat. AIS staff in Billings will flush the ballast tanks before removing the lock from the boat. The Wibaux station is operated by the Garfield County Conservation District.

Sunday evening the Hardin inspection station detected mussels on an inboard/outboard motorboat last used in the Lake of the Ozarks in Missouri. The recently purchased boat was being commercially transported to Washington state. Inspectors removed the visible mussels, locked the boat to the trailer and notified officials in Washington for further action. The Hardin station is operated by Montana Fish, Wildlife & Parks.

Yellowstone National Park aquatic invasive species boat inspection finds quagga mussels; Detection prevents mussels entering park waters (6/23/21)

A Yellowstone National Park aquatic invasive species (AIS) boat inspector found quagga mussels on a visitor's boat during a routine AIS inspection Thursday, June 17, at Grant Village. The inspector prevented the contaminated boat from launching. Detection of the mussels

prevented a major potential release of this highly invasive species into Yellowstone waters. If released into park waters, AIS can cause catastrophic changes to the ecosystem.

Zebra mussels are spreading in Central Texas — can dogs help stop them? (6/21/21)

The researchers will use six trained dogs that have shown success in detecting mussels. In addition to sniffing for mussels on boats, the dogs will also smell the waterways themselves. "We really need active screening and active controls, and they very well can work," Hall said. The research project has received a \$233,641 grant from the U.S. Department of the Interior's Fish and Wildlife Service to continue its work.

BALLAST WATER/BIOFOULING

Ballast-water-free LNG bunker/feeder gets double approval (7/9/21)

Paris-headquartered GTT and its partner, China's Hudong Zhonghua Shipbuilding Group Co. (HZ), have received a double Approval in Principle (AiP) from China Classification Society (CCS) and DNV for their "ballast-water-free" LNG bunker & feeder vessel concept. The AiPs recognize the compliance of the design with the rules and codes relating to oceangoing vessels, their construction and equipment. The design is fitted with GTT's membrane system. Most merchant vessels take on ballast water when the bunkers are empty or partially loaded in order to maintain seaworthiness. Even when ballast water is treated, there is a risk of transferring harmful aquatic organisms and pathogens from one area to another. The solution developed by GTT eliminates that risk completely. In addition, removing the ballast water treatment system also reduces the energy consumption and CO2 footprint of the vessel.

BWTS installation clock is ticking (7/6/21)

Shipowners who are dragging their heels on ballast water treatment system installations in hopes of saving money could end up paying a much higher price in the long run. That caution comes from Lianghui Xia, managing director of U.K.-based ship repair and retrofit group Newport Shipping. Xia cites statistics from Clarksons' World Fleet Register that indicate that thus far only 20,483 ships have so far installed or have on order BWT systems mandated by IMO regulations, leaving around 35,000 vessels still without such systems as the clock ticks towards a 2024 compliance deadline.

New alliance could ease ship repair squeeze on ballast water installations (6/30/21)

A strategic alliance between privately owned Norwegian ballast water system manufacturer, Optimarin, and UK-based Newport Shipping could ease pressure on ship operators who have not yet installed ballast water treatment systems (BWTS).

BIO-UV Unveils New Ballast Water Treatment System Series (6/29/21)

BIO UV Group has designed a new series of BIO-SEA ballast water treatment system compatible with flow rate requirements of up to more than 2100m3/h. The new M-Series BWTS incorporates a novel reactor arrangement designed to increase the flow rate capacity of existing technology without the need for any manifolds.

Minister of Transport announces new regulations to help prevent spread of aquatic invasive species in Canada (6/23/21)

Today, the Minister of Transport, the Honourable Omar Alghabra, announced the coming into force of the new <u>Ballast Water Regulations</u> to strengthen existing rules for vessels on international voyages and the introduction of new rules for vessels which remain in Canada and on the Great Lakes. These regulations, which replace the Ballast Water Control and Management Regulations, apply to vessels in Canadian waters and to Canadian vessels anywhere in the world. Related: <u>'Half-Baked' BWTS Regulation To Unfairly Impact Canadian Ship Operators (6/25/21) The EPA must follow Canada's lead and issue new rules for ballast water to protect the Great Lakes (6/30/21)</u>

BIO-UV selected with its partner The Columbia Group, Inc. by the U.S. Navy to equip future U.S. ships with a military version of its BIO SEA ballast water treatment systems (6/22/21)

Until now, military vessels have operated outside the scope of the "USCG Standards for Living Organisms in Ship's Ballast Water Discharged in US Waters" regulation applicable since 2016 and which governs the management of ballast water in American waters. However, future American military vessels will need to be equipped with ballast water treatment systems. Working with The Columbia Group, BIO-UV will design ruggedized ballast water treatment systems, covering ship ballast pump capacities from 300 m3/h up to 1,000 m3/h.

MARINE

Invasive Algae Cleanup Underway in Newport Beach (7/8/21)

An effort to remove and eradicate an invasive algae species from Newport Harbor was underway Thursday. The invasive algae, scientifically known as *Caulerpa prolifera*, was first discovered in the China Cove beach area of Newport Harbor in March. The city has been working since then with multiple federal, state and local agencies to identify the extent of the algae's growth and to develop a removal plan.

Related: Invasive algae found in California threatens food sources for ocean animals (7/9/21)

DNA data and modelling reveal potential spread of invasive species (6/28/21)

Scientists at the University of Southampton have found that a marine invasive species -- a sea squirt that lives on rocky shores -- could spread along 3,500 kilometres of South American coastline if climate change or human activities alter sea conditions.

More intense predation in the tropics can limit marine invasions (6/25/21)

Night and day, oil tankers, yachts and cargo ships stacked with shipping containers ply the 80-kilometer (50-mile) waterway through the jungles of Panama between the Atlantic and the Pacific Ocean: about 40 ships every 24 hours. But even though the Canal is fed by freshwater rivers that empty through the locks on each end, a system that generally prevents fish and smaller marine invertebrates from hopping from ocean to ocean, some still manage to get through,

clinging to the hulls of ships. Other invading species arrive from far-flung ports, dumped with ballast water as ships prepare for transit.

U.S. Fish and Wildlife Service Clamps Down on the Illegal Mitten Crab Trade (6/23/21)

Today, the U.S. Fish and Wildlife Service announced the completion of Operation Mitten Catcher, an international law enforcement investigation that prevented the illegal import of approximately 15,525 live Chinese mitten crabs into the U.S. Mitten crabs are considered a culinary delicacy in Asia and are smuggled into the U.S. in mass quantities in preparation for Chinese New Year and other cultural events. With the assistance of U.S. Customs and Border Protection and Environment and Climate Change Canada, Service wildlife inspectors seized the crabs at U.S. express hubs and major international airports. Smugglers had falsely declared the shipments as 100% polyester gowns, plastic molds, plastic storage bags and other commercial products.

AQUACULTURE

Fish farm loses bid for application to move young salmon into net pens (7/5/21)

Environmental groups are cheering a Federal Court decision dismissing a bid by fish farming company Cermaq Canada to have its application to transfer young salmon into net pens in the Discovery Islands reconsidered.

FISH

Illinois Researchers Using Image Recognition to Manage Invasive Asian Carp (7/8/21)

Fish and wildlife researchers are testing new image recognition technology on the Illinois River to manage invasive carp species.

The system is located along the Illinois River, at the Nature Conservancy's Emiquon Preserve in the Emiquon National Wildlife Refuge near Lewistown in Fulton County.

The system first attracts fish onto a device called a fish ladder, using water flow, temperature, food, or other attractants.

Then, the fish are taken through a scanner that captures up to 18 pictures of each one in less than a second, according to Jim Lamer, one of the project's collaborators and a river ecologist with the Illinois Natural History Survey.

Lamer says computer technology can automatically identify the species of each fish and sort it accordingly, as an invasive or native species.

"It's a machine learning process that recognizes the attributes of individual fish species," Lamer says. "The good ones, we can move one way, and the bad ones can go another way."

[Scotland] Anglers on alert for invasive Pacific pink salmon (7/6/21)

Pink salmon are native to Pacific Ocean waters but have spread to parts of northern Europe after being released into rivers in Russia in the 1960s.

"Unprecedented numbers" of the fish were found in Scottish rivers in 2017, and high numbers were again seen in 2019.

The salmon have already been caught this year in the Ness in the Highlands.

Fisheries Management Scotland (FMS) has asked anglers to report where else the fish have been found.

Barkley Carp Barrier Has Positive Preliminary Results (7/2/21)

Preliminary test results suggest a bio-acoustic fish fence (BAFF) installed at Barkley Dam in November 2019 is deterring the movement of Asian carp from the Cumberland River into Lake Barkley. Lyon County (Ky.) Judge-Executive Wade White announced in June that a report he received from U.S. Fish and Wildlife Service (USFWS) Midwest Fisheries Center Director Teresa D. Lewis, Ph.D., indicated promising results.

Of the 254 silver carp tagged in the area during a study period from November 1, 2020, through February 13, 2021, 57 fish crossed the BAFF when it was turned off. Only four crossed it while the BAFF was on. Additionally, she said, the agency counted 3,181 times silver carp approached the BAFF when it was off but only 612 times when it was on, "suggesting possible avoidance behavior when the system is on."

"This news is promising and a critical first step in understanding the technology, but more time is needed to complete the study," Lewis said in the report to White. "We still need to observe the effects on fish behavior over different seasons of the year and over longer periods of time to determine if they become acclimated to the deterrent. We will also be working with our partners to tag more silver carp to ensure we have a large sample size and statistically valid results."

[Tennessee] Asian carp task force working on strategies (6/24/21)

Asian carp — do we try to figure out their reproductive patterns? Do we try to turn them into a popular human food? Or do we just try to block them from being in our backyard? Those are all questions confronting Tennessee's Asian Carp Advisory Commission, which had a meeting Thursday morning in Henry County at the Holly Fork Shooting Complex. That group was created last September through an executive order from Gov. Bill Lee and tasked with studying the problems caused by the invasive Asian carp species of fish and hopefully devising plans to address those problems. About 25 members of the public attended the meeting to hear the panel, led by chairman Mike Bell, talk about the progress of some of the plans. Bell is a state senator from the 9th Senatorial District. He represents a portion of southeast Tennessee that includes Chickamauga Lake.

Related: TVA wants to place 10 barriers to stop Asian Carp migration (7/6/21)

AQUATIC PLANTS

[Michigan] Meeting To Highlight Invasive European Frog-Bit Plant (7/8/21)

European frog-bit, an invasive aquatic plant, has been found in 17 stormwater ponds, wetlands and drains in the Novi area. The Oakland County Cooperative Invasive Species Management Area is leading management efforts and seeking permission from people to survey waters on their properties.

While the plant is established along Michigan's east coast, officials say it has only been found in a small number of inland bodies of water, making the Oakland County detection a significant discovery.

Brian K. Ginn, Emma F. S. Dias & Toshia Fleischaker (2021) <u>Trends in submersed aquatic plant communities in a large, inland lake: impacts of an invasion by starry stonewort (*Nitellopsis obtusa*), Lake and Reservoir Management, 37:2, 199-213, DOI: 10.1080/10402381.2020.1859025</u>

FRESHWATER

Washington Post: People dumped their pets into lakes, officials say. Now football-size goldfish are taking over. (7/11/21)

The invasion begins innocently enough: A goldfish paddles the secluded waters of an at-home aquarium, minding its own business, disturbing no native habitats.

The real trouble comes later, when the human who put it there decides it's time for a change. Not wanting to hurt the fish, but not wanting to keep it either, the pet's owner decides to release it into a local lake, pond or waterway. That decision, experts say, is well-meaning but misguided — and potentially harmful.

Officials in Burnsville, a city about 15 miles south of Minneapolis, demonstrated why late last week, when they shared photographs of several massive goldfish that were recovered from a local lake. The discarded pets can swell and wreak havoc, the city warned.

[Colorado] Boulder Will Provoke Creek Closings To Restrict The Unfold Of Invasive Mud Snails And Start Work To Revive Streams (7/10/21)

Beginning Monday 19th July, the Metropolis of Boulder will shut off entry to South Boulder Creek on the South Mesa Trailhead to stop the unfold of an extremely invasive water species in one of the vital numerous creek ecosystems alongside the Entrance Vary.

[New Mexico] Game And Fish: Help Be Part Of The Solution To Invasive Species, Not The Cause... (7/9/21)

New Mexico Department of Game and Fish (NMGF) explains that it's that time of year again when the birds are calling, the sun is warming our hemisphere, the trees are turning green, the smell of cut grass is in the air and the thoughts of fishing, lake trips, hikes and BBQs all play in our heads. It's as if nature is beckoning us to return to the outdoor activities we enjoy with an almost simultaneous hit to all our senses... With that in mind, it seems like a good time to remind everyone venturing out to their favorite waters, whether it is to fish, play or just relax, to be cautious about inadvertently — or for lack of understanding the harm — transferring invasive species into or around the state. It's not something that may come to mind when you head out to wakeboard at Elephant Butte Lake, kayak the Rio Grande or fish at Eagle Nest Lake. However, it is a real concern for the wildlife and their ecosystems that can be devastated by invasive species.

CLIMATE CHANGE

Antarctica Is Warming. Are Invasive Species on the Way? (6/28/21)

Thanks to Antarctica's frigid isolation, the encircling Southern Ocean has been an exception so far. But with the Antarctic region now warming faster than almost anywhere else on Earth, and maritime traffic there on the rise, a team of biologists began investigating an unsettling scenario: could the icy waters soon change enough for a foreign species to flourish there and wreak havoc on the Southern Ocean's "near-pristine marine ecosystems?"

New Study on Climate Change Impacts on Plants Could Lead to Better Conservation Strategies (6/21/21)

The loss of plant species that are especially vulnerable to climate change might lead to bigger problems than previous studies have suggested, according to a new study published in the journal Proceedings of the National Academy of Sciences. If confirmed, the findings can help inform conservation strategies and lead to more accurate predictions about what ecosystems will look like in the future... In the experiment, another critical ecosystem function, the ability to resist invasive species, varied widely from year to year. This suggests it's harder to predict what future ecosystems might look like as climate change continues. "Variability in ecosystem functioning isn't necessarily a bad thing," Zavaleta said. "But it does mean more risk that the system can cross thresholds into a new stable state. For example, you might have heavy rainfall one year, allowing a lot of invasive species to come in and some native species to disappear. Then the next year, when it's dry again, maybe the system doesn't snap back."

OTHER

Biosecurity cameras to help detect foreign invasive species threat (7/5/21)

Cameras able to detect foreign pests just a few millimetres in size are the latest weapons being used to stop biosecurity threats from entering the country, thanks to new technology coming out of the capital. Machine-learning cameras developed by Canberra-based Trellis Data have been used at Australian ports to help detect invasive species hiding in cargo containers, without having to manually inspect them. The technology has been used as part of a two-week trial by the Department of Agriculture at the Port of Brisbane.

Invasive Cogongrass Confirmed in Arkansas (7/1/21)

The Arkansas Department of Agriculture is notifying the public that a new invasive grass species, Cogongrass, has been confirmed in Arkansas for the first time. For several years botanists and land managers have been on the lookout for Cogongrass (*Imperata cylindrica*) in southern Arkansas. This aggressive species, native to Southeast Asia, has spread rapidly across the Deep South over the past few decades. Cogongrass is considered one of the worst invasive species in the world, causing both economic and ecological damages that impact forestry, agriculture, rangeland, and natural ecosystems.

Invasive jumping worms leap into Oregon (7/2/21)

Jumping worms, a not-so-nice pest that arrived in the United States in the 1920s as fishing bait and as hitchhikers on imported plants and soils, have vaulted into gardens and nurseries up and down the Willamette Valley corridor.

Latest species to invade Fort Worth is an icky super-long predatory worm (6/29/21)

As if red ants and killer bees aren't bad enough, there's another invasive species in Texas that has slithered into Fort Worth: an extra-long worm — it can be nearly a foot long — disgusting on its own, but also predatory, in that it eats earthworms, which are essential to maintain healthy soil. It's called a hammerhead flatworm, and The Texas Invasive Species Institute confirms that they're starting to be spotted in the Dallas-Fort Worth area.

Ashley Morgan-Olvera, the institute's director of research and outreach, told the Fort Worth Star-Telegram that they've received hundreds of reports of hammerhead flatworms in the past few weeks of heavy rain.

Related: <u>Invasive hammerhead flatworms and black velvet slugs have been seen in San Antonio after recent rains (7/14/21)</u>

[Podcast] Pandemic like a global experiment on how human activity affects wildlife, researcher says

Amanda Bates, an ecologist at Memorial University in Newfoundland and Labrador led an international team of more than 350 researchers in an effort to study how lockdowns have affected the natural world. Bates spoke with CBC's The Current, and the segment featured a clip from Sarah Rang of the Invasive Species Centre on simple steps that can help prevent invasive species spread.

Reactive and Inconsistent Practices Hamstring Efforts to Manage Invasive Plants in the United States (6/23/21)

As summer unfolds, more than 500 species of invasive plants will be taking root in fields, lawns, and gardens across the U.S. As plants continue to move north driven by climate change, the number of invasives will only increase. Unfortunately, inconsistent regulations that vary from state to state means that invasive plants have an edge on our attempts to control them. However, new research from the University of Massachusetts Amherst recently published in the Journal of Applied Ecology suggests that we already have an answer in hand – communication.

'Crazy' ants that kill birds eradicated from Pacific atoll (6/23/21)

An invasive species known as the yellow crazy ant has been eradicated from a remote U.S. atoll in the Pacific. The U.S. Fish and Wildlife Service announced Wednesday that the ants have been successfully removed from Johnston Atoll National Wildlife Refuge. The ants stalk seabirds on the uninhabited atoll and prevented nesting on about 70 acres of land.

Myna offence – Invasive species declared a pest (6/21/21)

This week, Environment Minister Rebecca Vassarotti declared that the Indian or common myna was a prohibited pest animal under the Pest Plants and Animals Act 2005 – an Australian first. "While many people find Indian mynas are a nuisance, they have significant environmental impacts and to the community that we are really concerned about," Ms Vassarotti said.

Invasive jumping worms spreading quickly in Wisconsin (6/21/21)

When you're out in your garden, ecologists want you to look for Amynthas, an earthworm known as jumping worms. They're an invasive species that's spreading quickly around Wisconsin and the U.S. They were first discovered in Wisconsin at the UW-Madison Arboretum in 2013. "We didn't think they were here in the state. (It was) just kind of a random observation and it just launched this whole research program and outreach and communication around this new invasive species," said Brad Herrick.

OUTREACH AND EDUCATION

JOBS/GRANTS

Washington DFW: Fish & Wildlife Biologist 1 - European Green Crab Biologist - Permanent - *07074-21

Salary \$3,294.00 - \$4,286.00 Monthly Location Thurston County – Olympia, WA Job Type Full Time - Permanent Department Dept. of Fish and Wildlife Job Number 2021-07074

Closing 7/19/2021 11:59 PM Pacific

Help defend the marine waters of Washington by leading a team and supporting the Aquatic Invasive Species (AIS) Prevention Program.

No day is ever the same, the ever-changing and ever-evolving nature of this position provides complex deviations on a regular basis.

Come get your hands and boots dirty, join the Aquatic Invasive Species Prevention Program! With that in mind, picture yourself assisting the lead biologist for the European Green Crab (EGC) Project while supervising staff and conducting quality control/quality assurance of data. This is an opportunity to lead a team, set goals, develop strategies, and ensure the program performance objectives are met.

The optimal candidate has applied experience in aquatic invasive species management, principles, and procedures.

The best suited candidate has strong work ethic, the ability to take initiative, work independently, and has excellent inter-personal communication and relationship skills.

We are seeking a candidate who respects and values the opinions of others, creating an inclusive team environment where every member feels they contribute value to the project and WDFW.

USFWS: Inventory & Monitoring Data Manager GS 12 - 5 positions, CO and HI. Closes 07/22/2021

As an Inventory & Monitoring Data Manager your duties will include, but are not limited to, the following:

• Maintain and modify Inventory and Monitoring (I&M) database modules (both geospatial and tabular) to ensure long-term archiving and retrieval of ecological datasets produced by past and forthcoming efforts.

- Develop data management tools, protocols, and procedures to assist Natural Resource Program Center (NRPC), Regions, and refuge field stations with organizing, managing and analyzing biological and ecological datasets.
- Responsible for the creation of geospatial and biological metadata.
- Assist National I&M Data Manager and senior NRPC biological staff in the design, development, and distribution of quality assurance (QA) and quality control (QC) standards and protocols.
- Facilitate the planning, coordination, development, and integration of complex database models and information systems used by NRPC.
- Provide expert advice, coordination, training and technical assistance to other NRPC Branches, NWRS offices, regional and program offices and individual refuge units regarding the integration and analysis of biotic and abiotic datasets.
- Develop innovative solutions to improve workflows related to GIS data acquisition, development and documentation.
- Develop, author, budget, recommend, review, and oversee proposals and task orders to support data management projects.
- Formulate, recommend, implement, and distribute I&M guidelines and protocols relating to the documentation, dissemination, archiving, and security of datasets collected through the NWRS I&M initiative.
- Participate in the system and program design for the conversion, management, analysis and display of geographic data utilizing computer graphics equipment.
- Assist with the planning, development, and building of GIS models analyzing information collected for I&M activities.
- Serve as the technical expert providing technical guidance to end users in the operation of GIS and GPS software such as ArcGIS and ERDAS.
- Create maps, charts, graphics, and reports of refuge boundaries, federal ownership status, animal and plant species distribution, and other pertinent cadastral, biological, and natural resource information for the Center staff, other Washington Office employees, Regional Office staff, refuge managers, field biologists, I&M staff, the public, and others.

<u>USFWS: These positions are Fish and Wildlife Biologist, GS-0401-7/9.</u> Closes 7/26/21

- Boise, ID
- Chubbuck, ID
- Coeur d'Alene, ID
- Portland, OR
- Lacey, WA
- Spokane, WA
- Wenatchee, WA

These are developmental Fish and Wildlife Biologist positions designed to prepare employees for the full performance level work (GS-11). The primary purpose of these positions is to provide biological support on a variety of issues relating to restoration and conservation of fish and wildlife and their habitats. Responsibilities may include:

- Conducting a wide variety of complex biological and ecological surveys, investigations or inspections involving complex land and water resource development actions to determine the effects on threatened, endangered, candidate or species of concern.
- Review projects to assess restoration and project impacts for the involved area.
- Assisting or developing fish and/or wildlife recovery or management plans to insure conservation and enhancement of fish and/or wildlife and their habitat for a geographic area having a variety of habitat conditions.

The <u>Lower Columbia Estuary Partnership</u> is recruiting for two open positions: Technical Contracts Specialist and Communications and Outreach Associate. We are a nonprofit and a National Estuary Program that works to restore the lower Columbia River and engage local kids and adults in learning about and caring for it.

- The Technical Contracts Specialist will assist with the administration of technical contracts, competitive procurement, and financial tracking for Science Team projects. The Science Team is composed of nine staff who manage multiple complex and large (>\$1 million) contracts with funding agencies and subcontractors for habitat restoration, monitoring, and other technical projects. Applications are due by July 20. https://www.estuarypartnership.org/technical-contracts-specialist-application
- The Communications and Outreach Associate will help develop and implement fundraising strategies, plan community and fundraising events, and support external communications. They will also assist with grant writing and participate in crossfunctional teams as a communications and outreach specialist. Applications are due by July 30. https://www.estuarypartnership.org/communications-and-outreach-associate-application

Internship Announcement

Internship Opportunity Ballast Water Policy

Florida Sea Grant (FSG) is pleased to announce a paid, part-time, fully remote internship opportunity for current undergraduates, graduate/law students, or recent graduates focused on ballast water and aquatic nuisance species policy. The duties of the internship include reviewing ballast water and biosecurity policies aimed at preventing the spread of aquatic nuisance species and pathogens, with a consideration of how they may help reduce or prevent the transmission of coral disease.

Internship Dates

Desired internship dates are mid-August 2021 to mid-November 2021. However, the start and end dates can be flexible based on the needs and schedule of the selected candidate.

Compensation and Schedule

The intern will be established as an OPS employee at the University of Florida with a set salary of \$14.00 per hour. The intern will work approximately 15 hours per week for a total of 200 hours (about three months).

Due to the upcoming retirement of CEO Ed Thompson on August 31, The Wildlife Society has launched a search for our next Executive Director/CEO.

We are asking all of our members to help us find strong candidates by forwarding this email to everyone in your network who can help spread the word.

Click here to view the job description and application process information. You can also download the document as a pdf after viewing it.

While the position is preferably located in the Washington, D.C. area, qualified candidates who would need to work remotely are also encouraged to apply. All TWS staff members currently work remotely at least part-time, with some opting to work remotely full-time and in various locations across the country.

TWS is a thriving organization that is financially strong and has experienced significant membership growth and annual conference growth over the past few years. We are seeking an experienced, talented leader who can help us build upon this success.

Professor and Director, Invasion Science Research Center, University of Florida

This is a 12-month tenured position (50-75% research (Florida Agricultural Experiment Station) and 25-50% administration) in the Institute of Food and Agricultural Sciences (IFAS) at the University of Florida. A primary aim of the position is to establish a leading global research program on invasive species. The programmatic emphasis of the selected candidate should be on biology, ecology, evolution, management and/or socioeconomic dimensions of invasive species. The candidate's research should address both basic and applied research questions to better understand invasive plants, animals, microbes, and/or their environmental interactions; and to develop reliable knowledge that informs policy decisions regarding eradication, mitigation and/or management of invasive pests. Research at multiple levels from molecular to ecosystems, and at the interface of invasive species with other global change drivers such as climate change and land use change, is of particular interest. Open until filled.

Full announcement: https://facultyjobs.hr.ufl.edu/posting/88681

U.S. Geological Survey's Upper Midwest Environmental Sciences Center

The U.S. Geological Survey's Upper Midwest Environmental Sciences Center (UMESC) is currently recruiting for an Interdisciplinary Supervisory Biologist/Chemist (position may be filled by either a Biologist or Chemist) to serve as the Regulatory Affairs/Quality Assurance Officer. The incumbent will provide scientific and technical leadership to USGS scientists conducting research to develop and maintain the federal and state registration of biopesticides and pesticides used by federal and state agencies to control invasive or nuisance species, implement the USGS Quality Management System at UMESC, and implement the UMESC Quality Assurance Program. The incumbent will join the USGS family and serve the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life. For more information about UMESC, please visit https://www.usgs.gov/centers/umesc

How to apply: Please visit USA Jobs website at https://www.usajobs.gov/

Open to Public: USGS-RES-21-11115586-DE-EC Opening and closing dates: 07/12/21 to 07/23/21

Wisconsin Department of Natural Resources

The Wisconsin Department of Natural Resources is currently recruiting for an Organisms in Trade Coordinator (OIT). The position will be responsible for the coordination, development, and implementation of our statewide efforts to stop the introduction of new invasive species through commerce and trade into Wisconsin. This person is a member of the Department Invasive Species Team (DIST) and serves as a Central Office consultant and coordinator for the department's statewide invasive species rule (NR 40) training and outreach program for plant nurseries, aquatic plant retailers, pet dealers, plant and seed wholesalers, horticulture, and similar industries as part of a federally funded grant project. Working closely with the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) and the WDNR Department Invasive Species Team (DIST), this position conducts outreach efforts through presentations and written communication, and will focus on groups such as the Wisconsin Nursery and Landscape Federation, private nurseries, garden centers, seed producers, bait dealers, pet/aquarium industries, online and out of state vendors and wholesalers, farmers markets, craft stores, botanical gardens, arboretums, master gardener groups, and universities to prevent NR 40 regulated species from being sold and introduced into the state. Follow this link: https://wisc.jobs/Pages/Agency/DNR.aspx?unit=37000 and scroll down to Job ID 2256. Closes 7/25/21

GRANTS

2021 USDA APHIS VS Farm Bill NADPRP Funding Opportunity is Open

The United States Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) is announcing the 2021 competitive funding opportunity for the National Animal Disease Preparedness and Response Program (NADPRP). Established in the 2018 Farm Bill, this program allows APHIS to collaborate with animal health partners to implement high-value projects that enhance prevention, preparedness, detection, and response to the most damaging emerging and foreign animal diseases that threaten U.S. agriculture. Funded proposals are managed via cooperative or interagency agreements. In this funding opportunity, APHIS VS invites eligible entities to submit proposals for projects that will:

- develop and/or enhance State and Tribal foreign animal disease (FAD) vaccination plans to improve animal disease outbreak response capabilities,
- support animal movement decisions in an FAD outbreak, or
- strengthen outreach and education on animal disease prevention, preparedness, and response to specific audiences.

Additional information is available on the USDA APHIS NADPRP website. Proposals must be submitted by 11:59 PM EDT on Aug 6, 2021.

NOAA Fisheries Announces the 2022 Saltonstall-Kennedy Grant Competition

The goal of the Saltonstall-Kennedy Grant Program is to fund projects that address the needs of fishing communities, optimize economic benefits by building and maintaining sustainable fisheries, and increase other opportunities to keep working waterfronts viable. Aquaculture-

focused projects are encouraged to apply. The FY22 solicitation seeks applications that fall into one of two priorities:

- Promotion, Development, and Marketing.
- Science or Technology that Promotes Sustainable U.S. Seafood Production and Harvesting.

This year's solicitation consists of two separate submission processes. All interested applicants must submit a 2 page pre-proposal through the Notice of Funding Opportunity (NOFO) posted at Grants.gov. Pre-proposals must be received at Grants.gov, postmarked, or provided to a delivery service by 11:59 pm, Eastern Time, August 16, 2021. Use of Grants.gov is preferred.

FEDERAL/STATE/PROVINCIAL LEGISLATION, RULES, ACTIONS

Advocacy

[Letter] AFS Urges Biden Administration to Develop Offshore Aquaculture Regulatory Framework (7/1/21)

As your Administration seeks to reach net zero greenhouse gas emissions by 2050, the American Fisheries Society (AFS) urges you to consider the benefits of a robust marine aquaculture industry in the U.S. in achieving your climate goals. An offshore aquaculture industry in the U.S. can help to reduce our carbon footprint from imported seafood, increase domestic seafood supplies, relieve pressures on wild stocks from increased demand, while increasing the resiliency of our food systems in the face of climate change.

State/Province

[South Dakota] GF&P reviews invasive species rule changes (7/14/21)

The South Dakota Game, Fish and Parks Commission has placed several rule changes related to the control of aquatic invasive species -- such as zebra mussels and rusty crayfish -- up for public comment.

The list of invasive aquatic species created by GF&P personnel also includes quagga mussels, silver and bighead carp, Eurasian water-milfoil weed and curly pondweed. The harm caused by the invasive species includes damages to native fish species, boats and fishing equipment and, in the case of the mussel species, possible harm to swimmers.

The GF&P commissioners met at the Watertown Event Center on July 8-9 and gave final approval to proposals from their May and June meetings. They also passed several other proposals that are now available for public comment.

Iudicial

Executive

Congressional

This week: Congress starts summer sprint (7/12/21)

Lawmakers are starting to return to Washington, D.C., for a weeks-long summer sprint with some of their biggest priorities hanging in the balance.

The Senate will return on Monday from a two-week July 4 recess. The House will return next week after a three-week break

Reconciliation bill may limit GOP support for infrastructure (7/15/21)

The \$3.5 trillion reconciliation agreement reached late Tuesday by Senate Democrats and the White House has renewed the debate over whether passing it alongside the bipartisan infrastructure plan agreed to last month could tank the bipartisan plan. Key Senate Republicans said Wednesday the reconciliation agreement, which would push through some of President Joe Biden's domestic priorities over GOP objections, could imperil Republican support for the bipartisan infrastructure plan, which includes \$579 billion in new spending

Related: Trouble: IRS funding snags bipartisan infrastructure deal (7/15/21)

Appropriations

COMMERCE

Appropriations Committee Releases Fiscal Year 2022 Commerce, Justice, Science, and Related Agencies Funding Bill (7/11/21)

The House Appropriations Committee today released the draft fiscal year 2022 Commerce, Justice, Science, and Related Agencies funding bill, which will be considered in subcommittee tomorrow. The legislation funds agencies and programs in the Departments of Commerce and Justice, as well as the National Aeronautics and Space Administration (NASA) and the National Science Foundation.

The text of the draft bill is <u>here</u>. Report language is <u>here</u>. AIS language in the report language is as follows:

Page 38: 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 toward the implementation and future year requirements

ENERGY and WATER

Appropriations Committee Releases Reports for Energy and Water Development, and Related Agencies and Transportation, and Housing and Urban Development, and Related Agencies Bills (7/15/21)

The House Appropriations Committee today released its reports accompanying the fiscal year 2022 Energy and Water Development, and Related Agencies and Transportation, and Housing and Urban Development, and Related Agencies appropriations bills.

The text of the draft bill is <u>here</u>. In keeping with the Appropriations Committee's commitment to transparency, information on Community Project Funding in the bill is <u>here</u>. A summary of the bill is <u>here</u>. The bill report is <u>here</u>. AIS related items in the reports are as follows:

Page 16: Invasive Carp. —The Great Lakes and Mississippi River Inter basin Study was authorized by Congress under section 3061(d) of WRDA 2007 (Public Law 110-114). The Committee notes that the Brandon Road Lock and Dam in Joliet, Illinois, is critical to keeping invasive 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 and that funding is included in the fiscal year 2022 budget request to continue work on PED. As the Corps prioritizes projects, it shall consider critical projects to prevent the spread of invasive species. The Corps is directed to provide to the Committee quarterly updates on the progress and status of efforts to prevent the further spread of invasive carp, including the Brandon Road Recommended Plan and the second array at the Chicago Sanitary and Ship Canal; the location and density of carp populations; the use of emergency procedures previously authorized by Congress; the development, consideration, and implementation of new technological and structural counter-measures; and progress on PED work. 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 invasive 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 invasive carp solutions. The Corps is directed to provide to the Committee not later than 30 days after enactment of this Act a briefing on such navigation protocols and potential solutions.

Page 24: Coordination with Other Water Resource Agencies. —Additional funds are included for continued collaboration with other federal agencies and stakeholders on invasive species challenges.

Page 36: Aquatic Plant Control Program. —Of the additional funding pro-vided for the Aquatic Plant Control Program, \$17,000,000 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, as authorized by section1170 of the America's Water Infrastructure Act of 2018. 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. The recommendation also provides \$150,000 to commence activities authorized under section 509 of WRDA 2020, and the Corps is directed to provide to the Committee prior to the obligation of any funds for this purpose a briefing on how it will implement this pro-gram. Lastly, the recommendation provides additional funding for activities authorized by section 505 of WRDA 2020, and the Corps is directed to provide to the Committee prior to the obligation of any funds a briefing on how it will implement this program.

PAGE 66: Chicago Sanitary and Ship Canal Dispersal Barrier. —The Committee notes the Chicago Sanitary and Ship Canal (CSSC) dispersal barrier at Des Plaines River is a key control mechanism for protecting the Great Lakes from invasive carp. Over the last decade, the Corps has invested significant resources in building a permanent electric barrier on the Chicago Area Waterways System. The Committee appreciates that the Corps allocated resources to complete construction of the second array at the CSSC in fiscal year 2021. The Committee notes that maximizing effectiveness of the CSSC can have significant immediate benefits for preventing spread of aquatic invasive species into the productive and eco-logically diverse Great Lakes system.

Page 90: San Justo Reservoir, California. —The Committee recognizes the benefits of the San Justo Reservoir Zebra Mussel Eradication Project, and Reclamation is reminded that this project is eligible to compete for the additional funding provided in Water Conservation and Delivery. The Committee also recognizes that previous work conducted by Reclamation has demonstrated the efficacy of using muriate of potash (MOP) in treating invasive mussels. The Committee encourages Reclamation to leverage existing knowledge on MOP treatments to address the zebra mussel infestation at the San Justo Reservoir

Page 115: The recommendation provides \$5,000,000 to continue industry-led research, development, demonstration, and deployment efforts of innovative technologies for fish passage and invasive fish species removal at hydropower facilities, as well as analysis of hydrologic climate science and water basin data to understand the impact of climate change on hydropower.

INTERIOR/EPA

Appropriations Committee Approves Fiscal Year 2022 Interior, Environment, and Related Agencies Funding Bill (7/1/21)

The House Appropriations Committee today approved the fiscal year 2022 Interior, Environment, and Related Agencies bill on a 32-24 vote.

A summary of the bill is <u>here</u>. The text of the bill, before the adoption of amendments in full Committee, is <u>here</u>. In keeping with the Appropriations Committee's commitment to transparency, information on Community Project Funding [AKA "earmarks"] in the bill is <u>here</u>. [Note: Invasive relate items in the earmarks can be found on page 11].

The bill report, before the adoption of amendments in full Committee, is <u>here</u>. AIS related items in the reports are as follows:

TITLE I—DEPARTMENT OF THE INTERIOR

USFWS

Page 20: Wildlife and Habitat Management. —The recommendation includes \$264,517,000, which includes \$23,425,000 for Invasive Species Strike Teams an increase of \$10,000,000 above the enacted level for new teams to focus on high priority invasive species problems, such as nutria, to eradicate or control them before they develop more of a stronghold in the environment. The Committee also urges the Service to consider fire prone areas, or regions that are made more fire prone by the presence of invasive species, such as buffelgrass, when allocating and prioritizing resources for the Invasive Species Strike Teams and in their other efforts to eradicate invasive species.

Page 26: Aquatic Invasive Species. —The recommendation includes \$45,311,000 [*Note: past USFWS numbers: FY 2021 \$41,159,000 FY 2020 \$40,482,000; FY 2019 \$21,748,000*]

of which no less than \$3,834,000 is to help States implement plans required by the National Invasive Species Act (NISA); \$1,566,000 is for NISA coordination; and \$6,088,000 is to implement subsection 5(d)(2) of the Lake Tahoe Restoration Act. The Committee continues funding to aid the Service in working to prevent Invasive carp from entering the Great Lakes, and to control and eradicate them from the Mississippi River;

its six sub-basins, the Upper Mississippi River, Missouri River, Arkansas-Red White River, Lower Mississippi River, Tennessee Cumberland River, and Ohio River, and Kentucky Lake, and Lake Barkley. This recommendation includes \$26,000,000 for Invasive carp, of which \$4,000,000 is for contract fishing; \$1,011,000 is for Sea Lamprey administration costs; \$3,500,000 is to prevent the spread of quagga and zebra mussels in the West; and \$2,367,000 is for prevention.

The \$4,000,000 provided for contract fishing will create jobs while advancing efforts to combat Invasive carp by expanding and perfecting the combined use of contract fishing and deterrents to extirpate Invasive 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. 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 Invasive carp, including grass carp, and to make sure adequate resources are provided to support the efforts of the Invasive Carp Regional Coordinating Committee. The Committee recognizes the importance of understanding the current economic situation as it relates to the removal and uses of Invasive carp. The Committee directs the Department of Interior to hold a one-day forum modeled on the March 25, 2021 Department of the Interior oil and gas forum to review how Invasive carp that are removed through contract fishing or by other means are being utilized. Participants should include State Departments of Natural Resources, academia, and other interested stakeholders to ascertain current and potential uses, including human consumption and as a source for bait. The Service is to maintain a link on their website to this forum and brief the Committee on the findings within 180 days of enactment of this Act.

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.

USGS

Page 40: Biological Threats and Invasive Species Research Program. —The recommendation provides \$43,951,000. This funding level provides \$10,620,000 to continue critical research for Invasive carp, including \$3,000,000 for research to contain or eradicate grass carp such as the Survey's on-going work to develop species-specific toxicants for grass carp. The recommendation also provides \$4,720,000 for re-search 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, and \$4,190,000 is provided for reducing threats of invasive species and wildlife disease in a changing climate.

Page 44: 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 provides \$15,000,000. Research 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 re-search proposals that are approved. The Committee also encourages the use of the funding increase for research on PFAS.

OPERATION OF INDIAN PROGRAMS

Page 53: Agriculture and Range Program. —The recommendation provides \$42,127,000 for the Agriculture and Range Program, \$5,607,000 above the enacted level and \$700,000 below the budget request. This amount includes \$14,781,000 for Invasive Species and \$27,346,000 for Agriculture Program (TPA).

INSULAR AFFAIRS ASSISTANCE TO TERRITORIES

Page 68: Regional 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.

TITLE II—ENVIRONMENTAL PROTECTION AGENCY

Page 87: Great Lakes Restoration Initiative. —The Committee recommends \$375,000,000 for the Great Lakes Restoration Initiative (GLRI), \$45,000,000 above the enacted level and \$35,000,000 above the budget request. The Committee directs the Agency and other federal partners to continue to work together in coordination with the Great Lakes States, Tribes, local authorities, and nonfederal stake- holders to prioritize action-oriented projects across the five focus areas in lieu of additional studies, monitoring, and evaluations. Such projects include, but are not limited to, remediating and delisting Areas of Concern, reducing nutrient runoff, preventing and controlling invasive species, improve water quality, and in-crease coastal resiliency through restoration and protection of streambanks, natural coastlines and shorelines. As the Agency dis-tributes funds across the five focus areas, tribal related activities should be maintained at not less than \$15,000,000

PAGE 89: Great Lakes and Lake Champlain Invasive Species Program. — The Committee notes that it has yet to receive the plans directed in P.L. 116–94 and P.L. 116–260 on the Agency's previous and planned actions to implement the Great Lakes and Lake Cham-plain Invasive Species Program as authorized by the Vessel Incident Discharge Act (P.L. 115–282). In fiscal year 2022, the Committee expects the Agency to finalize its plan expeditiously, and directs the Agency to use not less than the fiscal year 2021 level of funds from the appropriate Geographic Programs to use sound science and technological advancements to monitor for the intro-duction and spread of aquatic nuisance species into or within the Great Lakes and Lake Champlain systems. The Agency is directed to include details of these relevant funding levels as part of the Agency's operating plan.

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

TRAININGS, WEBINARS, CONFERENCES AND MEETINGS

Archived Materials

Events: Webinars, Trainings, Conferences and Meetings

Watercraft Inspection Training

For more information go to https://www.westernais.org/ (under the "Training" tab) or contact Quagga D @ (702)236-3814 or quaggadee@cox.net

Because of continued concerns due to 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.

2021

July

2021 Summer Student Seminar Series

The U.S. Geological Survey's Nonindigenous Aquatic Species Database presents a seminar series focused on providing undergraduate students and early career scientists insight into federal career options as well as how various federal agencies work on invasive species issues nationwide. All seminars start at 3pm (Eastern)

- July 16 Jolene Trujillo (U.S. Bureau of Reclamation)
- July 21 Chelsea Bahaty (U.S. Army Corps of Engineers)
- July 23 Kaitlin Kovacs (U.S. Geological Survey)
- July 28 Yale Passamaneck (U.S. Bureau of Reclamation)
- July 30 Dr. Rochelle Sturtevant (National Oceanic and Atmospheric Administration)
- August 4 Mike Ielmini (U.S. Forest Service)
- August 6 Dr. Earl Campbell (U.S. Fish and Wildlife Service)
- August 11 Dr. Craig Martin (U.S. Fish and Wildlife Service)
- August 13 Katie O'Donnell (U.S. Geological Survey)
- August 20 Dr. Jacoby Carter (U.S. Geological Survey)

NAISMA Monthly Webinar:

July 21, 1 p.m. CT - Best Management Practices for Pesticide Applications

Description: To use pesticides legally and efficaciously the first step is to identify the pest. Then determine your pest management strategy. If a pesticide or mixture of pesticides is the best choice, the pest manager must read, understand and follow the pesticide product's label. This presentation will "walk-through" a number of key label statements. Emphasis will be placed on the importance of assuring the site is allowed on the label, environmental hazard statements, mixing compatibility and jar tests, and sprayer clean-up procedures.

August

2021 Pacific NorthWest Economic Region 30th Annual Summit

Date: Aug 15, 2021 to Aug 19, 2021

Venue: Big Sky Resort Location: Big Sky, Montana

Notes: Rescheduled from 2020 to 2021

NAISMA Monthly Webinar:

August 18, 1 p.m. CT - Racial Equity & Environmentalism

Description: This presentation will provide the history of the construction of race, (a key component in driving these inequities), while also examining environmental policies that have had a layered impact on the environmental movement and contributed to the racial homogeneity

we see today. The goal of this presentation is to help participants understand why these inequities exist and develop shared language for how to discuss these issues and interrogate the intricate relationship between race and institutional outcomes.

September

Western Regional Panel on ANS

Update: Following the results of the attendance survey, the Executive Committee of the Western Regional Panel on ANS has voted to call off the in-person Salt Lake City WRP Annual Meeting and transition to an all-virtual annual meeting this fall. The WRP will continue to provide top-notch virtual presentations that bring the latest in AIS information and research across the West. On top of this, there will be supplementary virtual social spaces to ensure that we are still making those important connections and fortifying a network of AIS professionals!

Minnesota Aquatic Invasive Species Research Center Showcase September 22, 2021; St. Paul, Minnesota

North American Invasive Species Management Association Annual Conference September 27-30, 2021; Missoula, Montana (with online options) 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. cohosted by Montana Invasive Species Council

October

<u>Mississippi River Basin Panel Meeting</u> October 5-7, 2021; This year's coordination meeting will be held at Reelfoot Lake State Park near Tiptonville in northwest Tennessee. Location: Ellington Hall Auditorium, Reelfoot Lake State Park, 2595 Hwy 21 E Tiptonville, TN 38079

The Invasive Species Council of BC is pleased to host the <u>2021 Invasive Species Research</u> Conference: Turning Science into Action October 6-7, 2021

World Fisheries Congress 11-15 October, 2021 Adelaide, Australia

Save the date: WALPA is heading to the Tri-Cities this fall! WALPA is returning to the east side in 2021 to host its 34th annual conference in Richland from October 20-22. Please join us at the newly remodeled Holiday Inn Richland on the Columbia River. This year's theme, "It Takes a Village," was chosen to highlight collaborative efforts to understand, protect, and restore our lakes. Stay tuned for the call for abstracts, registration, and hotel reservation information. We are looking forward to seeing you in Richland!

November

Alaska Invasive Species Workshop November 3-4, 2021; Anchorage, Alaska and virtual

AFS has changed the dates for the 151st AFS Annual Meeting in Baltimore to November 6-10, 2021, from the original date of August 8-12. Please note that this is a Saturday to Wednesday meeting schedule rather than the traditional Sunday to Thursday. This change is being made with the desire to safely host an in-person meeting and to celebrate our 150th anniversary, albeit one year late. The meeting will also include remote participation options and AFS will transition to a full virtual option should the COVID-19 situation make that the appropriate and safe choice. New deadlines will be provided soon for symposium and abstract submissions. Please check the meeting website for updates.

Valuing Water: Economics, Ecology, & Culture 41st International Symposium of the North American Lake Management Society November 15–18, 2021 • Oklahoma City, Oklahoma

Innovations in Invasive Species Management Conference and Training

We welcome everyone back to the Gaylord Opryland Resort and Convention Center in Nashville, TN for the 4th annual 2021 Innovations in Invasive Species Conference. When: November 29th through December 2nd, 2021

December

Northeast ANS Regional Panel Fall Meeting December 3, 2021 and December 8, 2021; Virtual Meeting

2022

February

2022 Midwest Fish and Wildlife Conference, February 13-16, Des Moines IA

National Invasive Species Awareness Week February 28, 2022 – March 4, 2022

April

April 18-22 ICAIS Oostende Belgium: The International Conference on Aquatic Invasive Species (ICAIS) is the most comprehensive international forum to address new and emerging issues related to aquatic invasive species in freshwater, marine and estuarine environments. ICAIS provides an international platform for the presentation of aquatic invasive species research that pertains to species biology, risk assessment, prevention, management and control methods, ecological and ecosystem impacts and restoration, outreach and policy.

May

11th International Conference on Marine Bioinvasions May 15-19, 2022; Annapolis, Maryland

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