

Invasive Fishes in Virginia: Perspectives Gained from Managing Blue Catfish, Northern Snakehead, and Alabama Bass

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What is an invasive species?

Invasive species are non-native plants, animals and other living organisms that thrive in areas where they don't naturally live and cause (or are likely to cause) economic or environmental harm, or harm to human, animal or plant health. Invasive species degrade, change or displace native habitats, compete with native wildlife, and are major threats to biodiversity. - USFWS



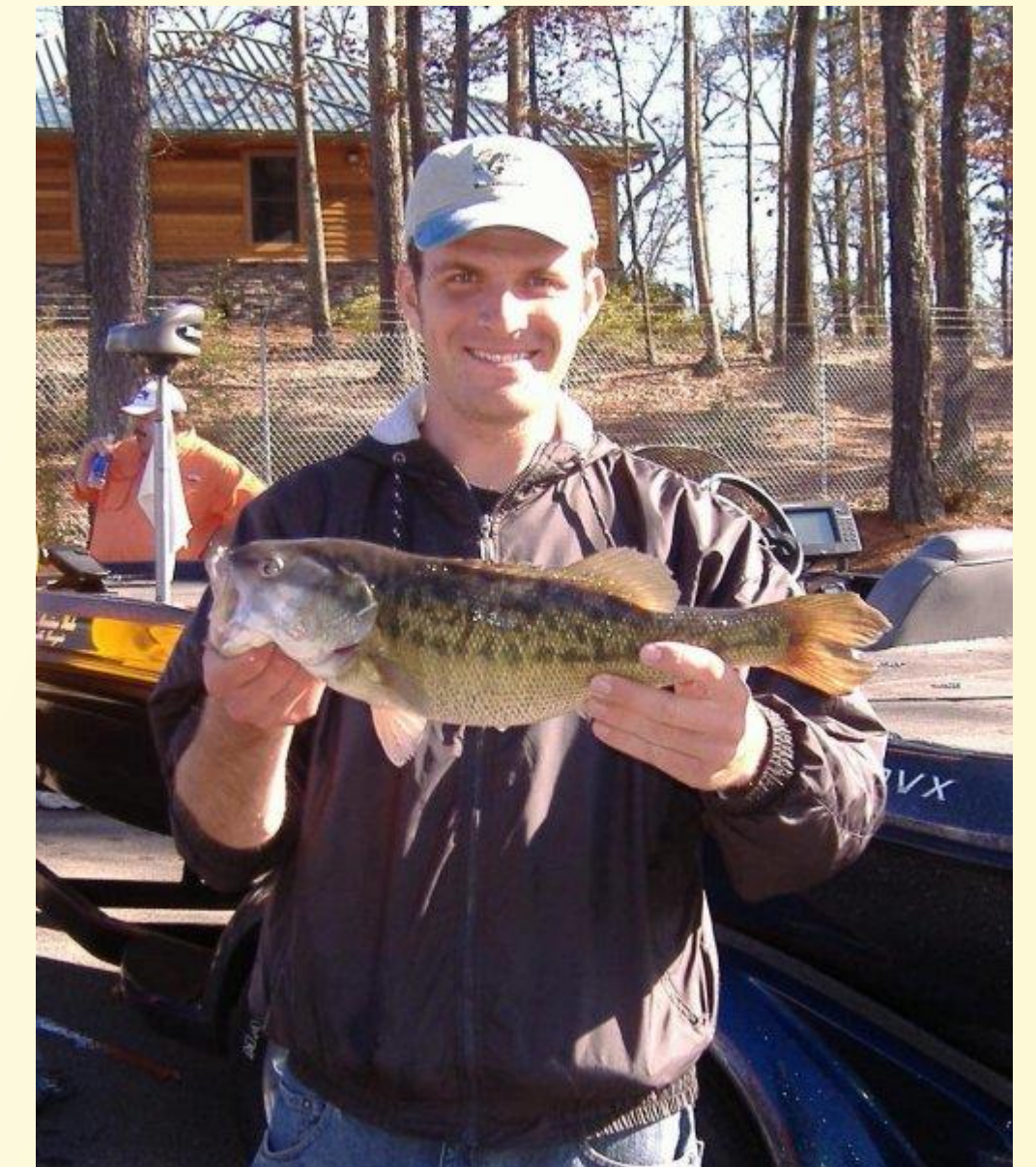
For Your Consideration...



Blue Catfish



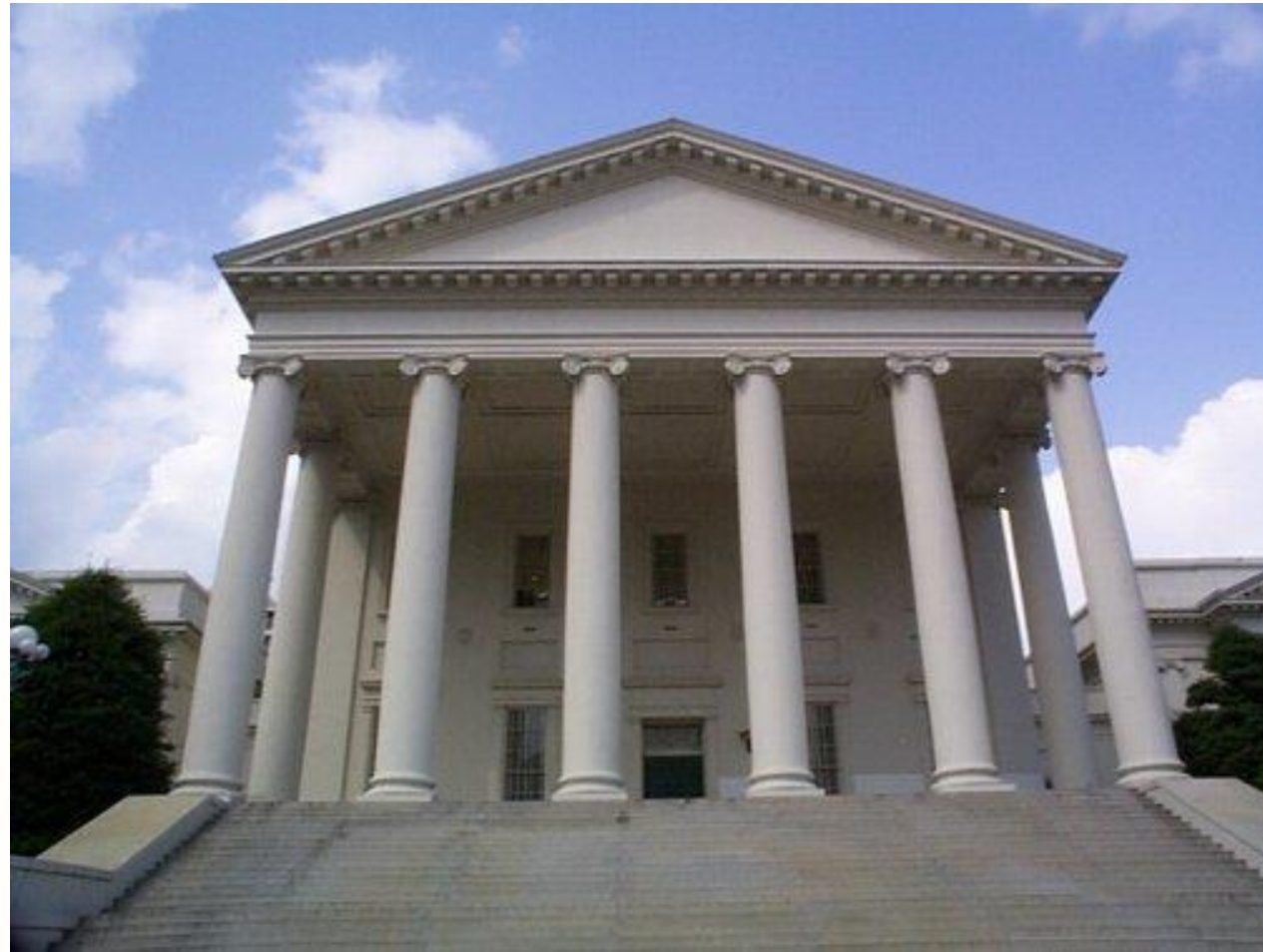
Northern Snakehead



Alabama Bass



Virginia



Law:

29.1 -543.1 A. It is unlawful for any person to introduce into or stock in waters of the Commonwealth, including private ponds or lakes, the blue catfish or its hybrids or to release any blue catfish or any such hybrid into any water body other than that in which it was caught.

29.1-574 "Nonindigenous aquatic nuisance species" means a nonindigenous aquatic freshwater animal species whose presence in state waters poses or is likely to pose a significant threat of harm to (i) the diversity or abundance of any species indigenous to state waters; (ii) the ecological stability of state waters; or (iii) the commercial, industrial, agricultural, municipal, recreational, aquacultural, or other beneficial uses of state waters. Nonindigenous aquatic nuisance species shall include the zebra mussel, quagga mussel, and all species of snakehead fishes of the family Channidae.

29.1-572 The Board may promulgate regulations necessary to carry out the provisions of this article including, but not limited to, the designation of other nonindigenous aquatic nuisance species.

Regulation:

4VAC15-30-40. Importation requirements, possession, and sale of nonnative (exotic) animals.

A. Permit required. A special permit is required and may be issued by the department, if consistent with the department's fish and wildlife management program, to import, possess, or sell those nonnative (exotic) animals listed in the following table

F. Exception for snakehead fish. Anglers may legally harvest snakehead fish of the family Channidae, provided that they immediately kill such fish and that they notify the department, as soon as practicable, of such actions.

I. Exception for Alabama bass. Anglers may possess live Alabama bass of the family Centrarchidae only on the body of water from which the fish were captured, provided that the angler does not live transport these fish outside of the body of water from which the fish were captured. Anglers may only release live Alabama bass back into the body of water from which the fish were captured. Anglers may legally harvest Alabama bass provided that the anglers ensure all harvested Alabama bass are dead.

Alabama Bass



Intention



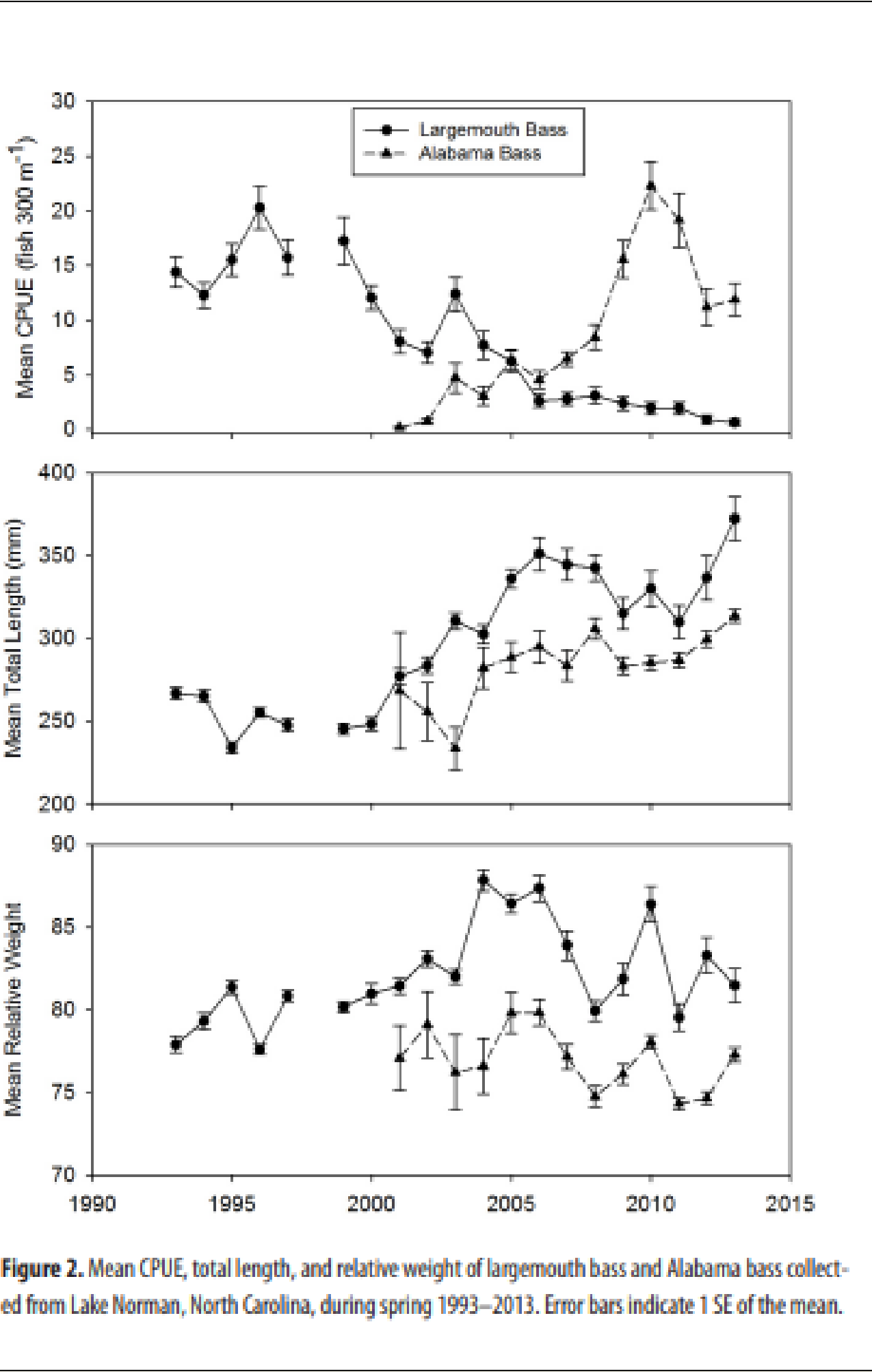
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Alabama Bass



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Alabama Bass



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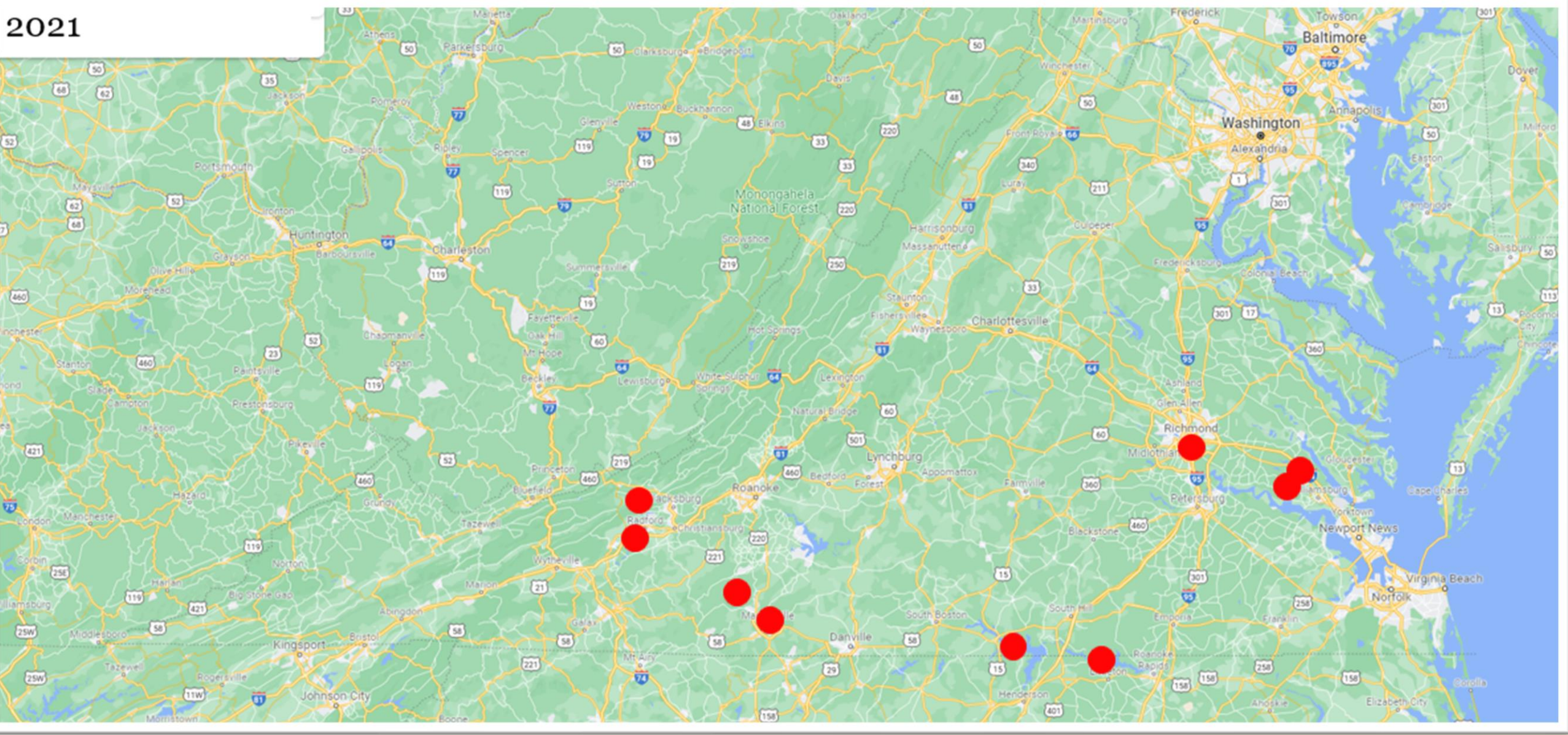
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Alabama Bass



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DO YOU KNOW THE DIFFERENCE?

Alabama bass (invasive)

Tooth patch present on the tongue

Dark blotchy lateral band present from head to tail

Rows of dark spots present below lateral band

Jaw fully closed extends to middle rear of eye

Largemouth bass

Generally lacks tooth patch on the tongue

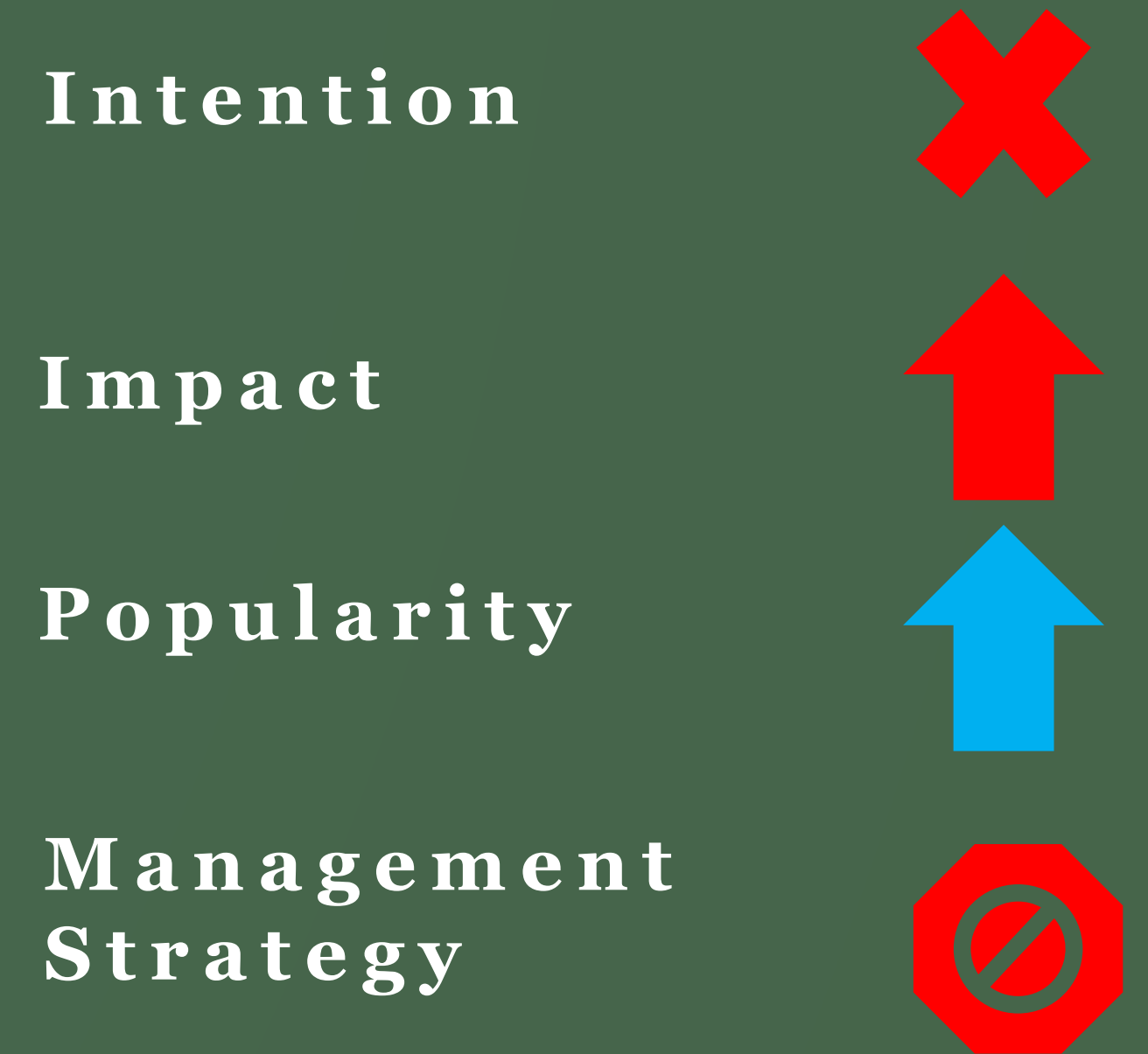
More continuous lateral band present from head to tail

Non-continuous and uneven spots below lateral band if present at all

Jaw fully closed extends past the eye

- Anglers are reminded that the introduction of novel predators can have unforeseen impacts on native or established ecosystems.
- The introduction of Alabama bass is illegal in Virginia. Alabama bass have been scientifically shown to out-compete established populations of largemouth bass and hybridize with small-mouth bass.
- Invasive species cause negative ecological and/or economic harm.
- Anglers who suspect they have captured an Alabama bass should take a picture of the fish, clip off a thumbnail-sized portion of one of the pelvic fins, and store the fin clip dry in an envelope. The pelvic fins are located on the bottom of the fish, just under the head. They should then either contact the Department of Wildlife Resources at: fisheries@dwr.virginia.gov or 804-367-1293.

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Northern Snakehead



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Northern Snakehead



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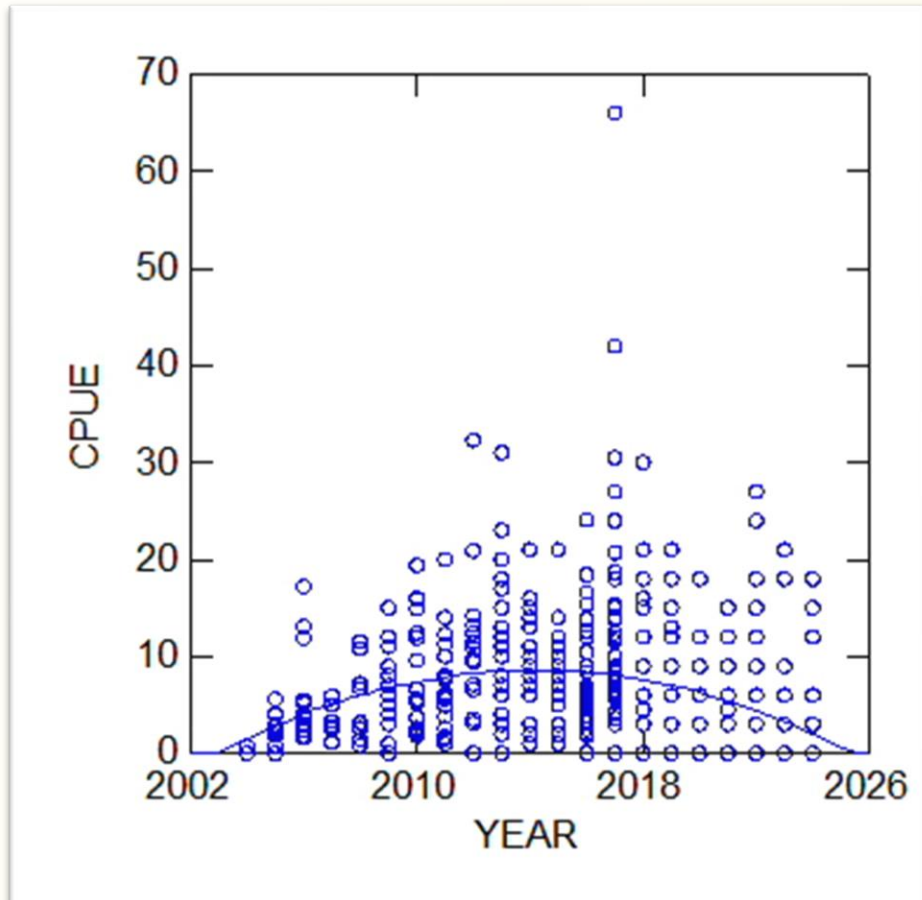
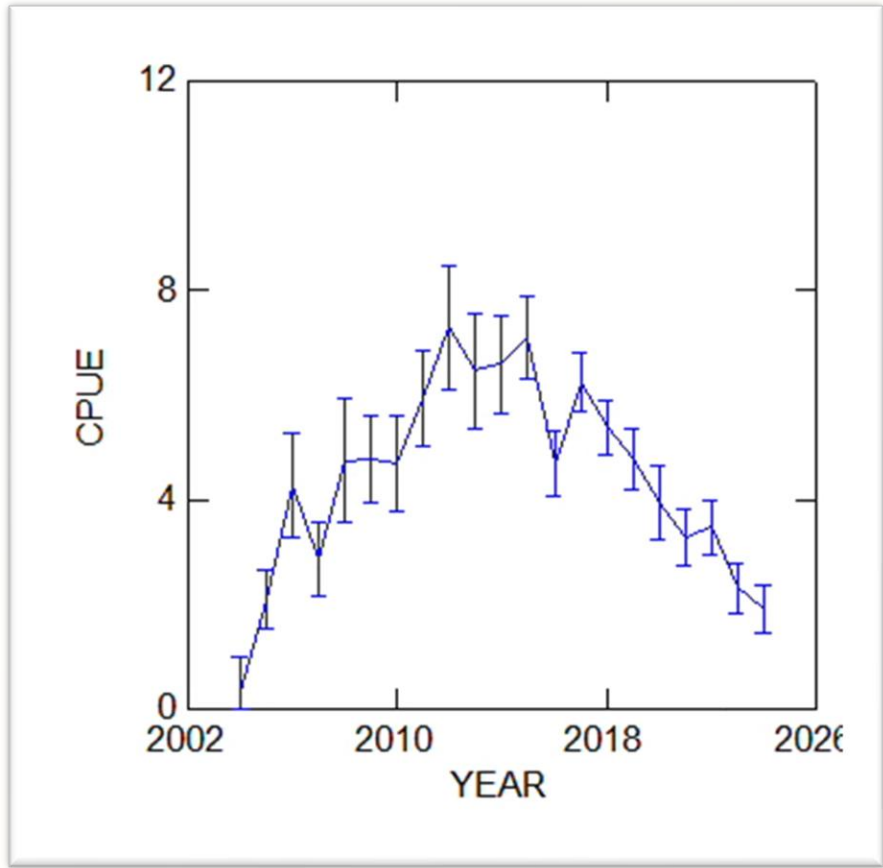
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Northern Snakehead



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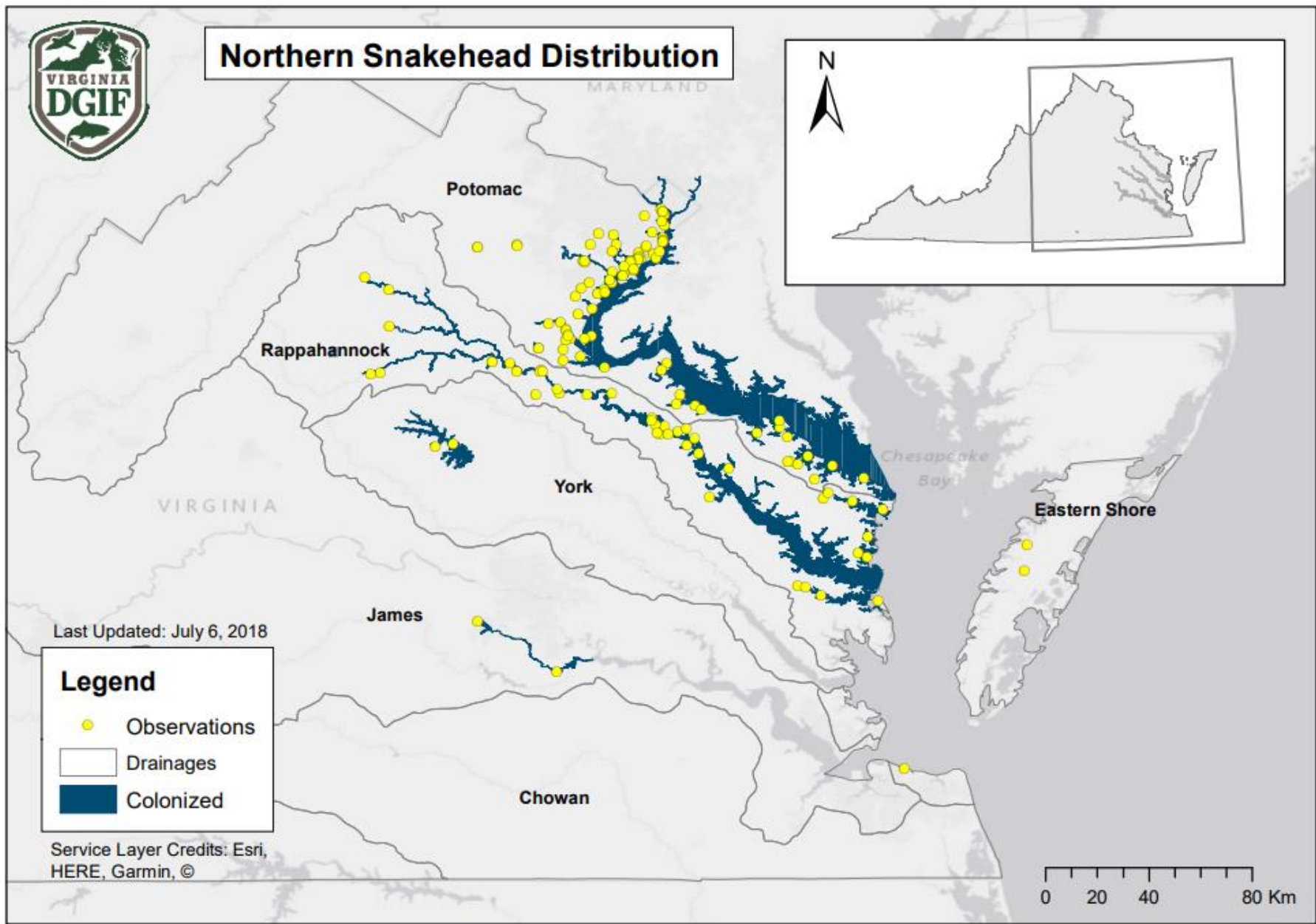


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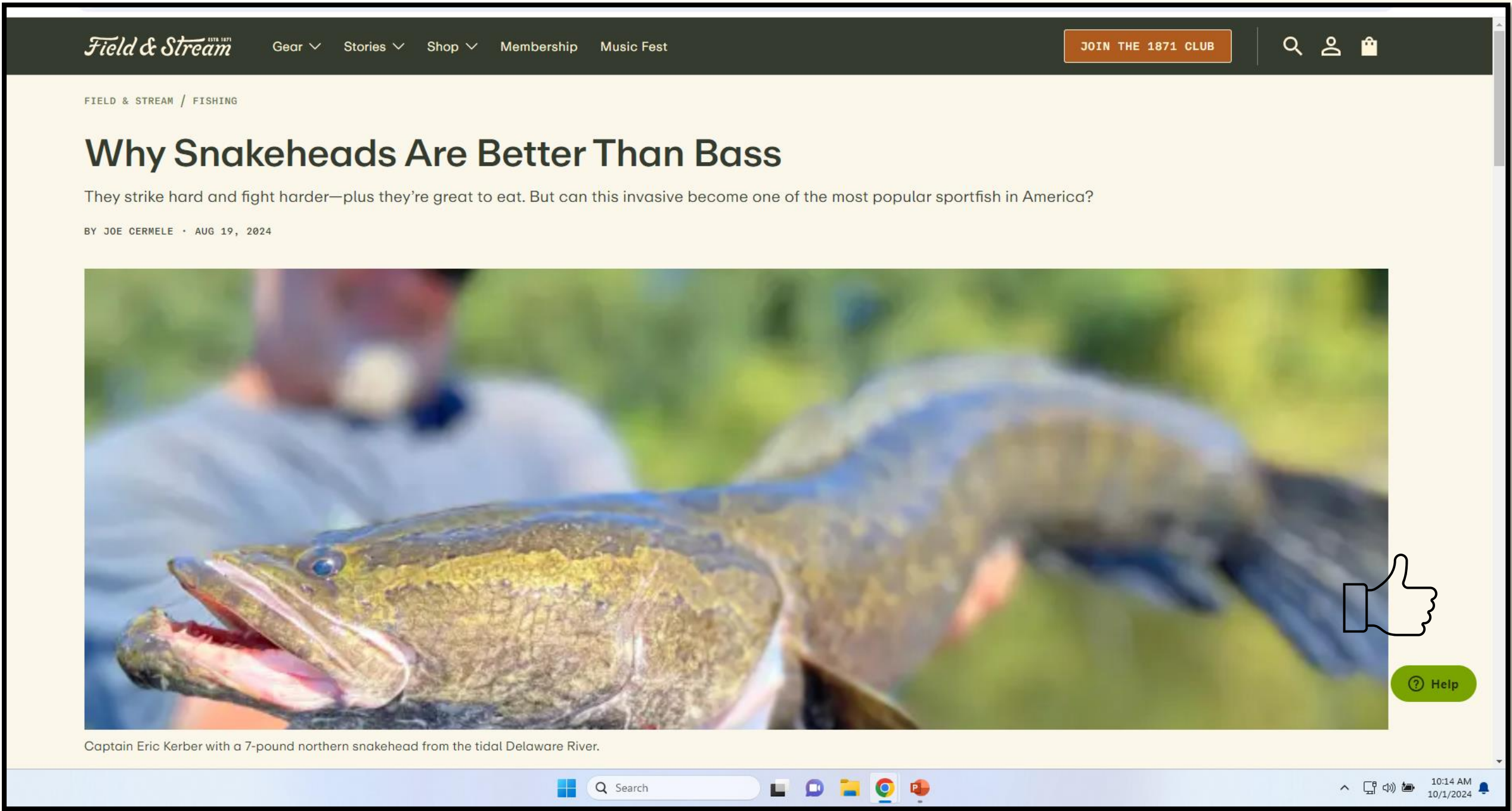


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Northern Snakehead



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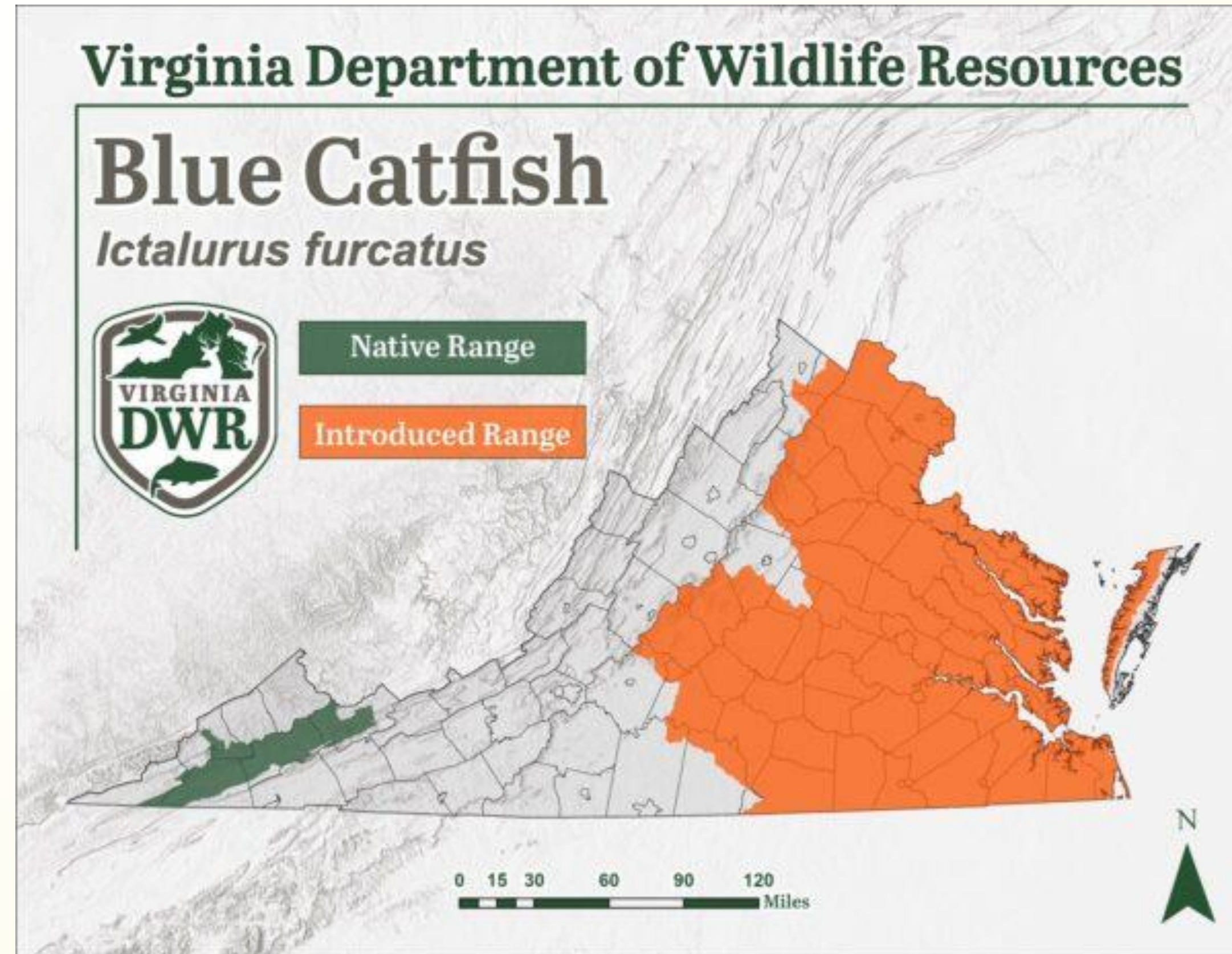
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Blue Catfish



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Blue Catfish

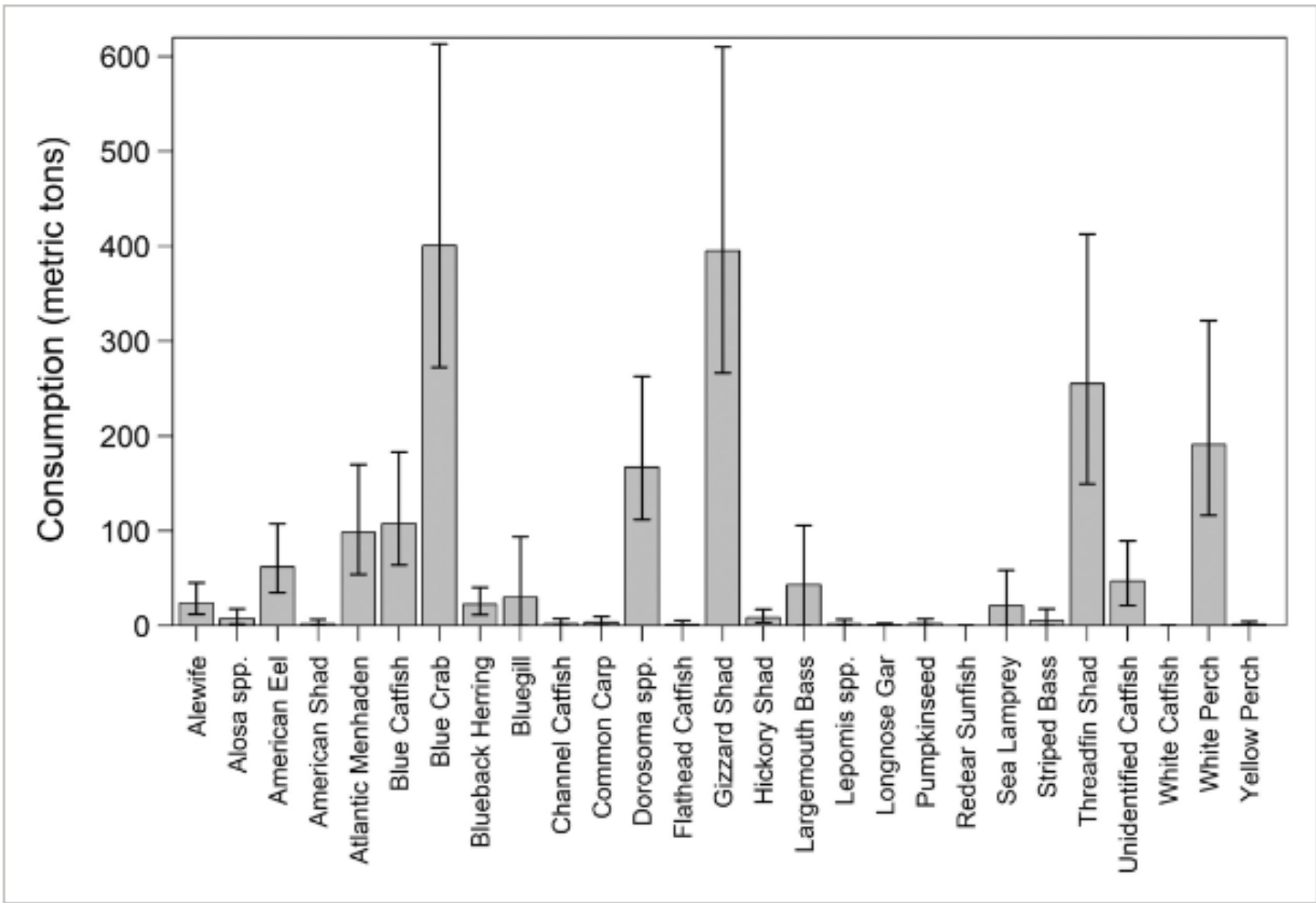


FIGURE 6 [Open in figure viewer](#) | [Download PowerPoint](#)

Estimates of total population prey consumption by James River Blue Catfish in 2015 for select prey taxa of conservation concern and fishery management interest. Error bars represent 95% confidence intervals. Scientific names are provided in Table 1.

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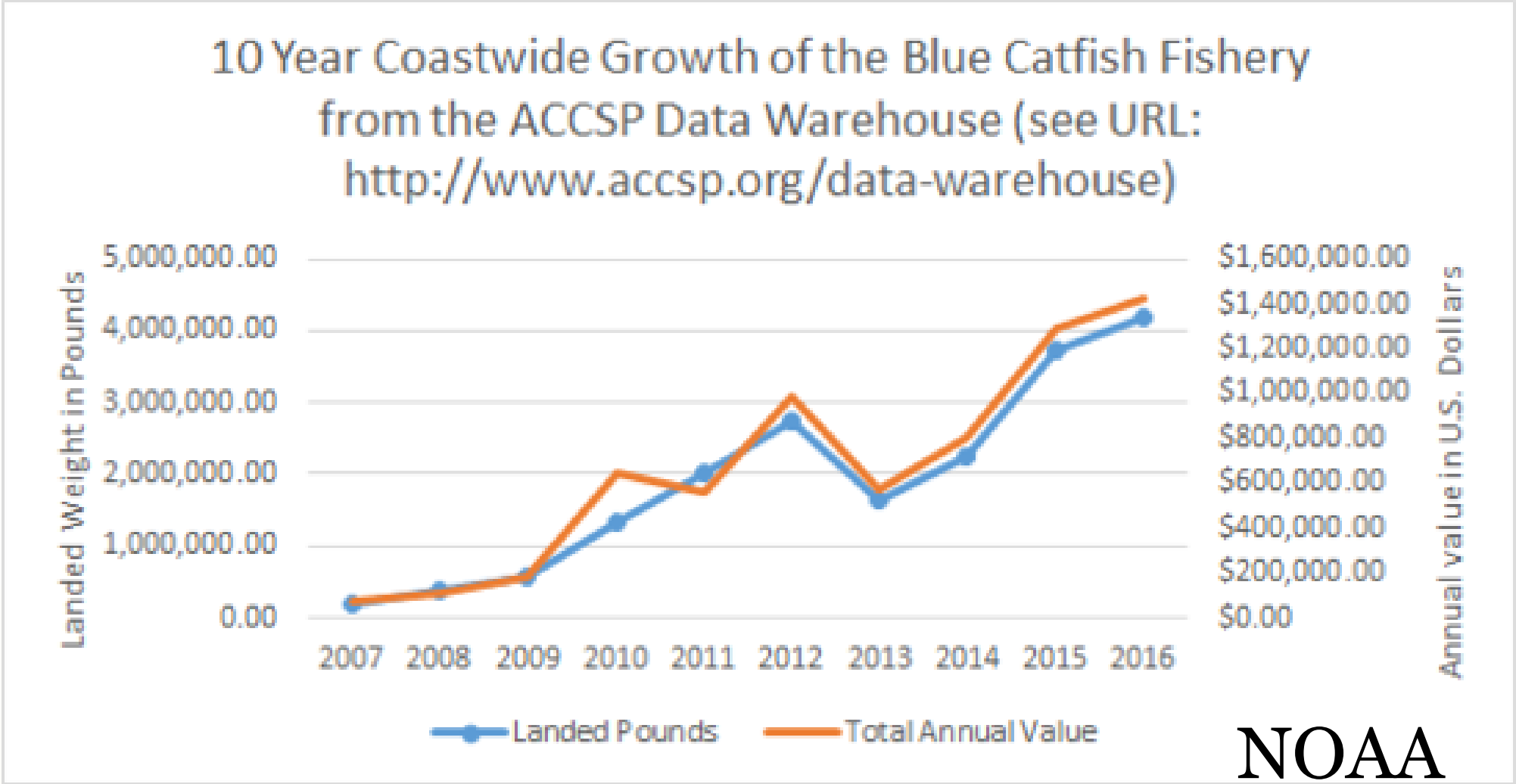


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Blue Catfish



Chesapeake Bay Magazine



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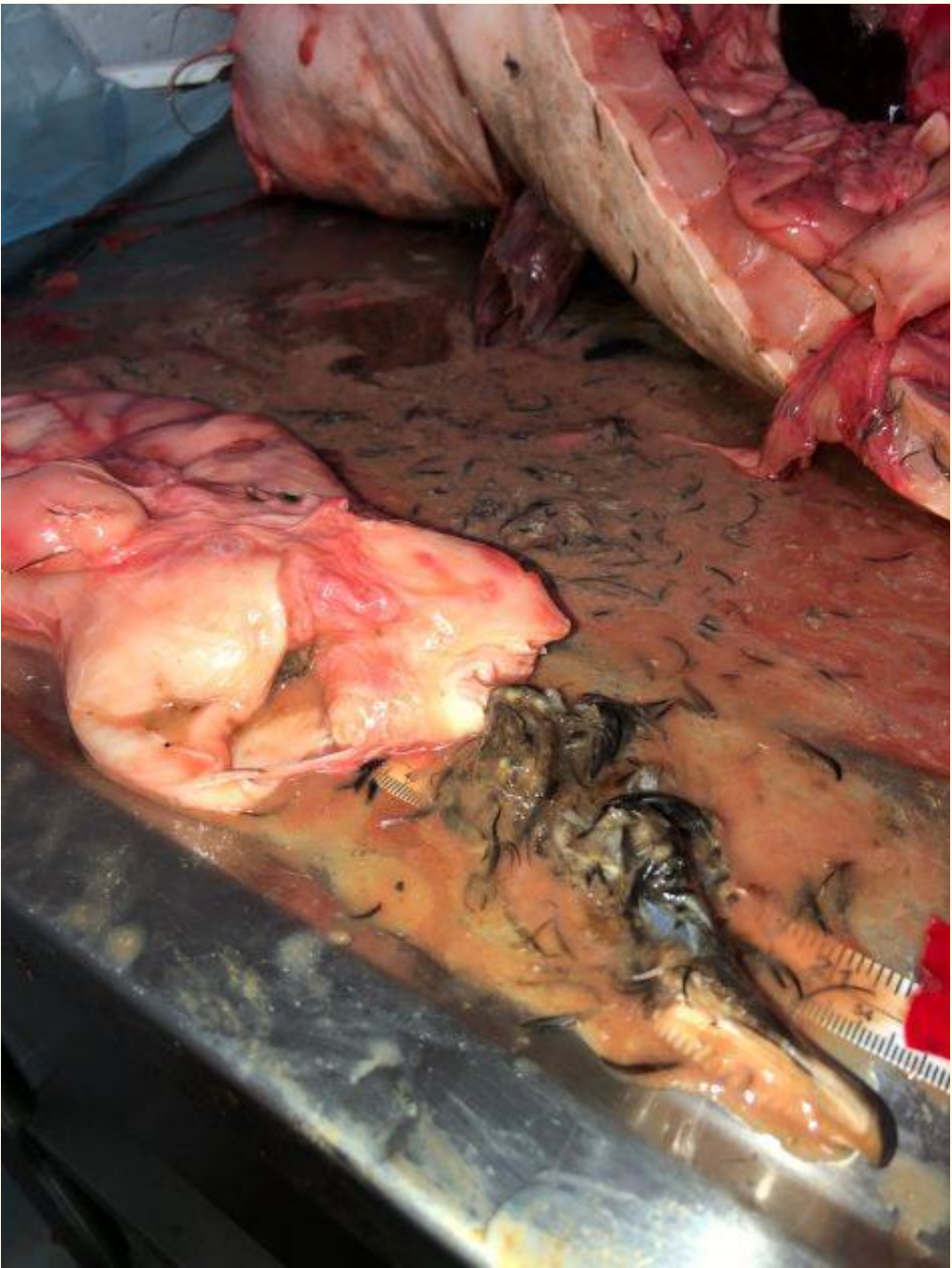
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Blue Catfish – Other Jurisdictions



The contents of a catfish stomach, including a wood duck. © Zachary Crum

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What is an invasive species?

TITLE



How does DWR plan to address increasing constituent demand to manage NSH as a sportfish in Virginia going forward? Particularly given the absence of any documented negative environmental or economic impacts resulting from NSH populations in Virginia waters?

What is an invasive species?

Regarding black bass (beyond the fact that snakes are far more entertaining to catch), there have likely been significant environmental impacts wrought by non-native invasive largemouth populations in eastern Virginia over the decades. What are DWR plans for documenting and mitigating those impacts? Any plans for controlling non-native black bass populations to reduce future impacts?

Thanks for any info you can provide regarding these topics.



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Largemouth Bass



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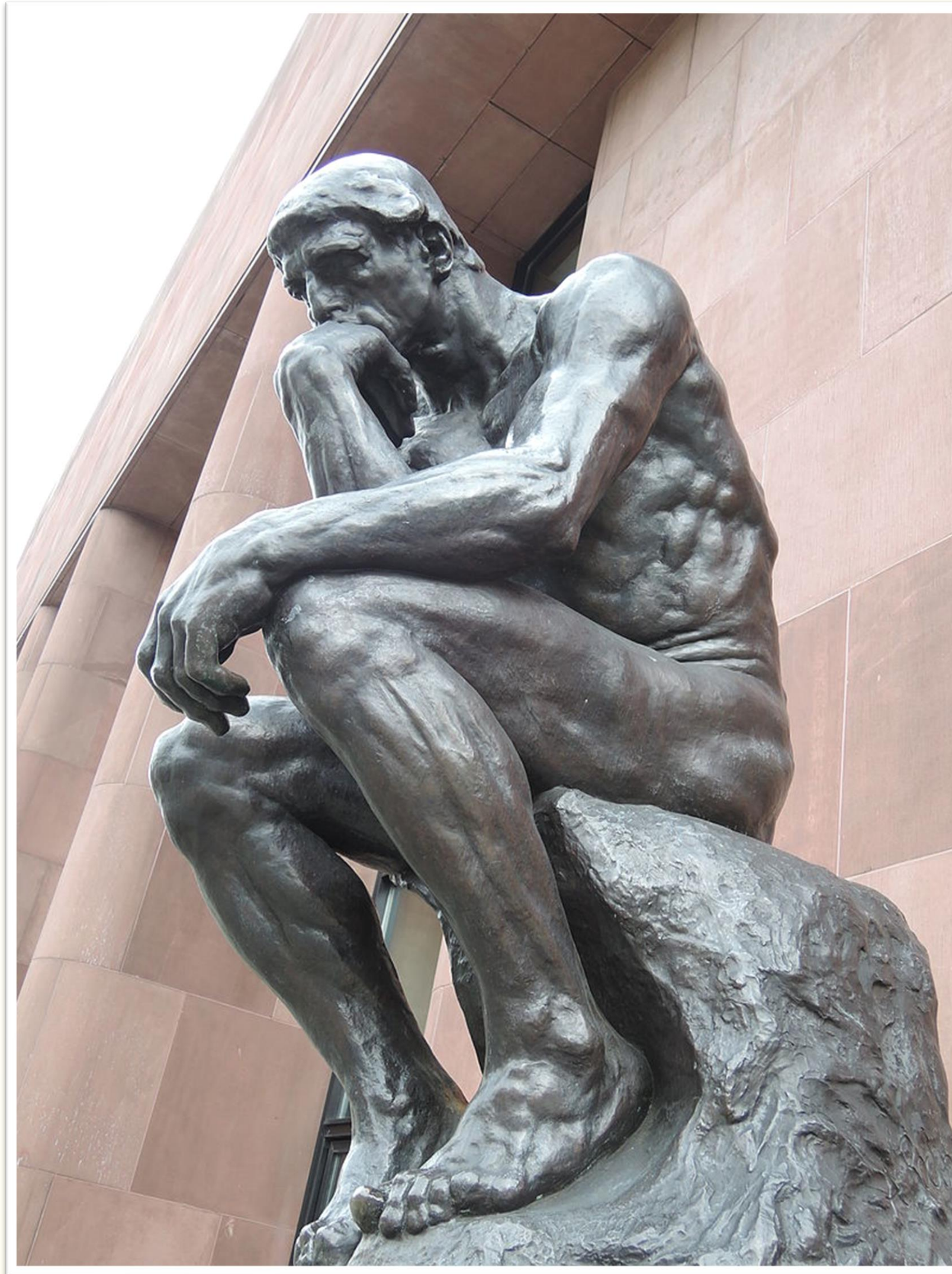


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Considerations

Is it a popular gamefish?

Are the impacts known or suspected?

Is control feasible?

What external pressures are present?

How do we message?

