

Lincoln Memorial University

LMU Institutional Repository

Research Day

Research Forums

Spring 4-12-2023

Benthic Beasts: The Ecological Significance of Lake Sturgeon and Blue Catfish in Eastern Appalachian Waterways

Stewart Thacker

stewart.thacker@lmunet.edu

Follow this and additional works at: <https://digitalcommons.lmunet.edu/researchday>



Part of the [Animals Commons](#), [Aquaculture and Fisheries Commons](#), [Biodiversity Commons](#), [Terrestrial and Aquatic Ecology Commons](#), and the [Zoology Commons](#)

Recommended Citation

Thacker, Stewart, "Benthic Beasts: The Ecological Significance of Lake Sturgeon and Blue Catfish in Eastern Appalachian Waterways" (2023). *Research Day*. 5.

<https://digitalcommons.lmunet.edu/researchday/5>

This Open Access Presentation is brought to you for free and open access by the Research Forums at LMU Institutional Repository. It has been accepted for inclusion in Research Day by an authorized administrator of LMU Institutional Repository. For more information, please contact LMUIR@lmunet.edu.



Benthic Beasts: The Ecological Significance of the Lake Sturgeon and Blue Catfish in Eastern Appalachian River Systems.

By Stewart Thacker



Lake Sturgeon (Acipenser fulvescens)



Blue Catfish (Ictalurus furcatus)



What is Benthic?

Benthic simply put means “bottom.” Meaning species such as Blue Catfish, Lake Sturgeon, and Common Carp are all species residing in the benthic zone of the water column. These species often referred to as “bottom feeders.” This is mainly misconstrued with them inhabiting the bottom while feeding partially on the bottom. So, why all the fuss?





Significance: *A. fulvescens*

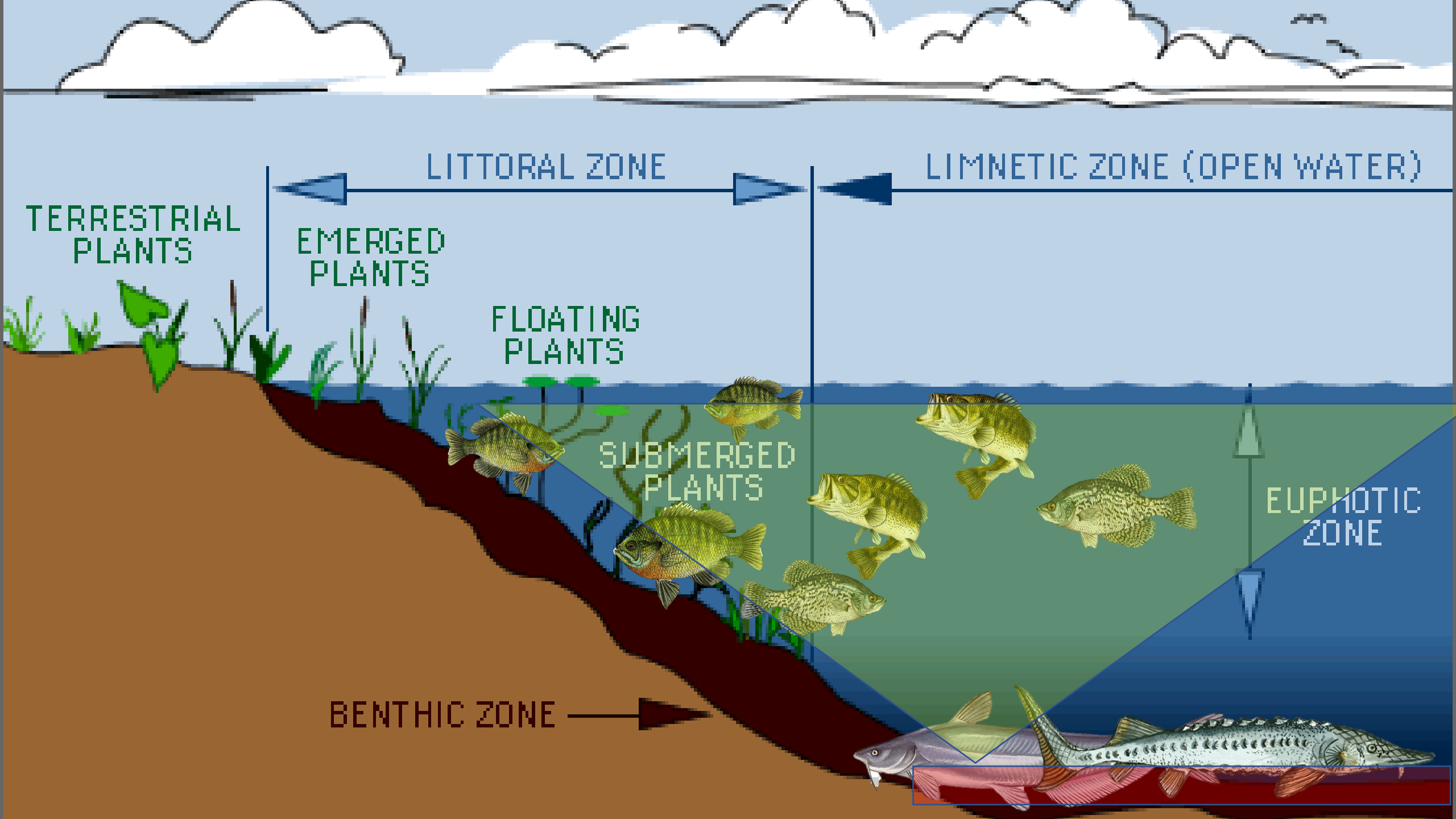
- Sturgeon are benthivores
- Sturgeon diet consists of feeding mostly on small invertebrates such as insect larvae, crayfish, snails, clams and leeches.
- As well as detritus and similar waste products.
- This means they are a primary regulator of biowaste and smaller organisms that are often avoided by photic and euphotic dwelling species.



Significance: *I. furcatus*

- Blue Catfish are opportunistic/generalist feeders.
- Blue Catfish diet is described as “anything that can fit in their mouths.”
- This means that they regulate all levels of the water column. Species control is their primary role within the waterbody





LITTORAL ZONE

LIMNETIC ZONE (OPEN WATER)

TERRESTRIAL PLANTS

EMERGED PLANTS

FLOATING PLANTS

SUBMERGED PLANTS

EUPHOTIC ZONE

BENTHIC ZONE