

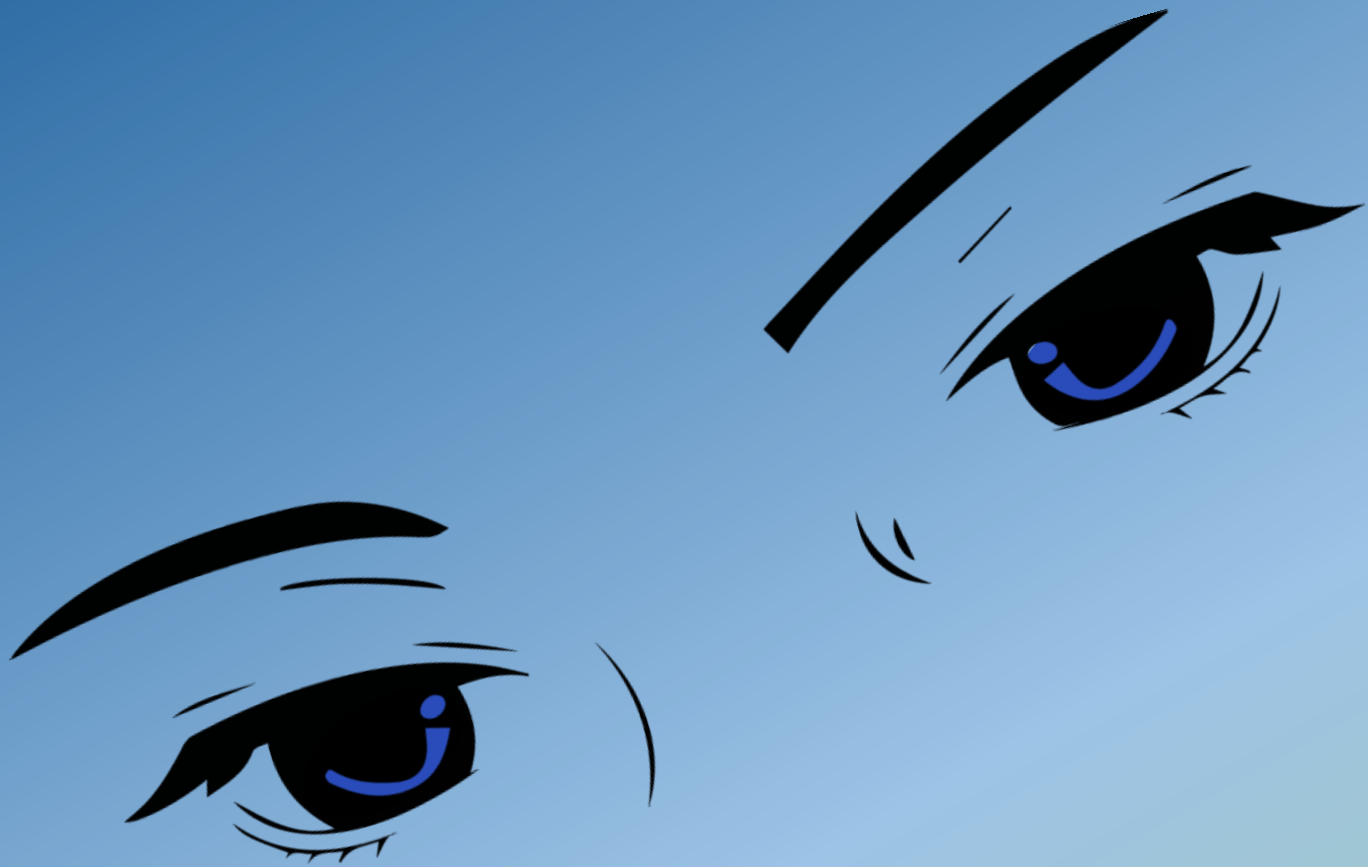
Dr. Daniel McGarvey
Center for Environmental Studies
Virginia Commonwealth University



Look at Me

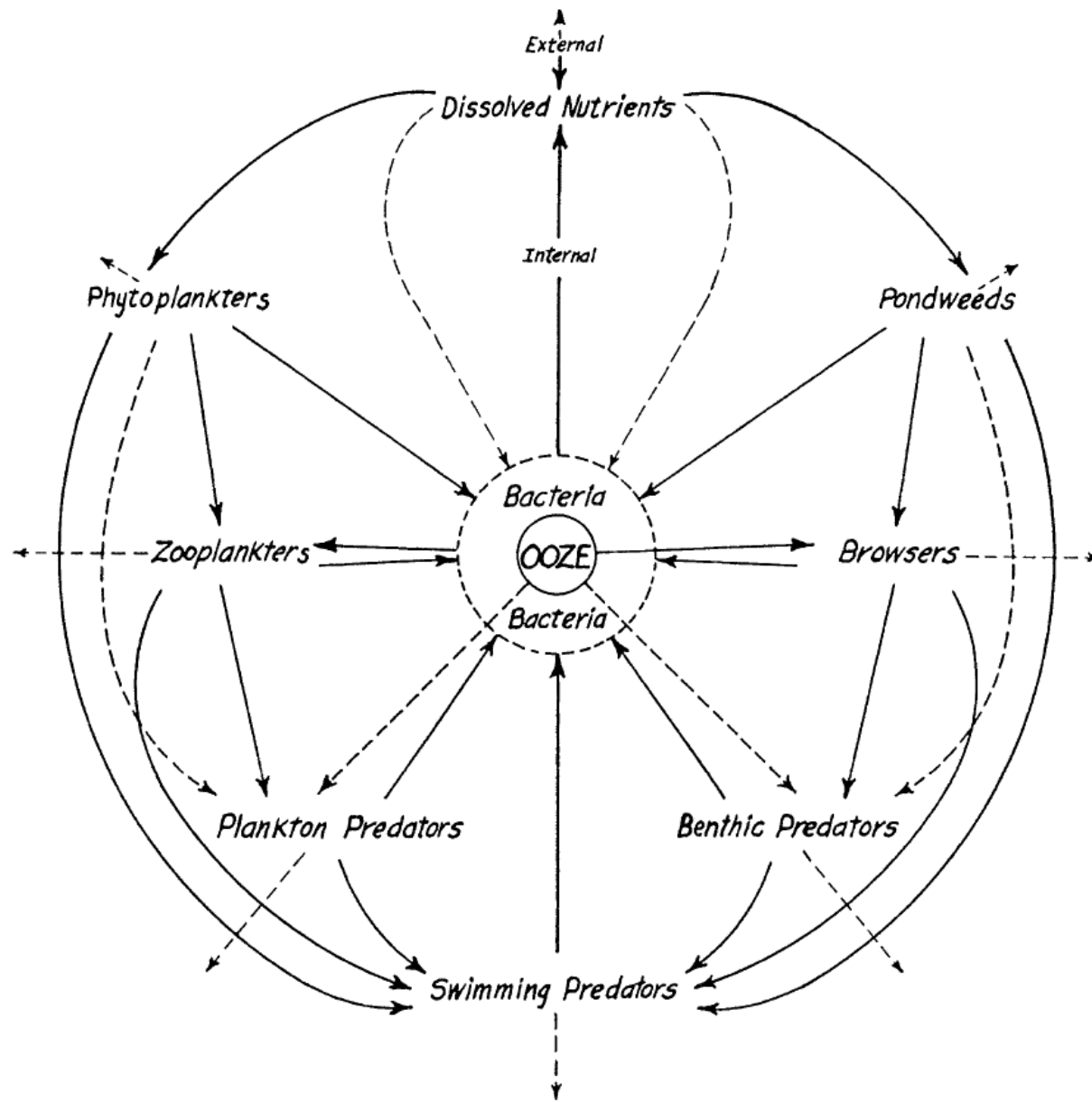
I have something I want
to share with you

Dr. Daniel McGarvey
Center for Environmental Studies
Virginia Commonwealth University

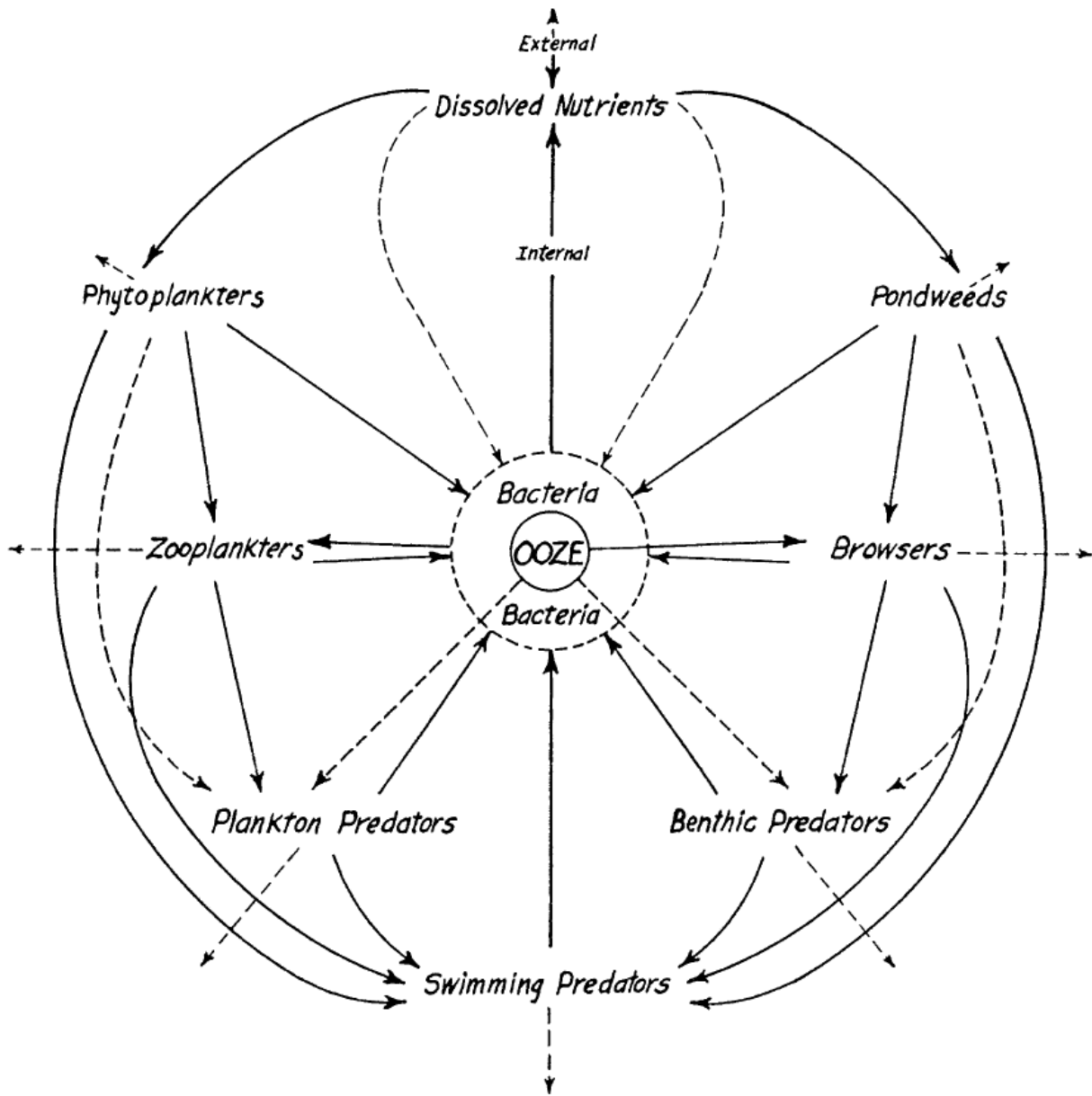


Look at Me

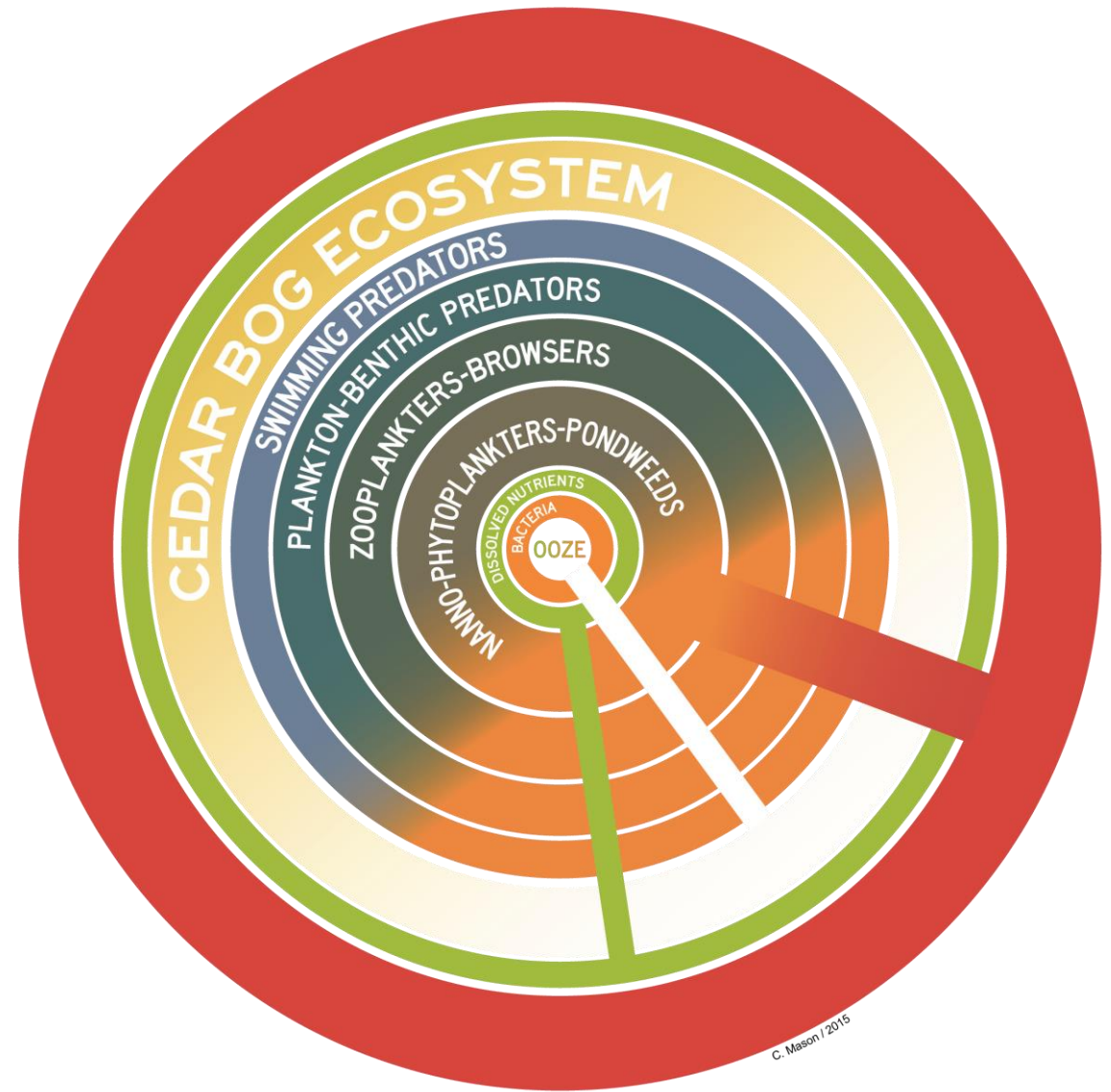
I have something I want
to share with you



Lindeman 1941



Lindeman 1941

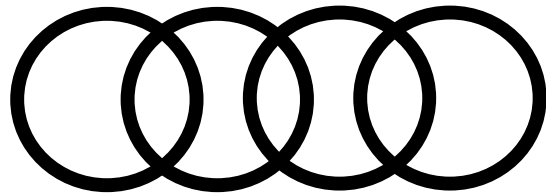
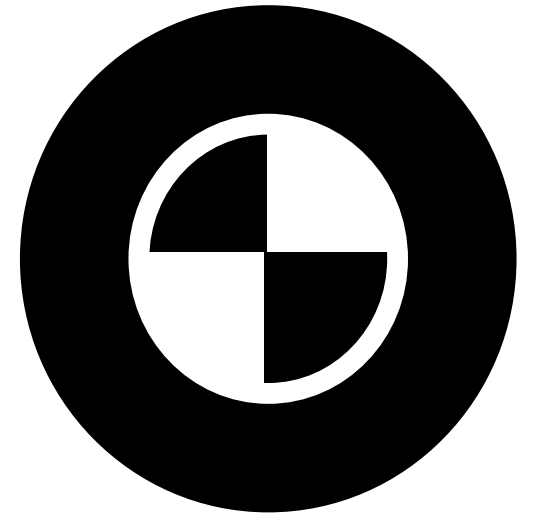
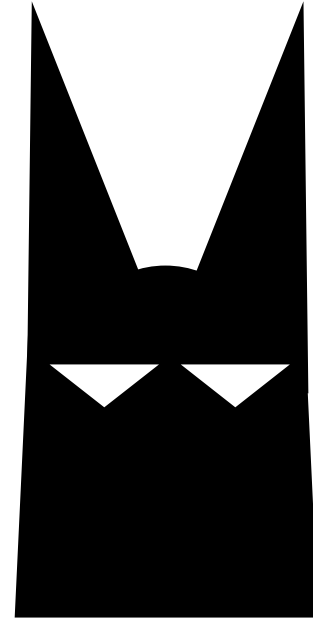
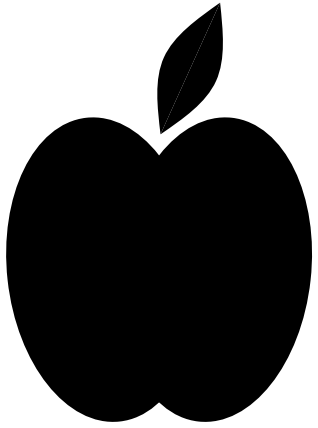


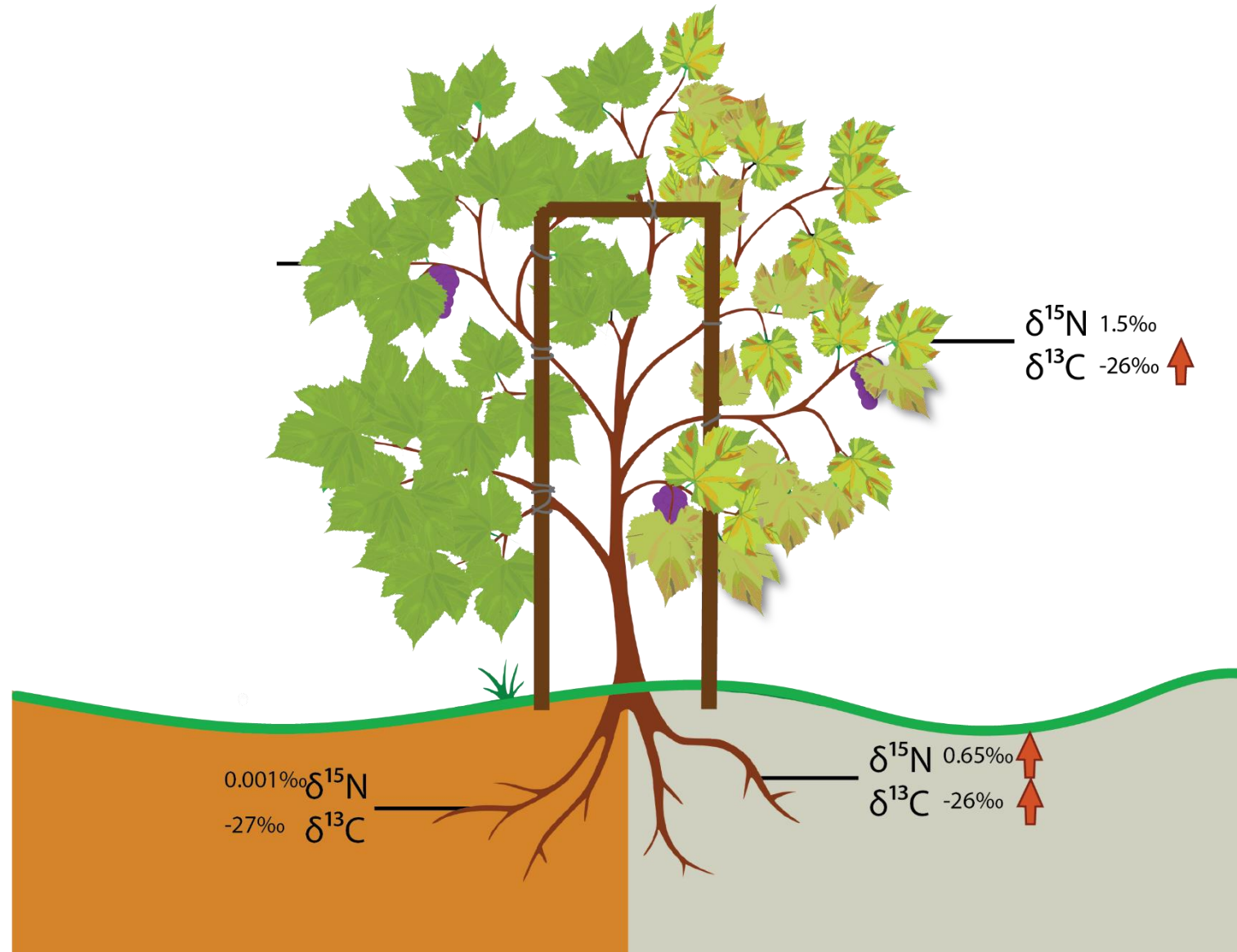
C. Mason / 2015

Mason 2015

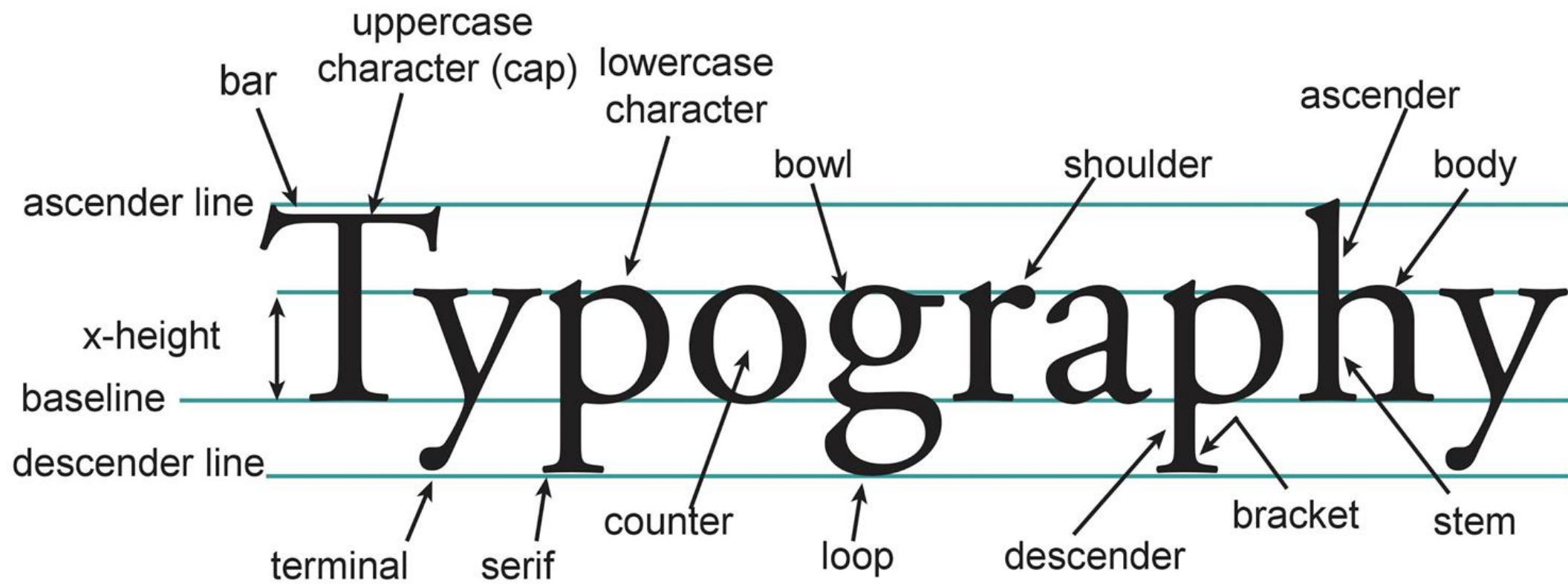
The logo features the text 'e|EESP 2.0'. The lowercase 'e' is in a dark grey, rounded font. A vertical green line acts as a separator between the 'e' and the 'E'. The 'E' is a tall, dark grey, blocky letter. The 'S' and 'P' are also dark grey, blocky letters. The '2.0' is in a green, sans-serif font, positioned below the 'P'. At the top of the green vertical line, there are three green, leaf-like shapes pointing upwards and outwards.

e|EESP
2.0





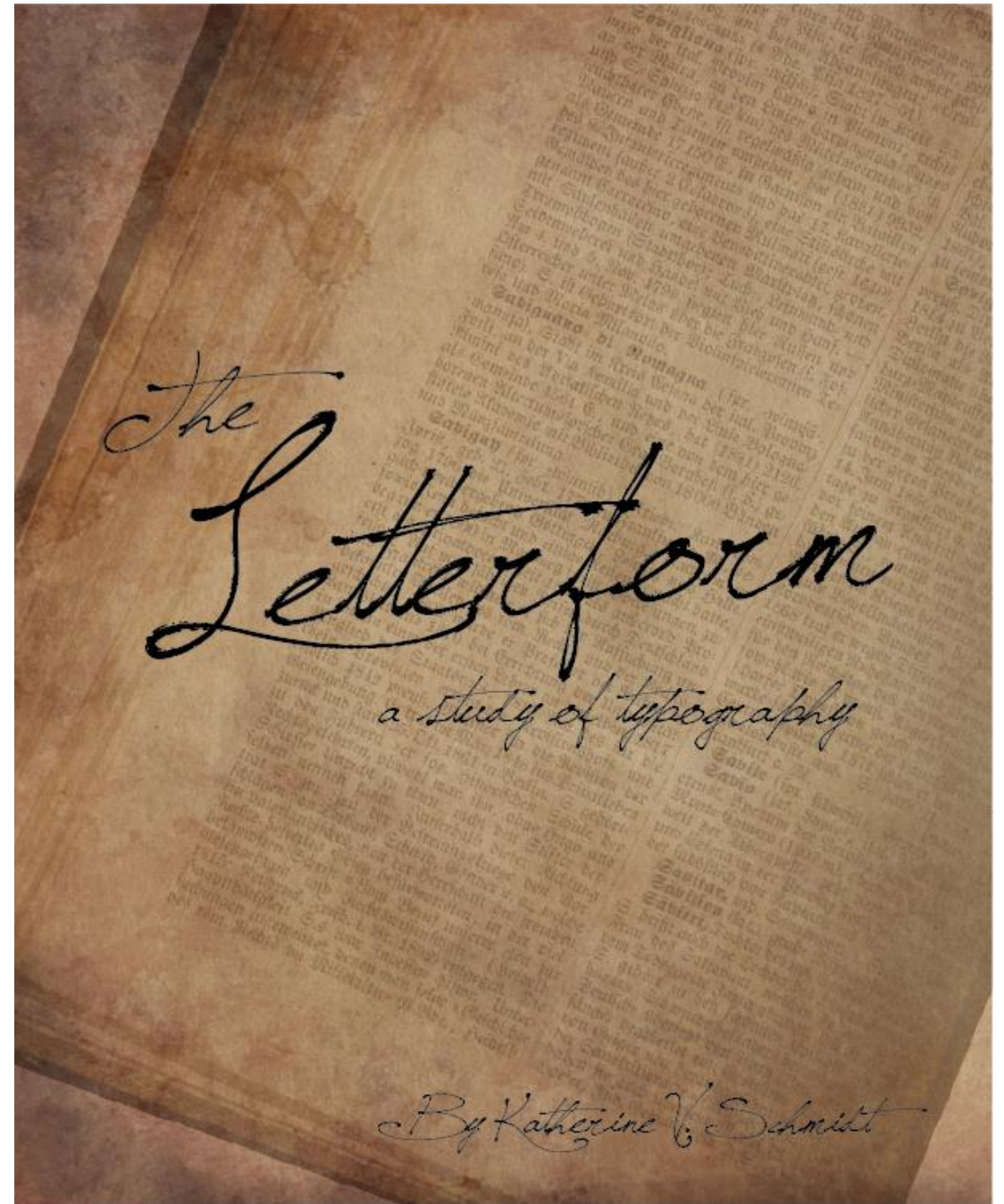
Stephen Via



Katie Schmidt

the
letterform
the
letterform
the
letterform
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letterform
the
letterform

katie v. schmidt



The Letterform

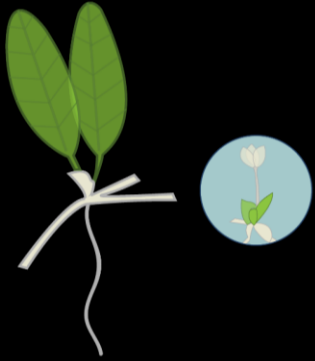
A. Davidson



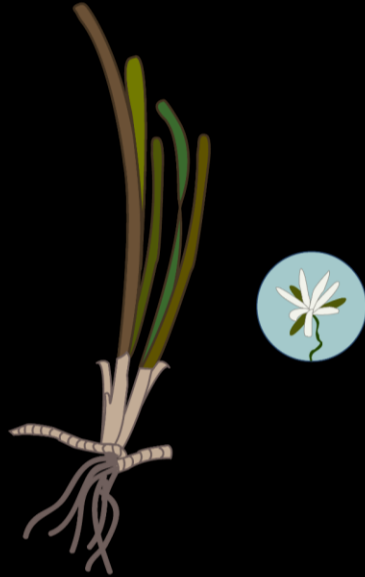
LETTER FORM

Brittany Moretz

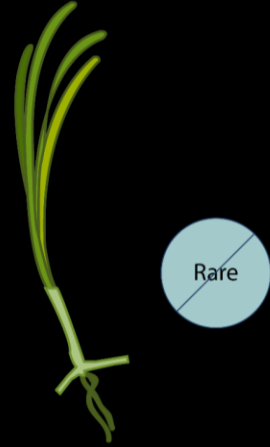




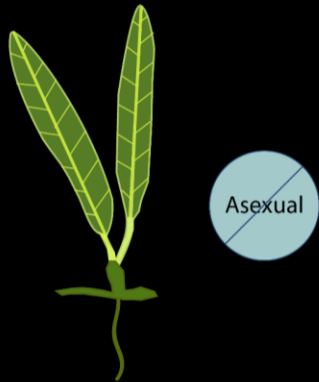
Halophila decipiens



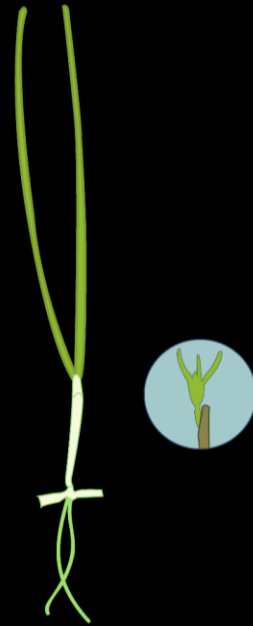
Thalassia testudinum



Halodule wrightii



Halophila johnsonii



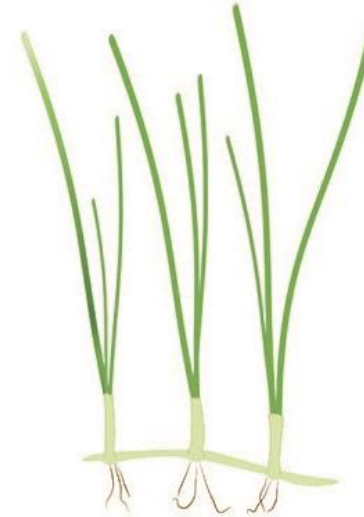
Syringodium filiforme



Manatee Grass
(*Syringodium filiforme*)



Turtle Grass
(*Thalassia testudinum*)



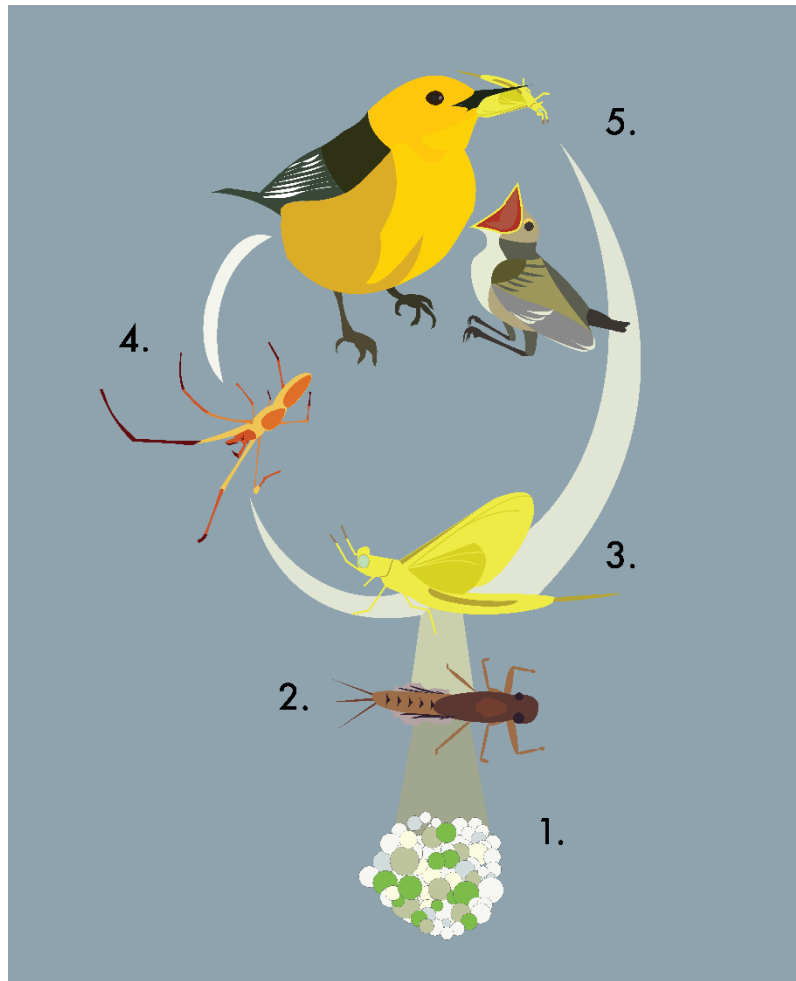
Shoal Grass
(*Halodule wrightii*)



Johnson's Seagrass
(*Halophila johnsonii*)



Paddle Grass
(*Halophila decipiens*)



**Transport of Algal Bloom Toxin
into Terrestrial Ecosystems**

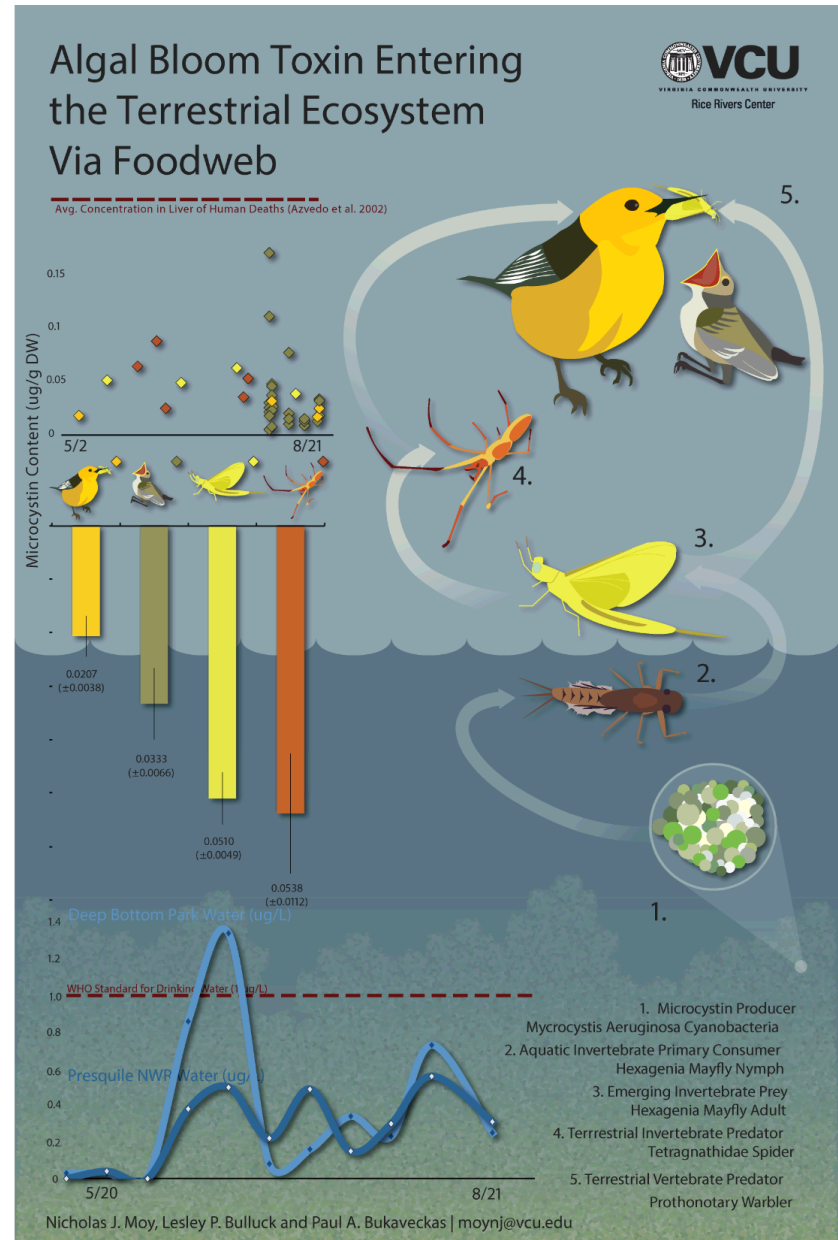
- 1. Microcystin Producer *Microcystis Aeruginosa* Cyanobacteria
- 2. Aquatic Invertebrate Primary Consumer *Hexagenia* Mayfly Nymph
- 3. Emerging Invertebrate Prey *Hexagenia* Mayfly Adult
- 4. Terrestrial Invertebrate Predator *Tetragnathidae* Spider
- 5. Terrestrial Vertebrate Predator Prothonotary Warbler

Nicholas Moy



Transport of Algal Bloom Toxin into Terrestrial Ecosystems

1. Microcystin Producer *Mycrocystis Aeruginosa* Cyanobacteria
2. Aquatic Invertebrate Primary Consumer *Hexagenia* Mayfly Nymph
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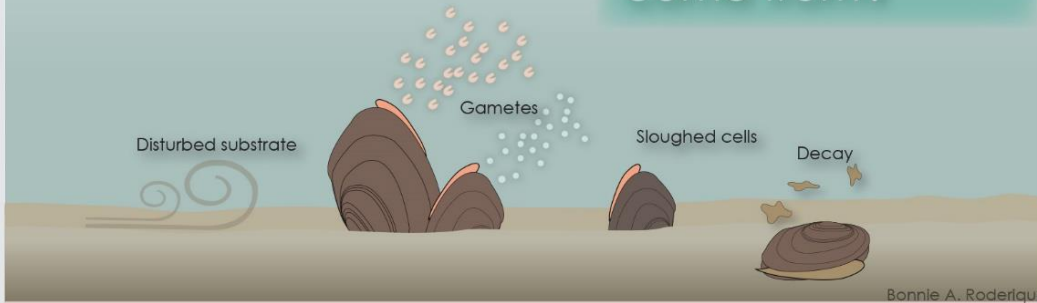


Nicholas Moy

species Revealed

environmental DNA (eDNA)
as a conservation tool

Where does eDNA come from?



Bonnie A. Roderique

How can eDNA be used?

DETECTION

Species presence at collection sites can be inferred from species DNA in water samples

BIOMASS

Species abundance/biomass can be determined by the concentration of DNA in the sample

ALLELIC DIVERSITY

Allelic diversity among and between populations can potentially be determined

water samples with a mixture of species DNA are collected and filtered

DNA suspended in water is trapped on the filter

DNA is extracted from the filter

sample is amplified via qPCR using species specific primers

only DNA from species of interest remains

Mesocosms with varying levels of species biomass are sampled

As biomass increases, DNA concentration in the sample should increase at a near constant rate

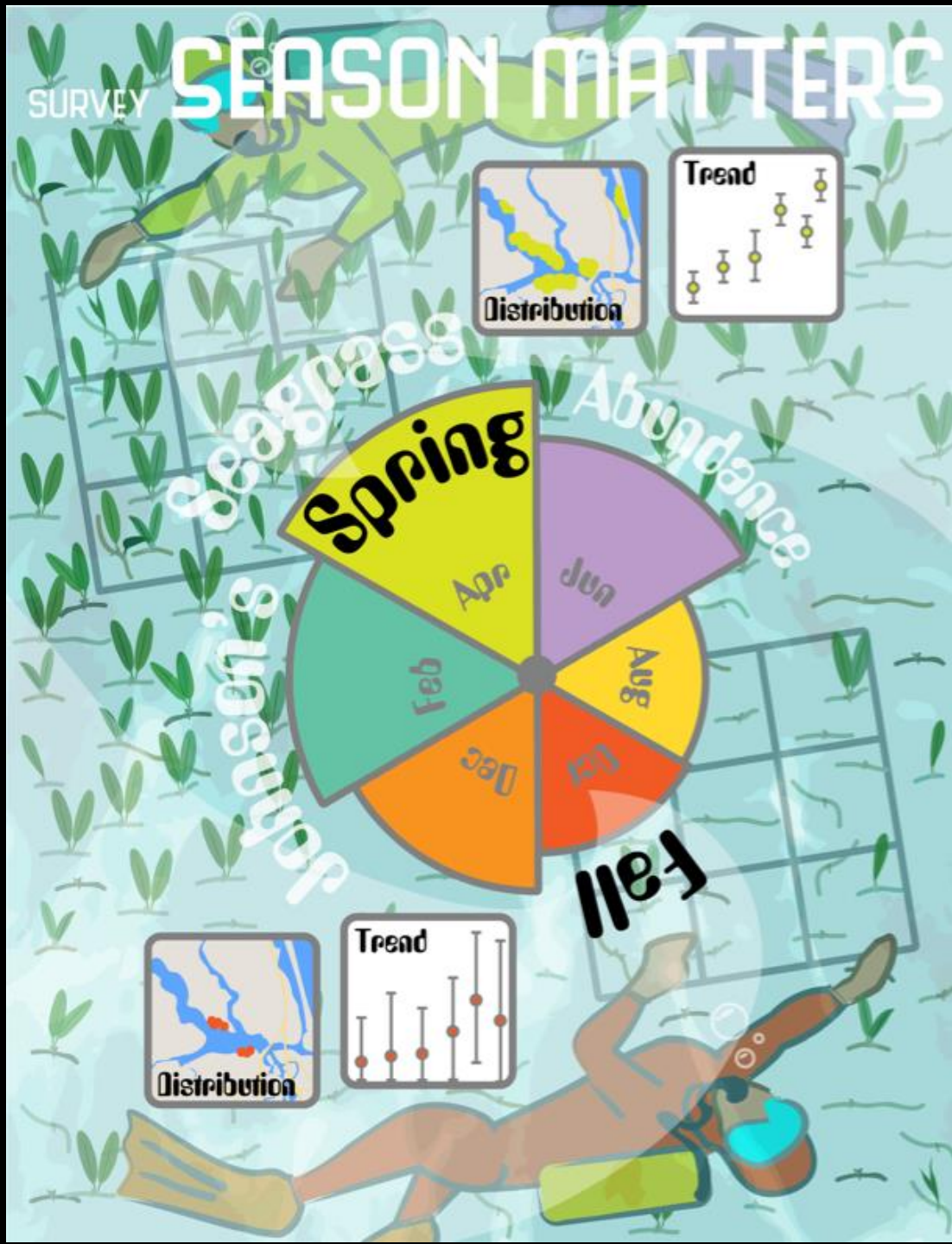
Collected DNA is sequenced to determine the total number of different alleles in each population

Allelic diversity is an important parameter of population genetic diversity

Bonnie Roderique

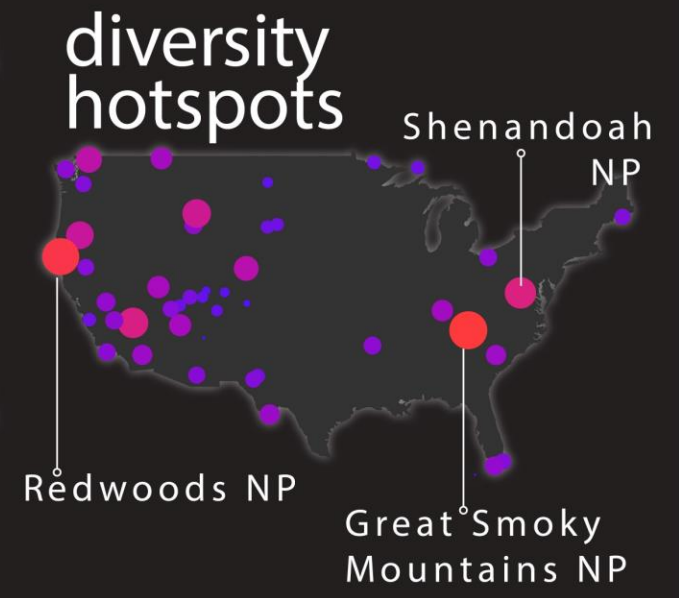
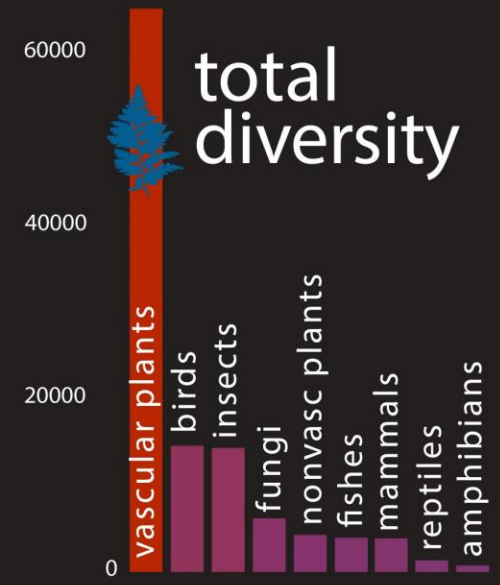
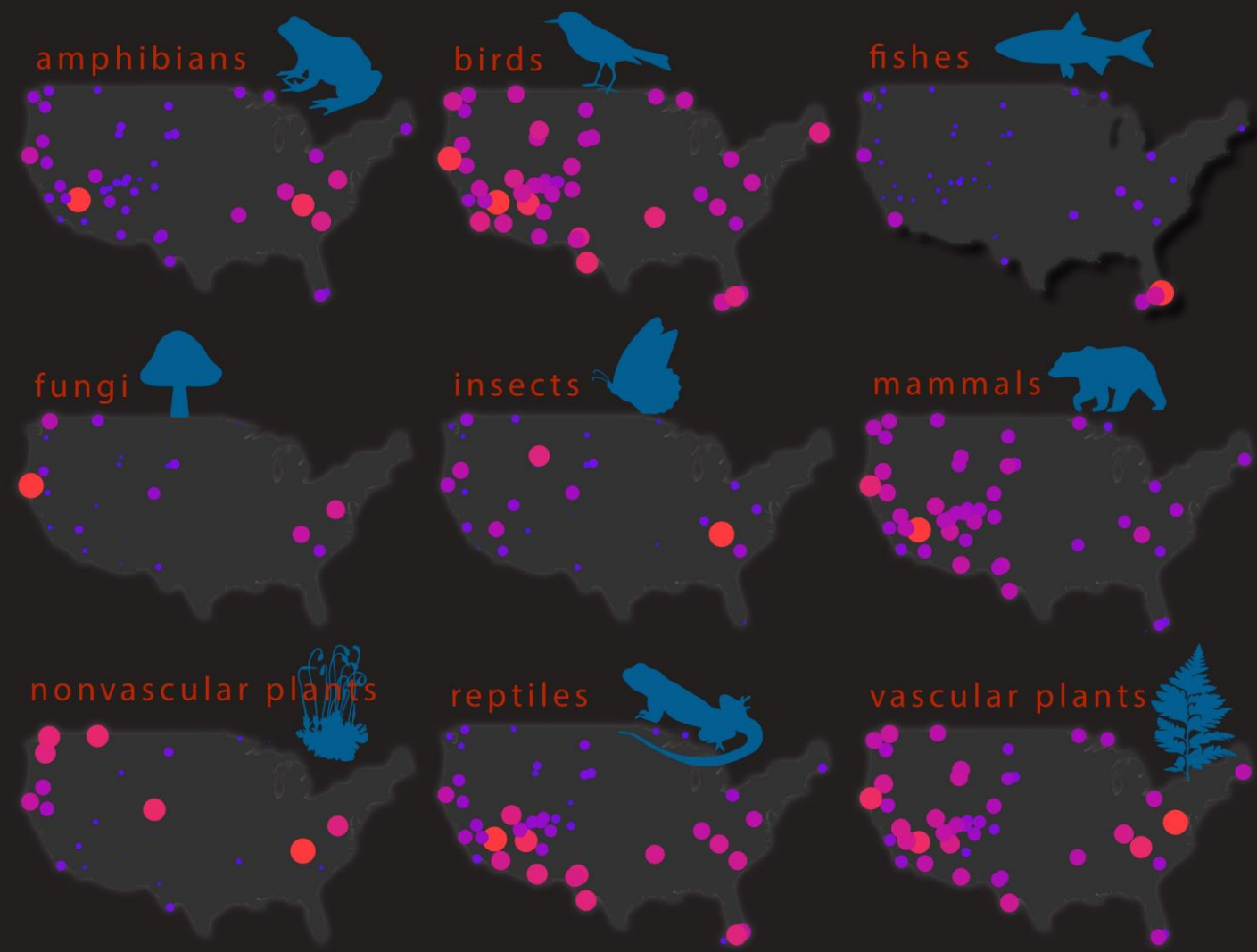
SURVEY

SEASON MATTERS

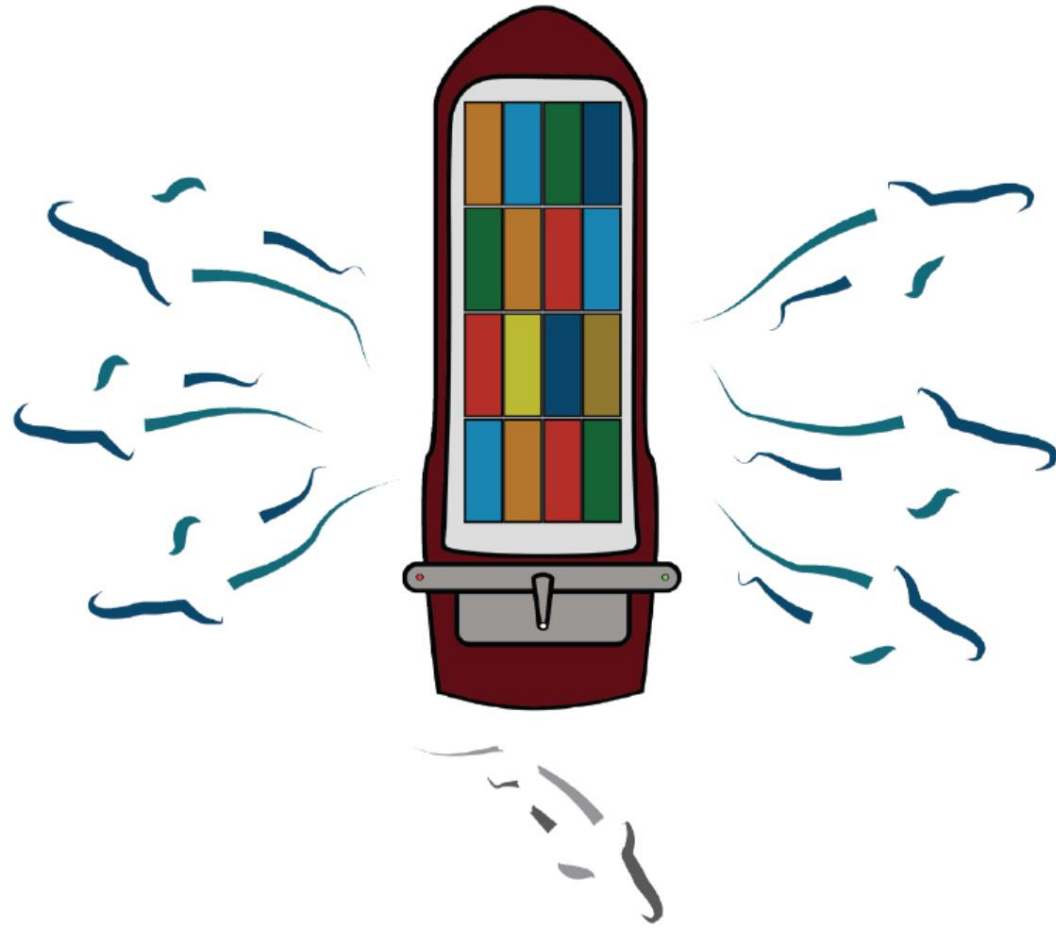


Ben Nickley

NATIONAL PARK biodiversity



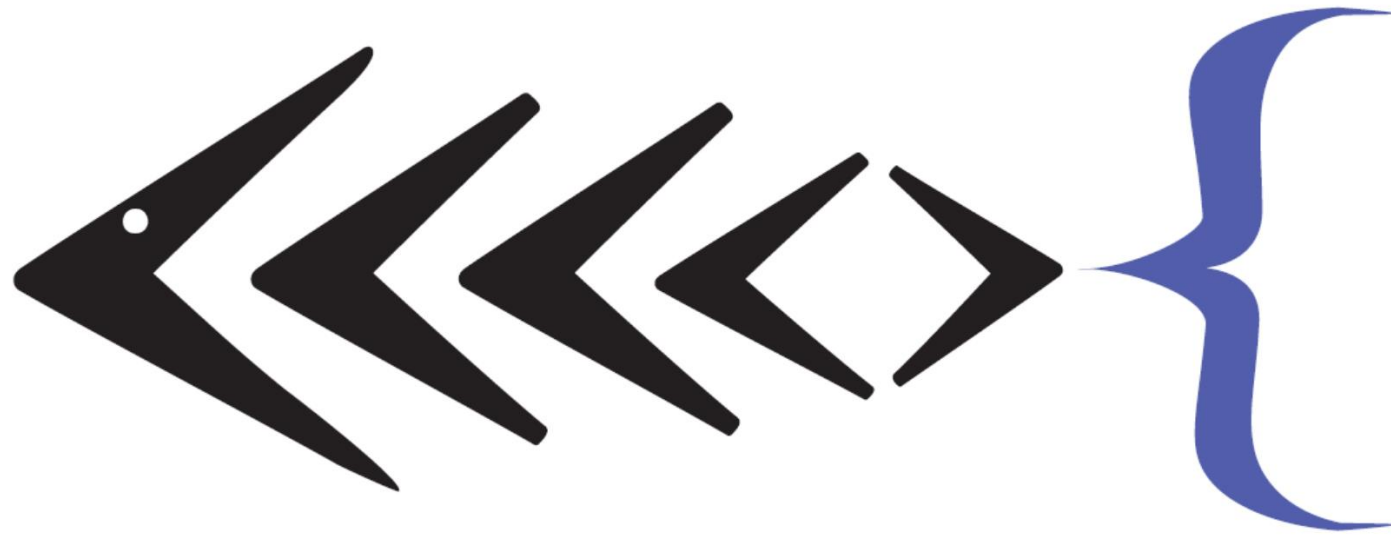
by Taylor Woods



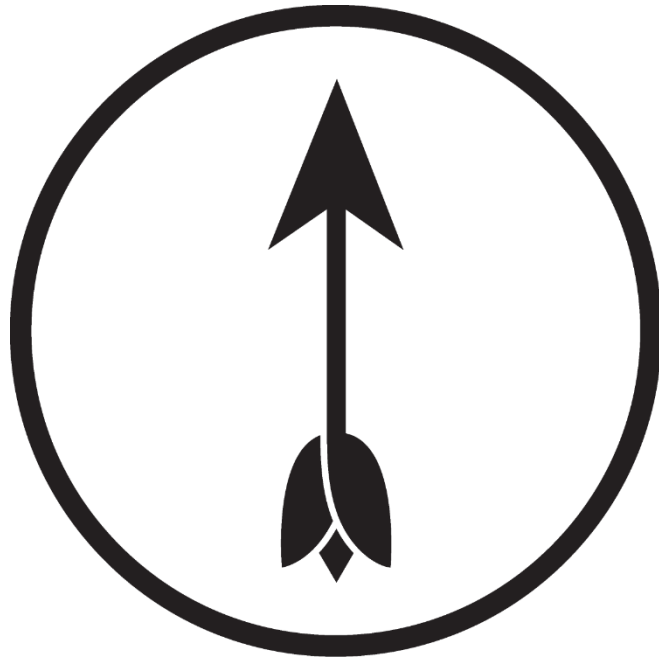
Michael Barber – *Sturgeon vectors were made subtle for visual interest and to convey how their hidden lifestyle is revealed through telemetry, as well as to look like surface waves. I revised the struck sturgeon to look more similar to the rest of the sturgeon in the logo, and rearranged them to make the logo more versatile in terms of placement on posters, presentations, etc.*



Jane Remfert – *This simple function expresses the entire basis of my research. Once fonts were chosen, characters were manipulated to flow together. Style elements (e.g., drop shadow) were added to lift the logo off the page. Colors were chosen by sampling greens from an image trace of a leaf...reflecting the colors of the forest environment in which my research is conducted.*

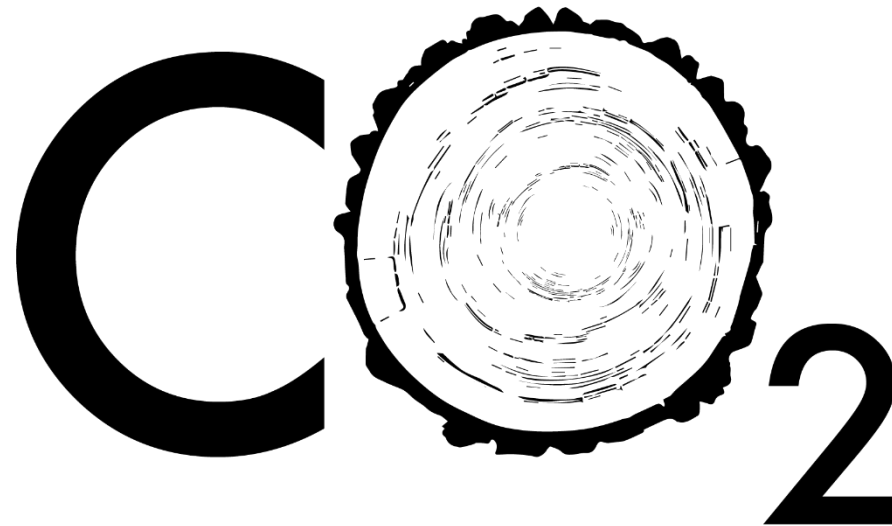


Taylor Woods – *I approached this exercise by emphasizing the union of computer programming and freshwater fish ecology that defines my research. I sought to create a logo that was simple enough to be applicable in a wide range of media formats, from PowerPoint to business cards.*



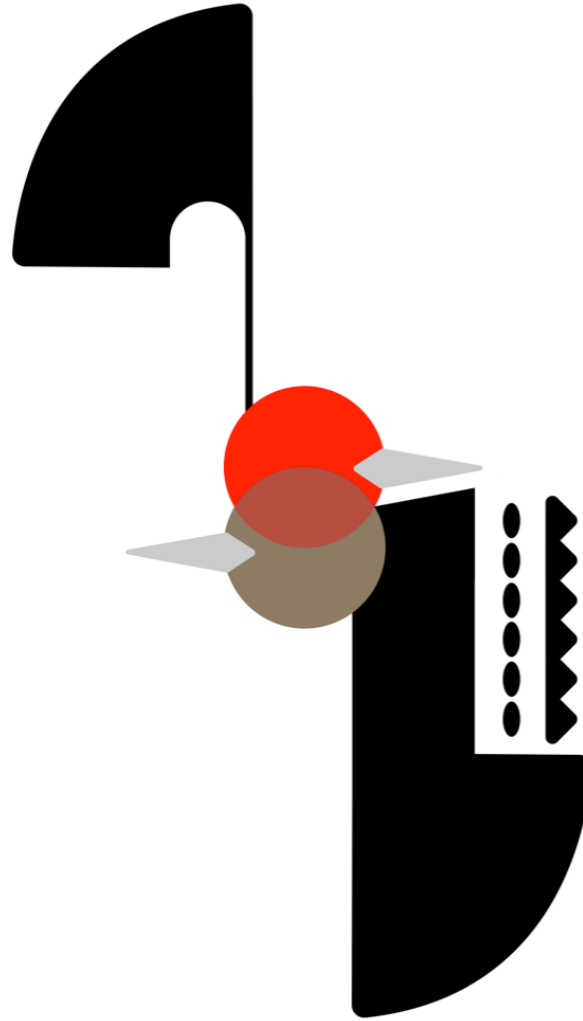
*Wyatt
Carpenter*

*Amy
Schmid*





Lindsey Flanary



Ben Nickley



Brittany Moretz

Bulletin

LIMNOLOGY AND OCEANOGRAPHY

ASLO

Association for the Sciences of
Limnology and Oceanography



WILEY

Key Challenges

- Confines of graduate timeline
- Germaine skills vs. individual storylines
 - Partner storylines
- Scalability / transferability

McGarvey, D.J. and S.E. Faris. 2019. *An arts-based approach to science communication training*. Scientia (<https://doi.org/10.26320/SCIENTIA311>). [Google “McGarvey Scientia”]

McGarvey, D.J. and C. Mason. 2015. *Re-envisioning the communication of our science*. ASLO Bulletin 24 (1) : 1-4. [Google “McGarvey ASLO Bulletin”]

Thanks!

- Sara Faris
- Robert Meganck, Sara Gevurtz, Laura Chessin
- VCU Center for Environmental Studies
- VCU Department of Communication Arts
- VCU Quest Innovation Fund
- My brave students. . .

Daniel McGarvey

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