

Filling the Shallow Water Monitoring Gap for Habitat and Forage

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Project Dependencies:

- GIT funding
- Riverkeeper participation
- Training network
- Sample handling/ID/preservation
- Data quality control

Underwater Grass (SAV) Monitoring:

- Brooke Landry (MD), JJ Orth (VA, VIMS)
- H-GIT funding proposal
- Sampling:
 - Timing – seasonal: spring, summer, fall
 - Location – throughout each river, as far upstream as possible
 - Data taken:

SAV:

- ✓ Spp. Composition
- ✓ Abundance
- ✓ Bed size
- ✓ Location (GPS coordinates)
- ✓ Shoreline classification

WQ data

Forage sampling: Fish & benthic invertebrates (2nd year)

Forage sampling:

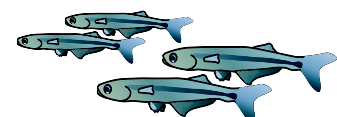
Fish (traps) & benthic invertebrates (cores):

- F-GIT funding proposal
- Pilot study this year with a few key Riverkeepers
 - Test & modify gears (minnow traps & benthic cores)
 - Sample within habitats (SAV, emergent marsh)
 - Data:
 - ✓ Abundance of key forage groups/species
(identified at STAC Forage Workshop)
- Year 2 - Add to SAV sampling with subset of Riverkeepers who are interested

Key Forage Species / Groups:

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- Bay Anchovy
 - Polychaetes
 - Mysids
 - Razor clams
 - Amphipods and isopods
 - Weakfish (juveniles)
 - Spot (juveniles)
 - Mantis shrimp
 - Sand shrimp
 - Atlantic croaker (juveniles)
 - Macoma clams

Based on wet weight of prey in stomach analyses from ChesMMA (VIMS)

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- Atlantic menhaden
 - Blue crab
 - Shad & river herrings
 - Small bivalves
 - Atl.Silverside
 - Mummichog

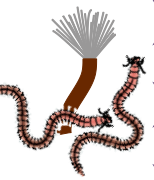
Managed forage species

Historically Important

Upriver

- ½ species are invertebrates
- Many not usually “forage”

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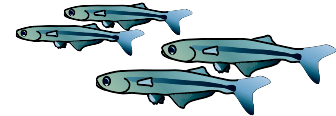


➤ Blue crab

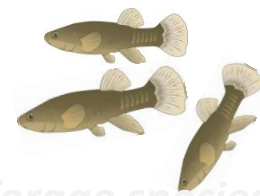
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