

Aquatic Community Assessments in Five TVA Tailwaters



Sampling Methods

- Fish and Benthic Community Samples collected in the Spring during minimum flow
 - Community Assessment -Index of Biotic Integrity
 - Quantitative and Qualitative Benthic IBI
- Three Stations Collected Per Tailwater



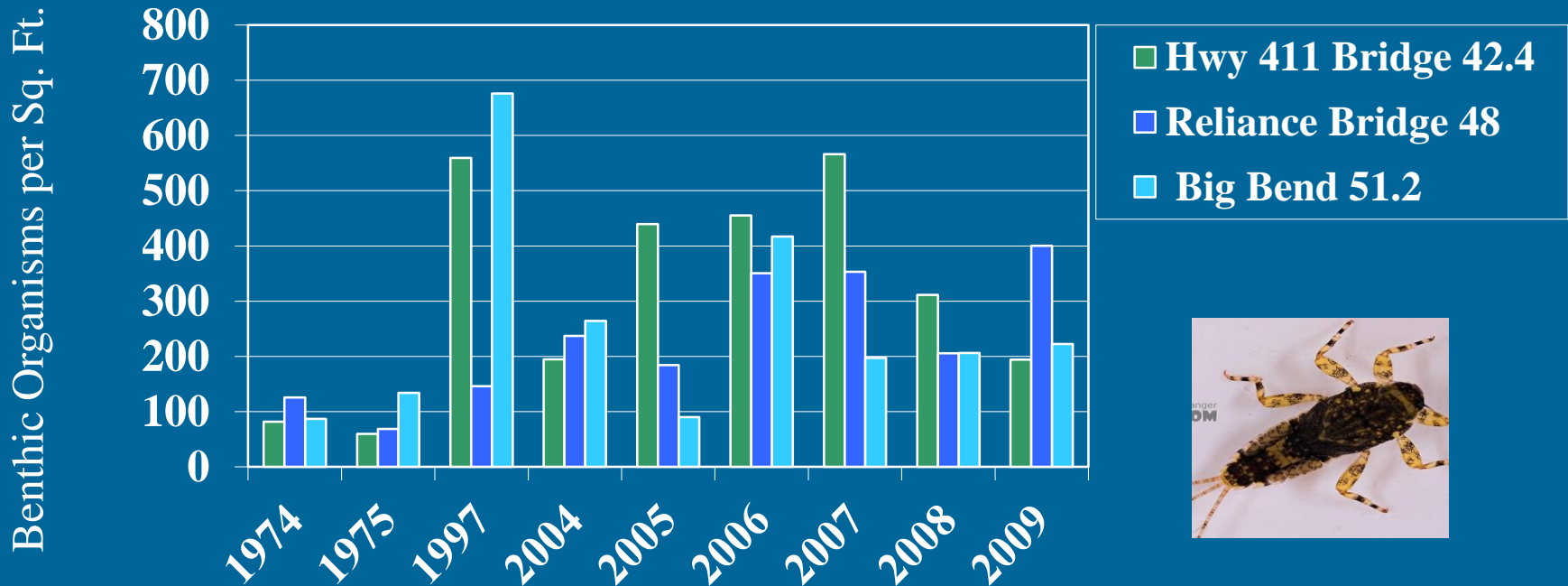
Sampling Stations



Tailwater	Station (River Mile)		
Apalachia	Big Bend (51.2)	Reliance (48.0)	Hwy 411 (42.4)
Cherokee	Below Dam (51.1)	Nance F. (33.3)	McKinney (25.0)
Norris	Miller Is. (77.0)	Fish Trap (70.5)	Hwy 61 (66.7)
South Holston	Below Weir (49.2)	Hick. Tree (44.4)	Webb Br. (39.4)
Wilbur	Near Dam (31.0)	Elizabeth. (21.8)	Saylor Is. (16.4)

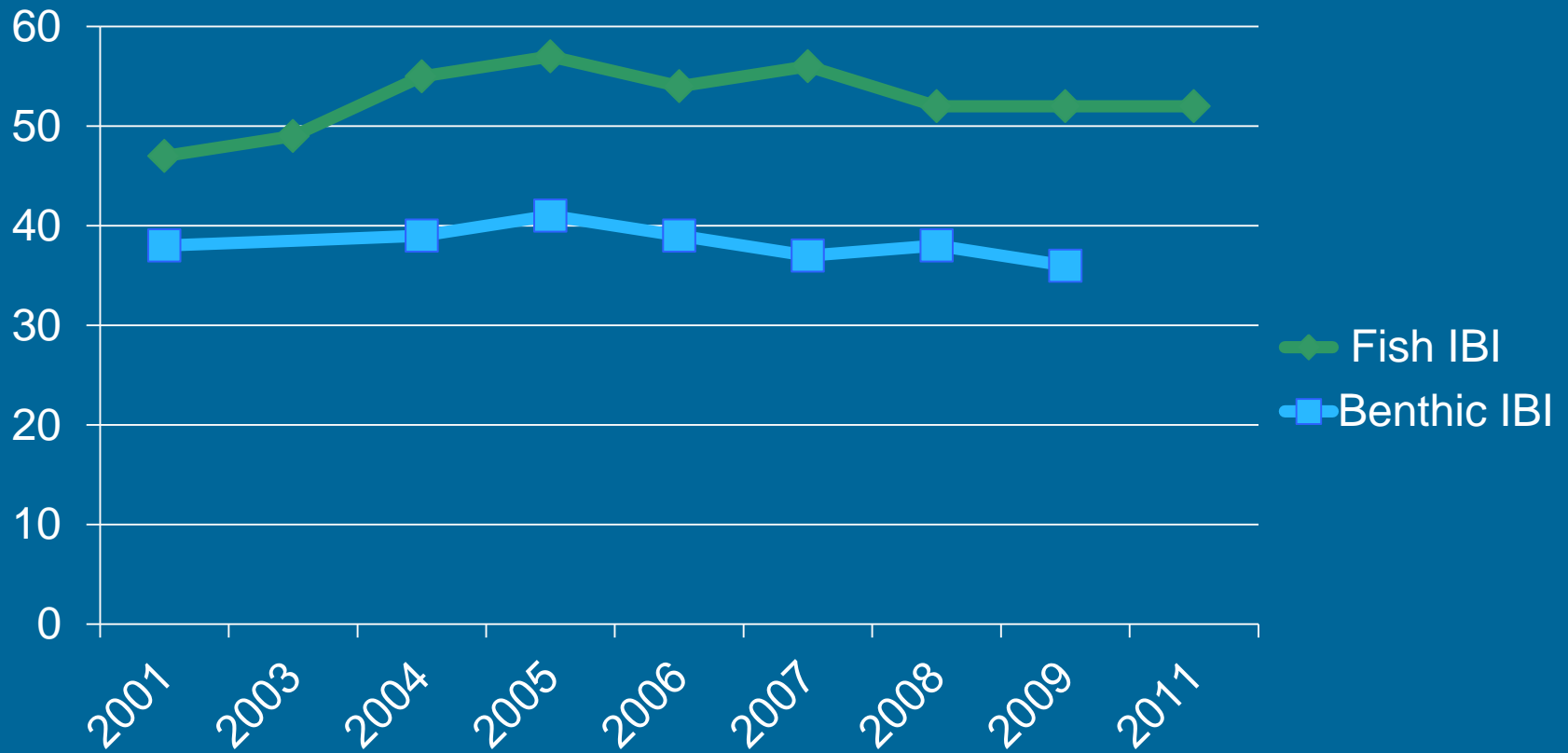
Apalachia

Relative Abundance of All Benthic Organisms

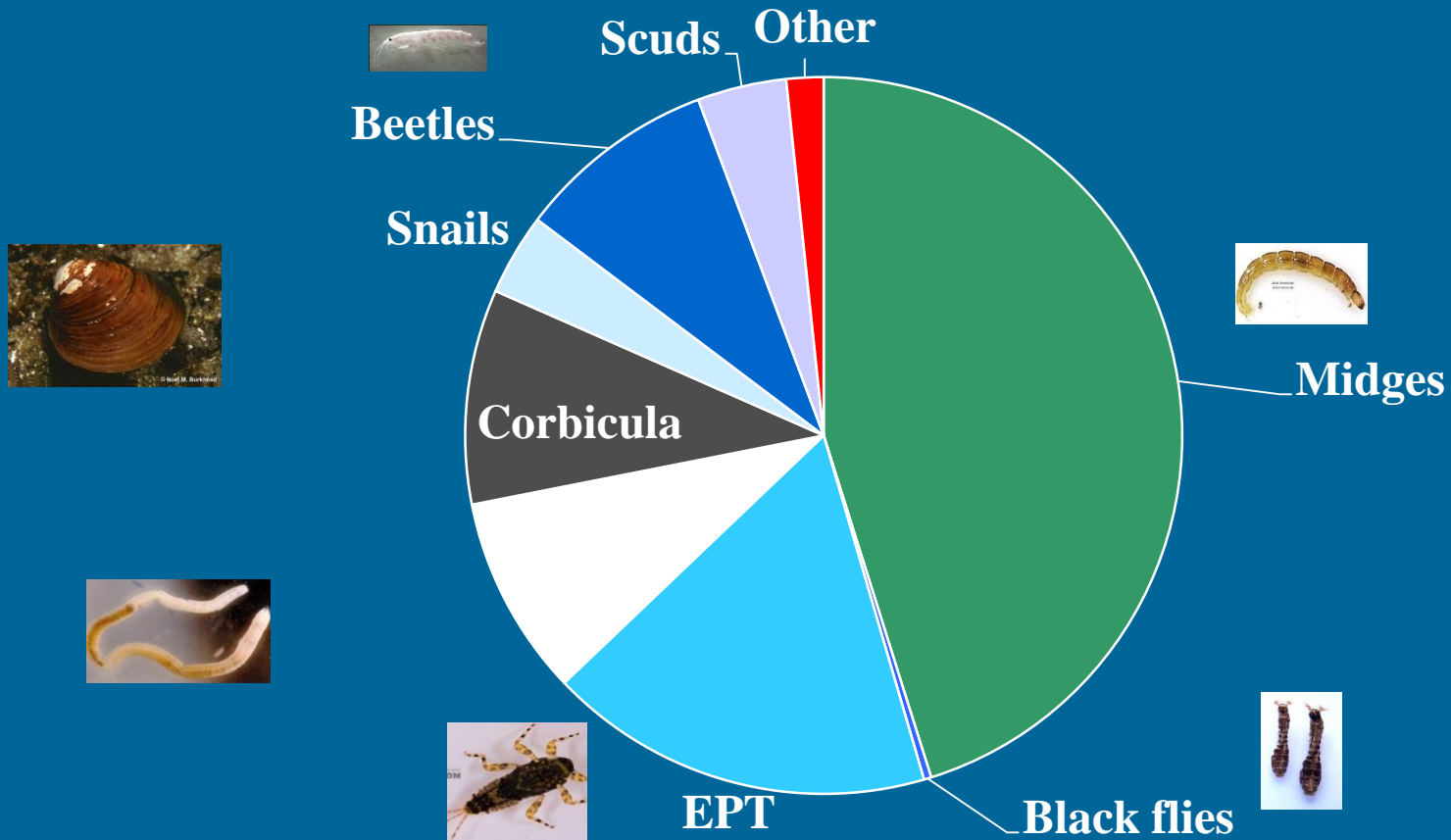


Appalachia

Fish and Benthic Index Scores

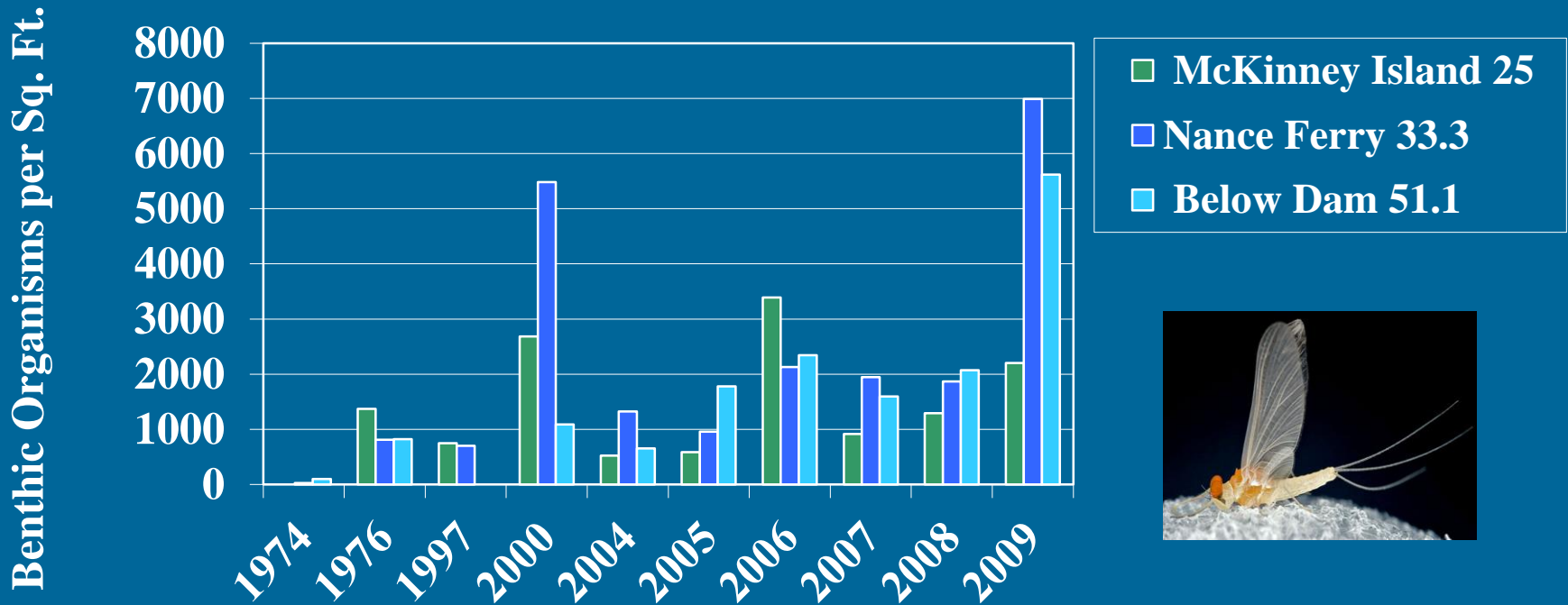


Apalachia: Species Composition



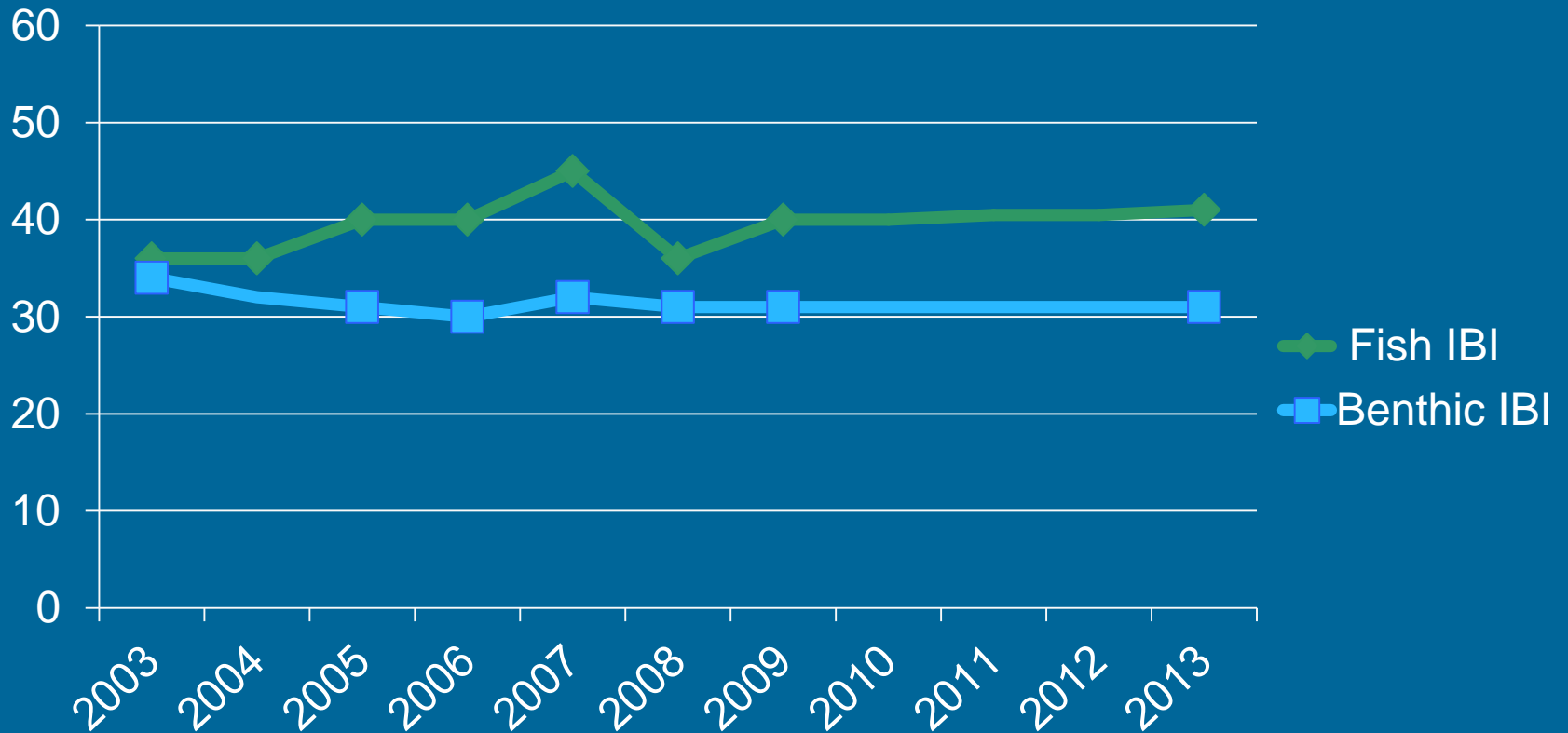
Cherokee

Relative Abundance of All Benthic Organisms



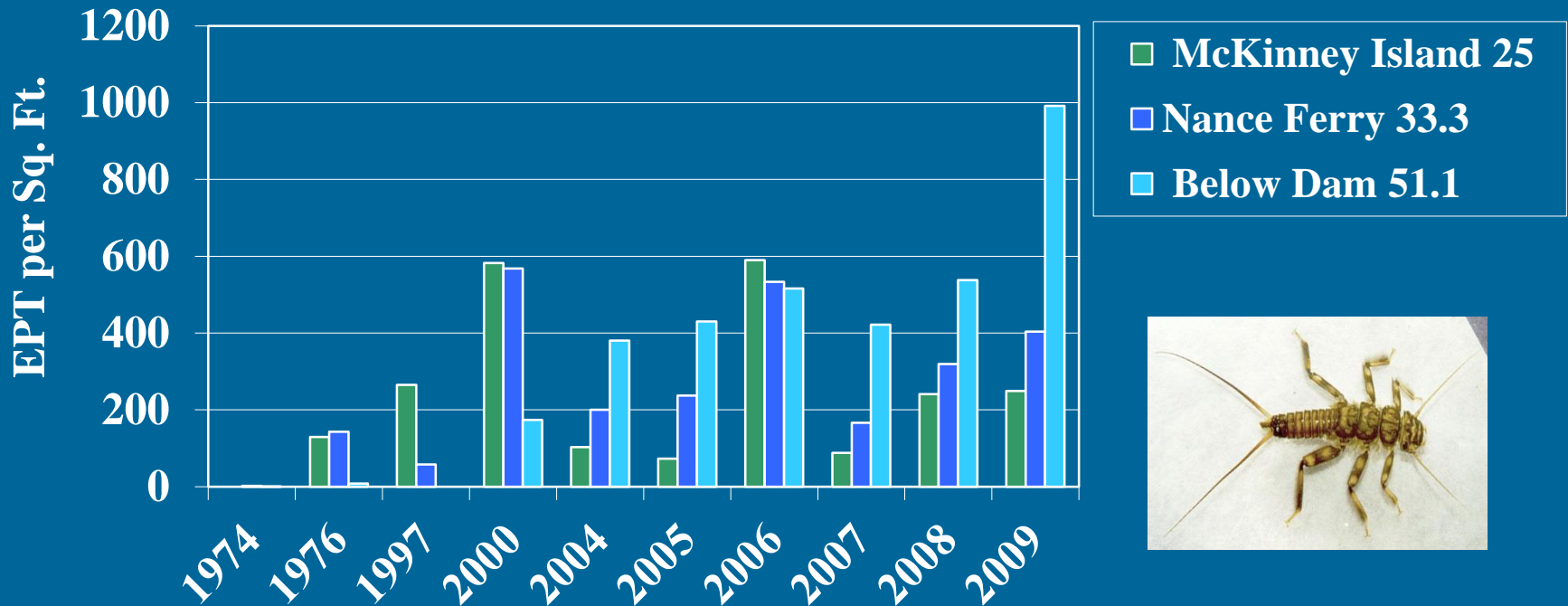
Cherokee

Fish and Benthic Index Scores

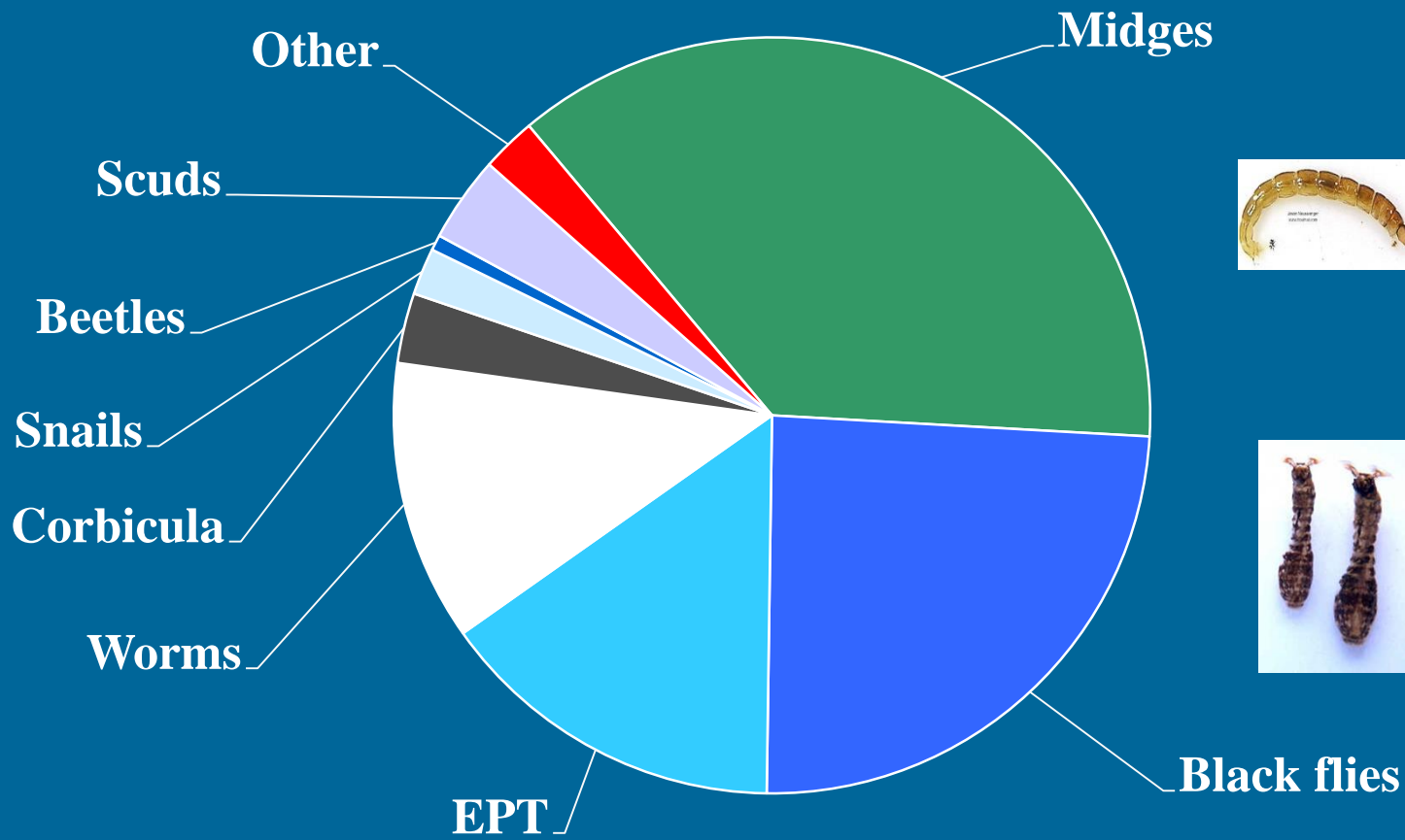


Cherokee

EPT

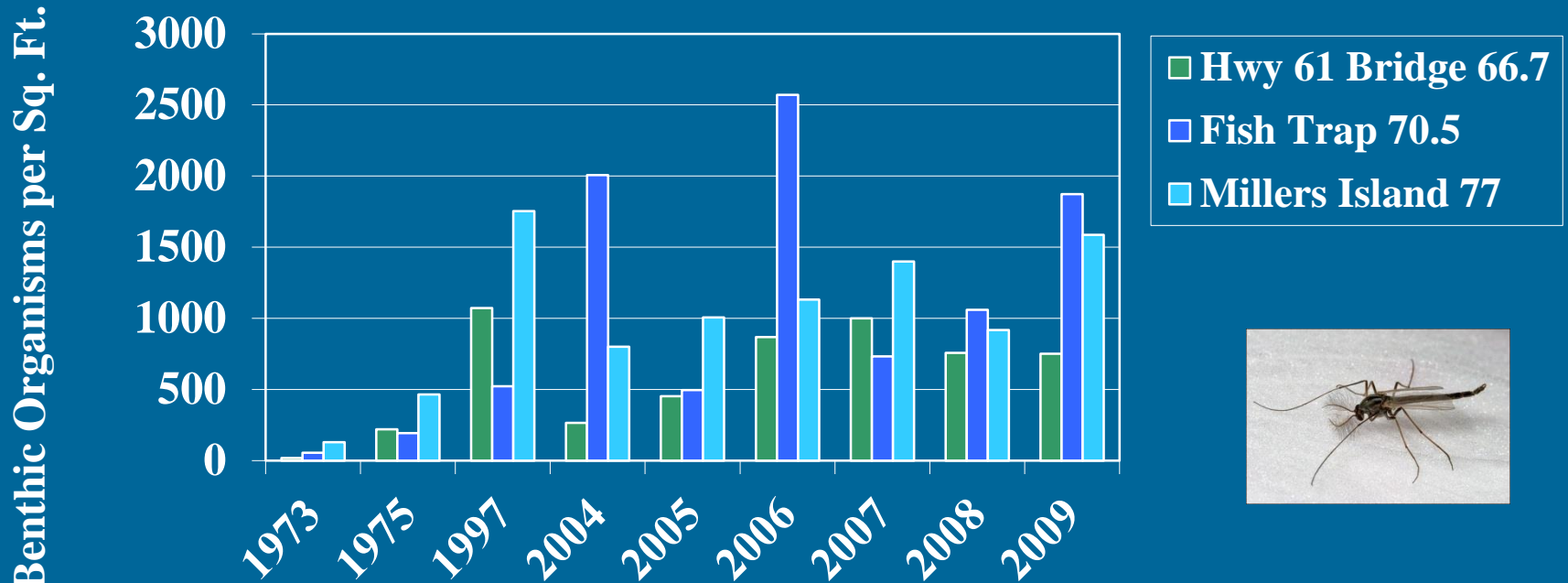


Cherokee: Species Composition



Norris

Relative Abundance of All Benthic Organisms



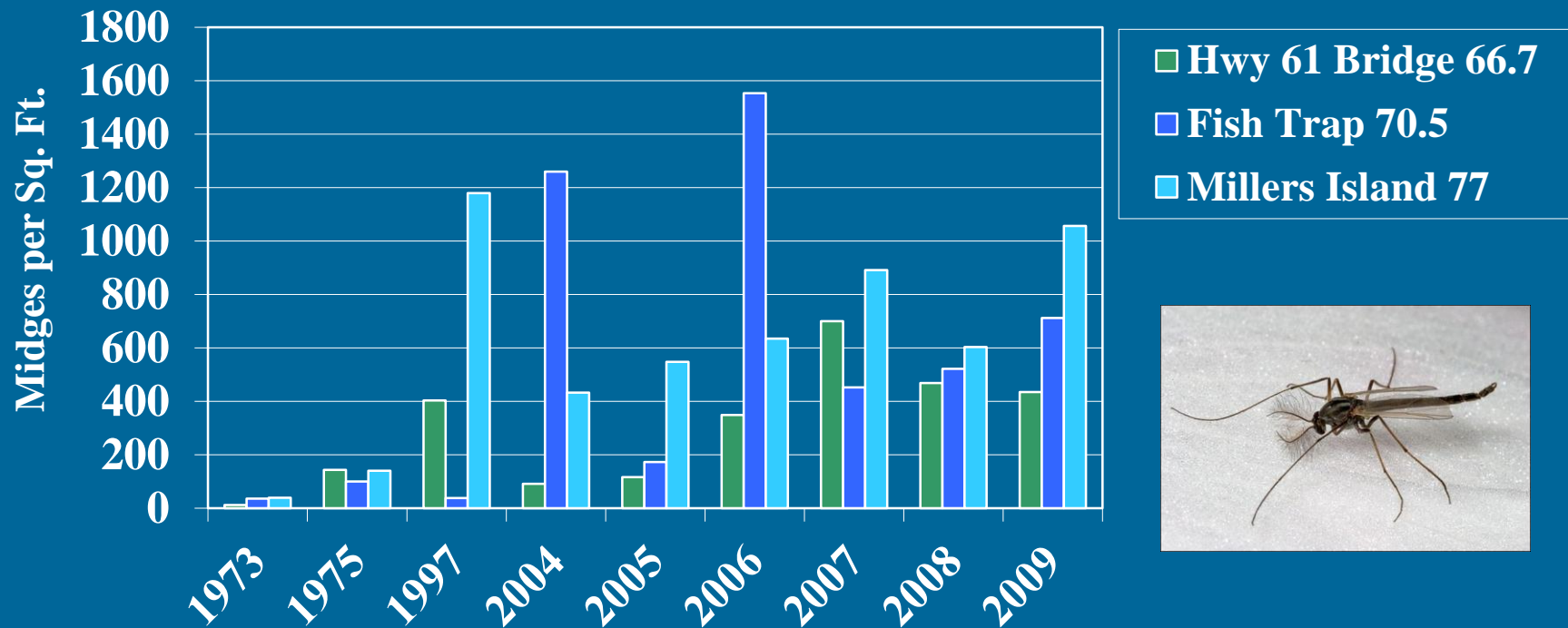
Norris

Fish and Benthic Index Scores

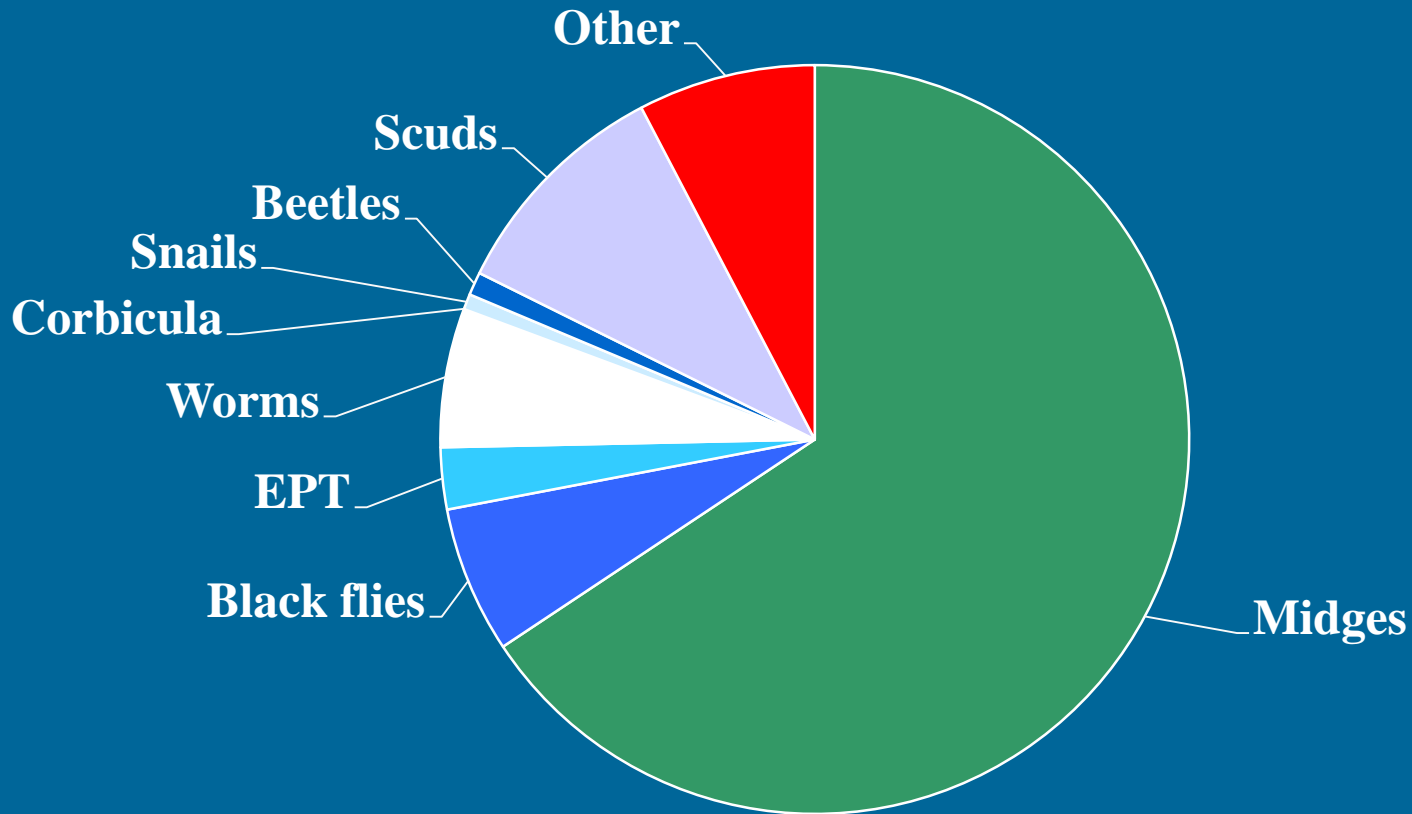


Norris

Midges

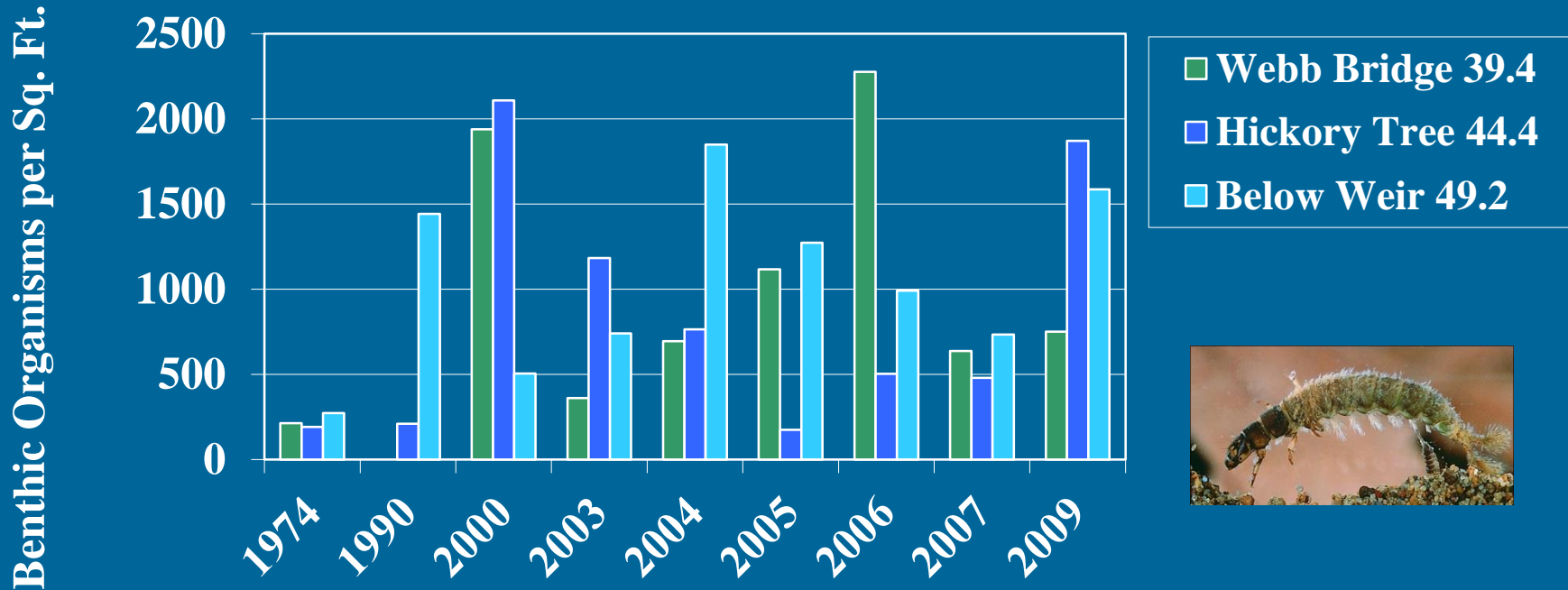


Norris: Species Composition

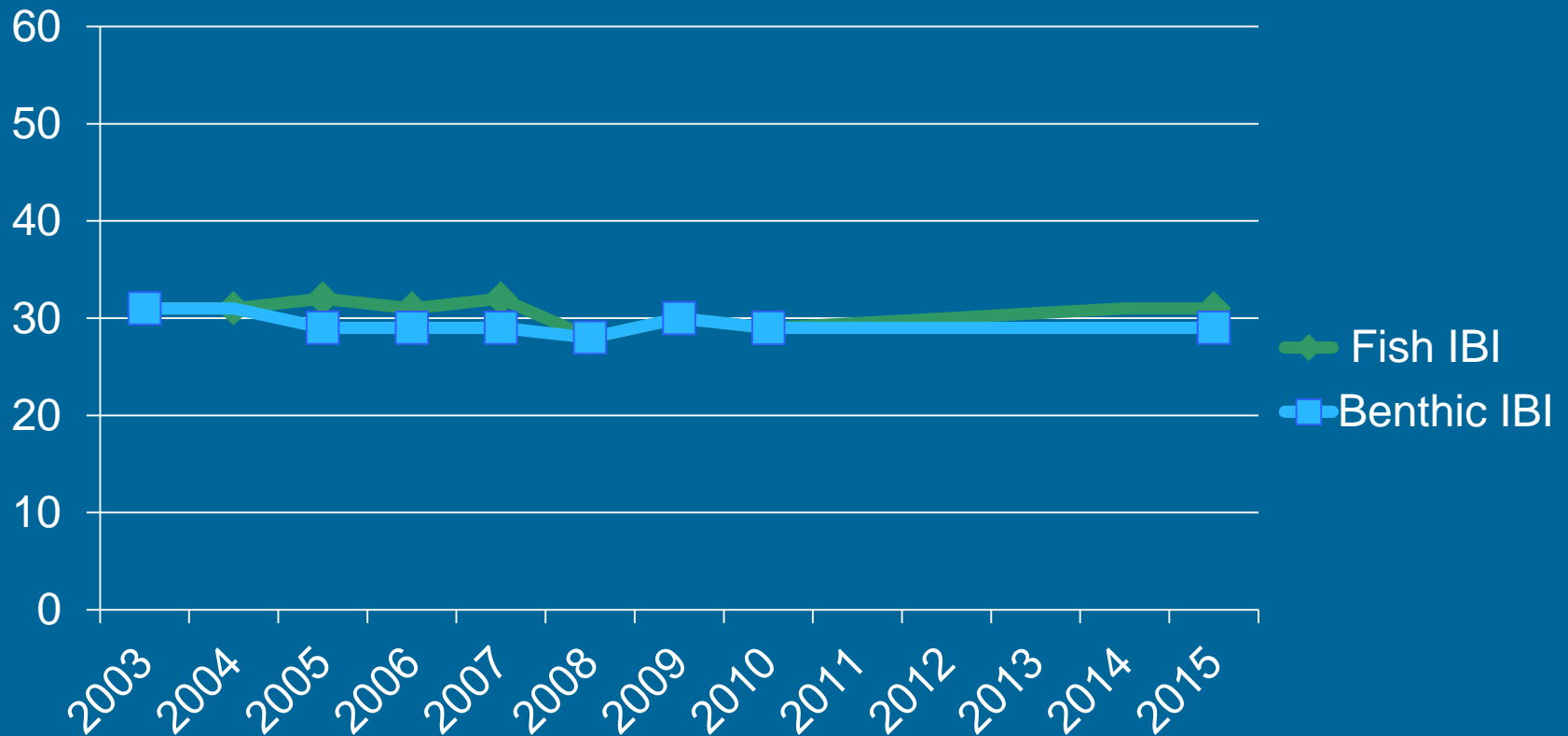


South Holston

Relative Abundance of All Benthic Organisms

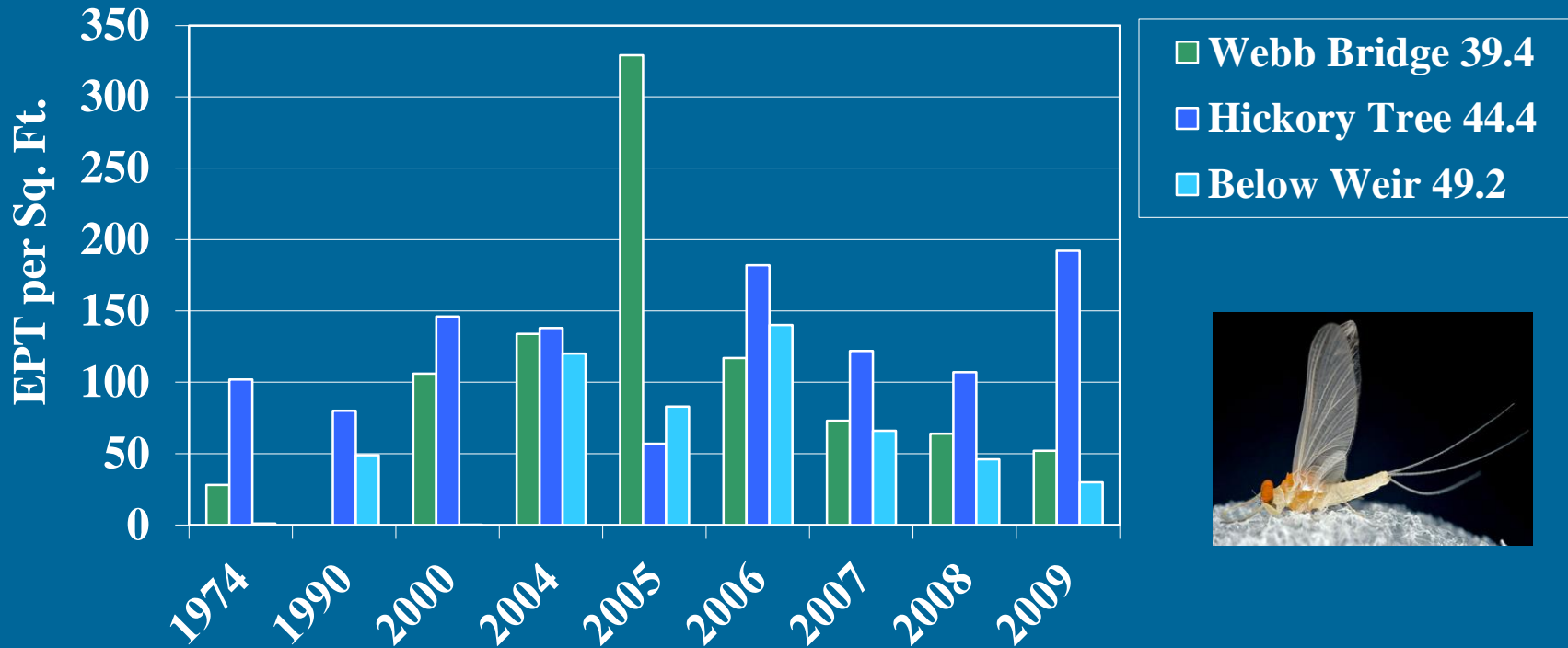


South Holston Fish and Benthic Index Scores

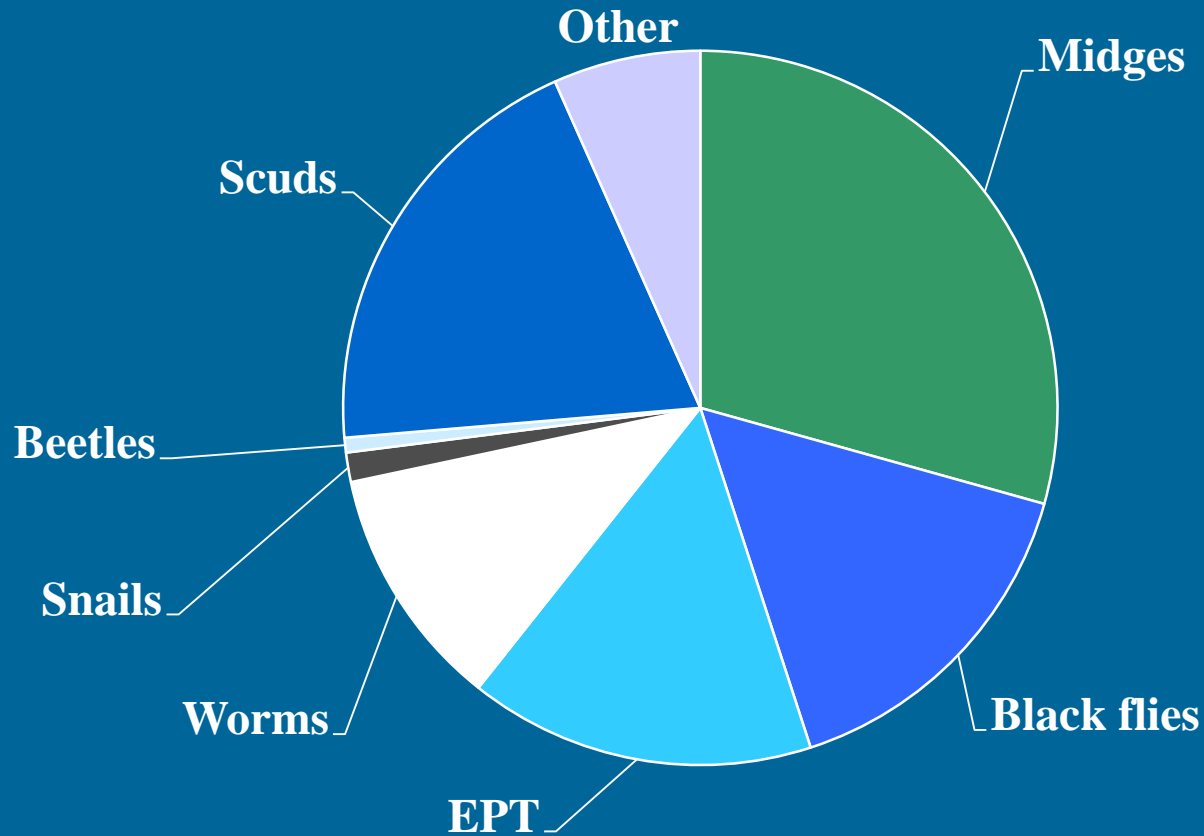


South Holston

EPT

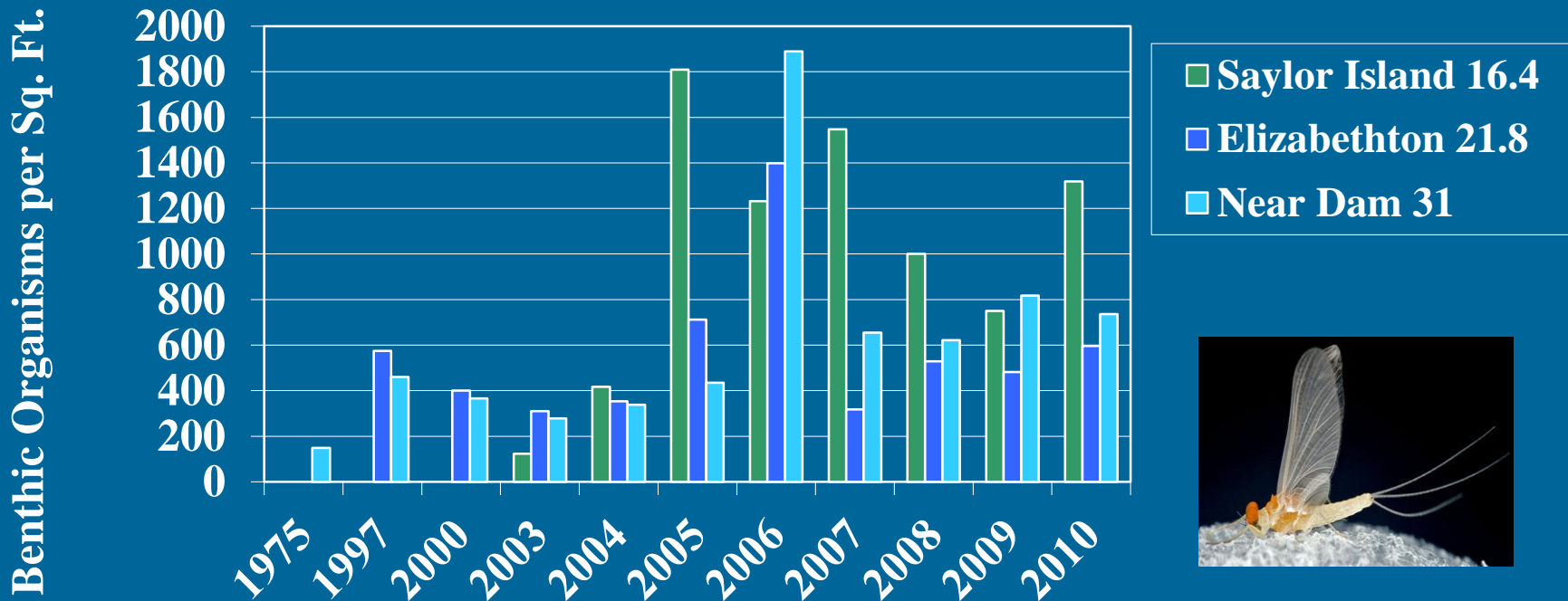


South Holston: Species Composition



Wilbur

Relative Abundance of All Benthic Organisms



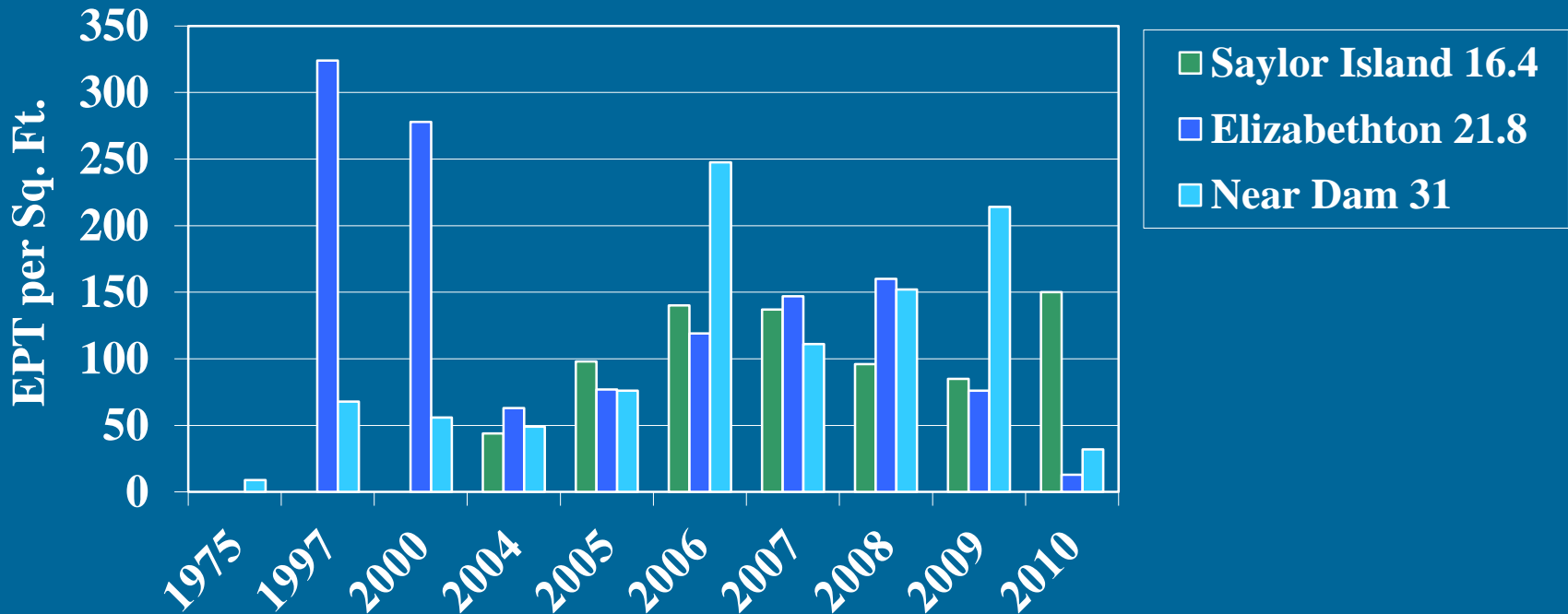
Wilbur

Fish and Benthic Index Scores

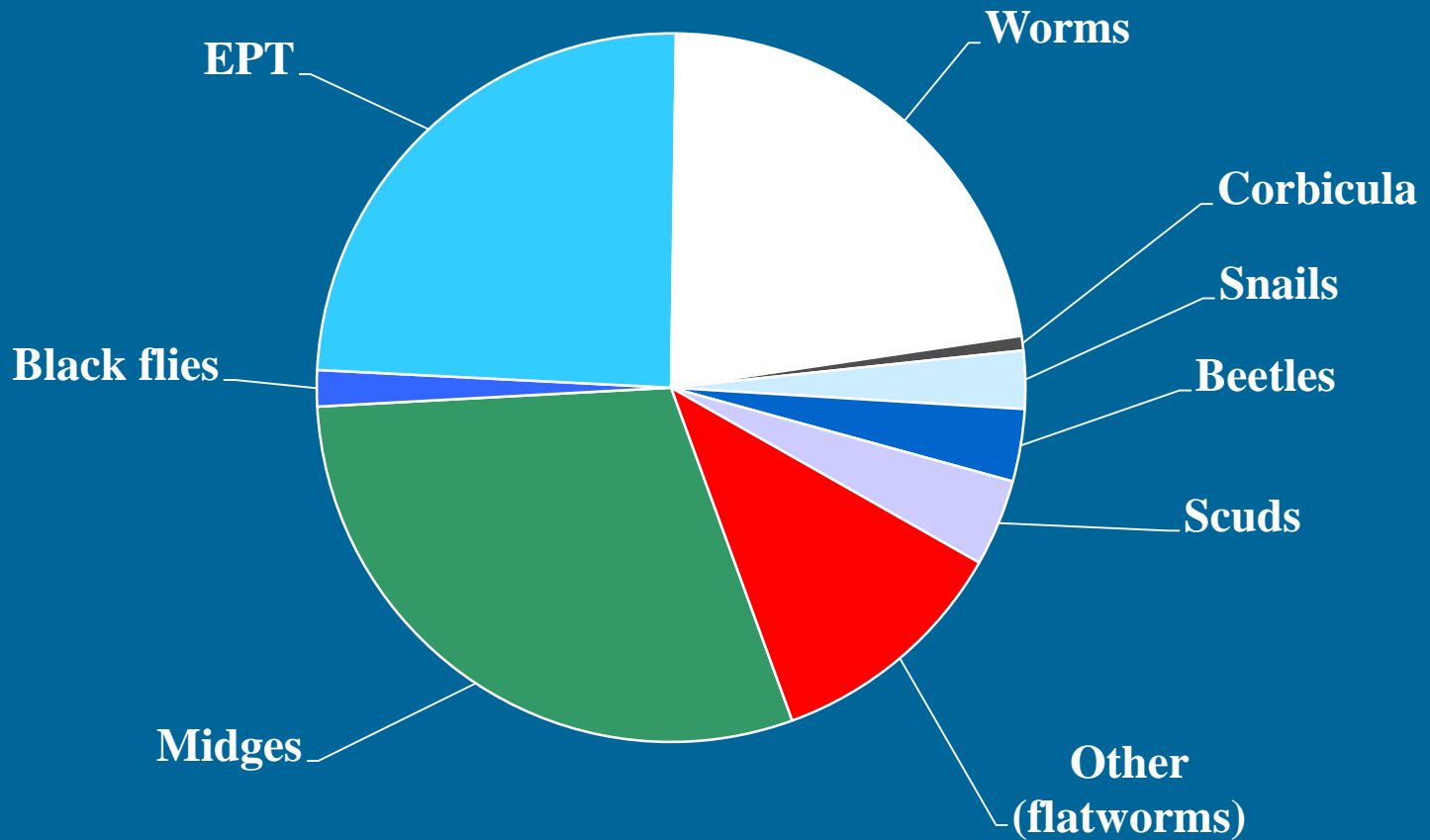


Wilbur

EPT



Wilbur: Species Composition



Summary

- Benthic macroinvertebrate communities have responded favorably to Reservoir Release Improvements
- Fish and Benthic index scores have remained stable post RRI
- Didymo does not appear to be negatively impacting densities in tailwaters, shifts in diversity have been noted