

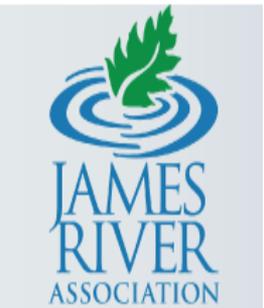
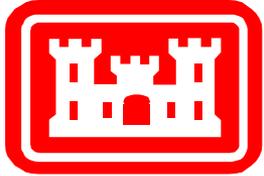
Status of Atlantic Sturgeon in the James River, Virginia

James River Partnership

April 22, 2008



Virginia Sturgeon Research Team



- USACE, ERDC, Vicksburg, MS
- Virginia Sea Grant at VIMS
- VCU Rice Center for Environmental Life Science
- US Fish and Wildlife Service
- James River Association, James River Keeper

Atlantic sturgeon (*Acipenser oxyrinchus*)

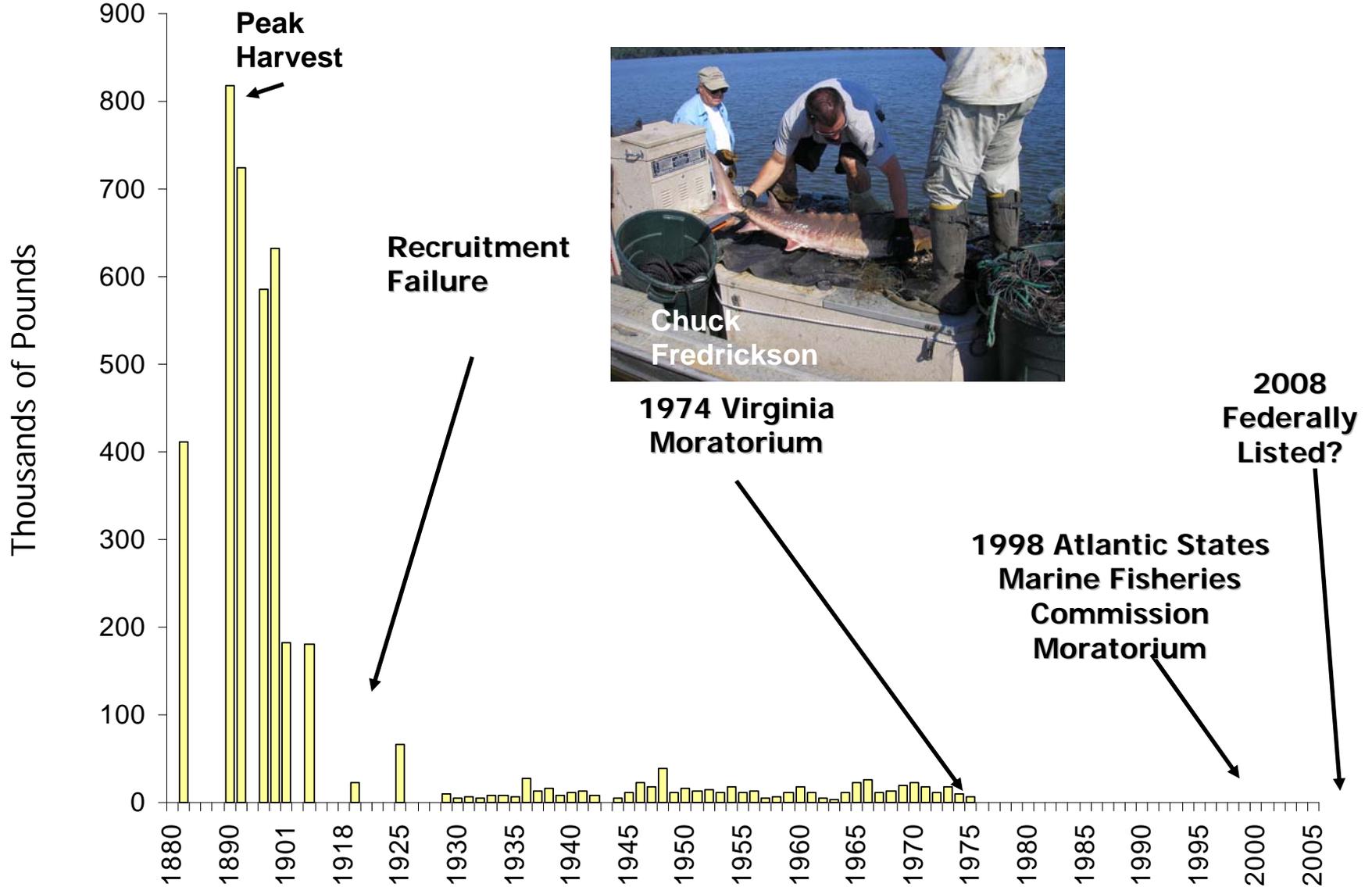
- A fish of ‘superlatives’ along the Atlantic coast
 - Largest freshwater species (up to 14’)
 - Greatest longevity (up to 60 y)
 - Long-distance migrations (anadromous)



Current Status of Atlantic Sturgeon in the Region

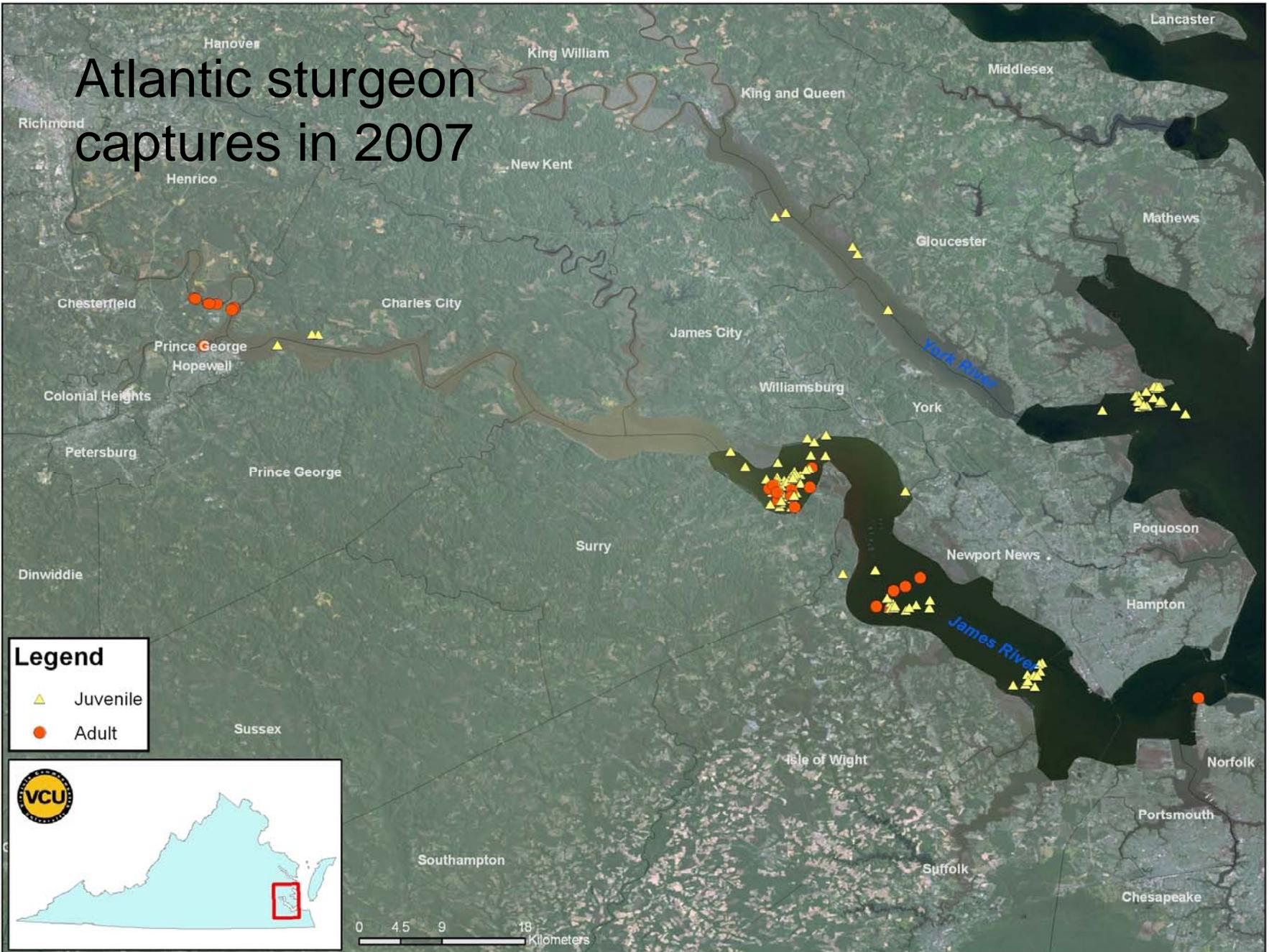
- Historical Trends
- Chesapeake Bay Tributaries
- James River population
 - Fishery Research Grants program (2006-2008)
 - Genetic studies (Tim King, USGS)
 - Federal listing pending, based on status report by NOAA

Virginia Atlantic Sturgeon Landings



Chuck Fredrickson
1974 Virginia Moratorium

Atlantic sturgeon captures in 2007



Atlantic Sturgeon Research in Virginia: an Overview

- Passive and active tracking studies
- Hydroacoustic characterization
- Habitat mapping
- Basic biology and life history
- Human-fish interactions



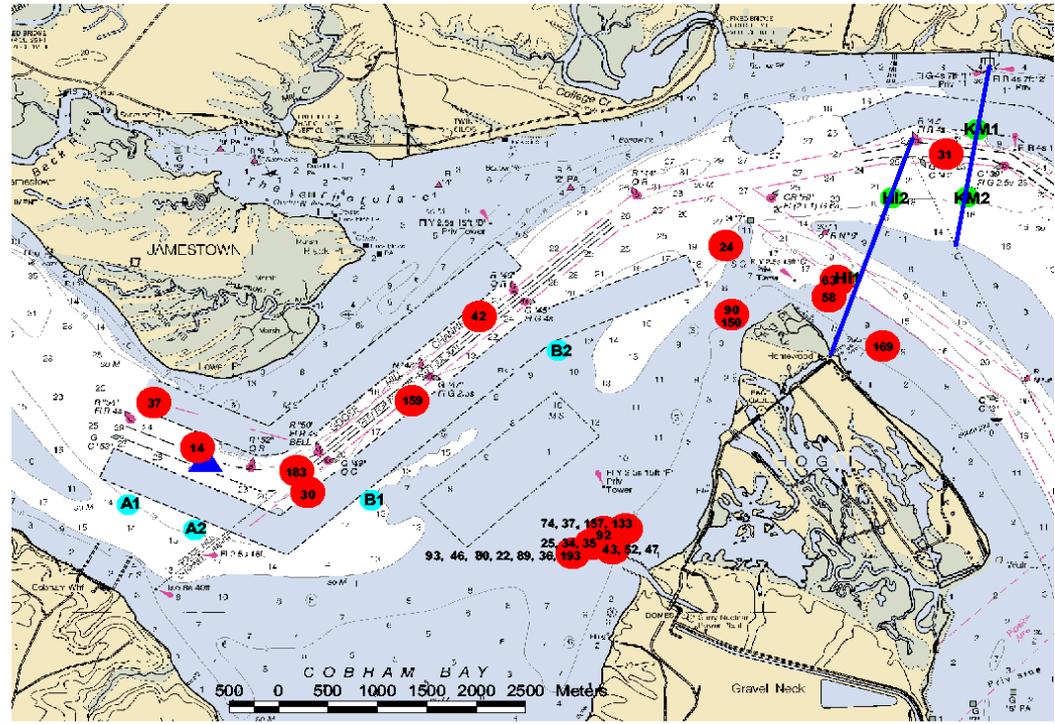
Active and Passive Telemetry



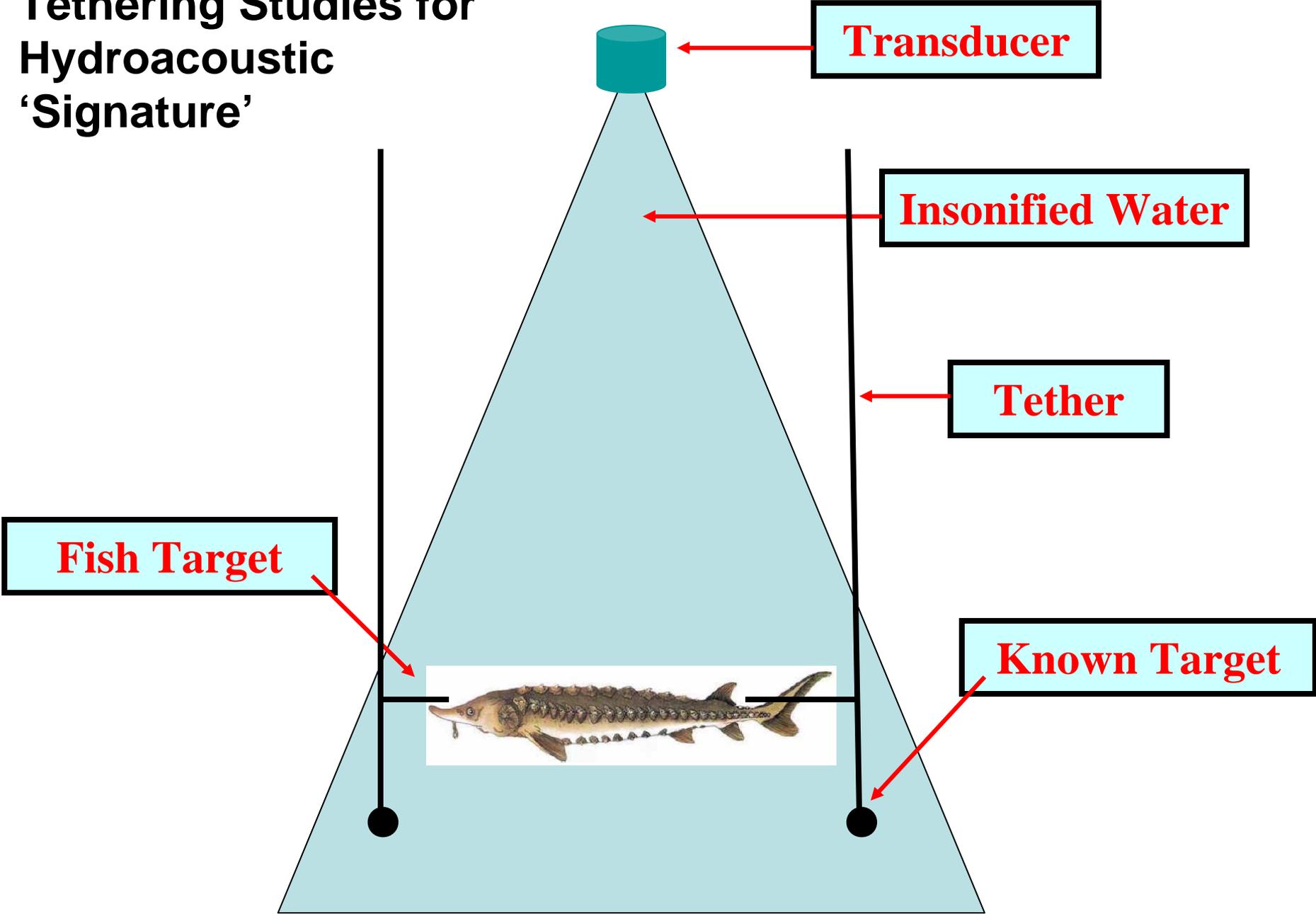
Diameter = 13 mm
Length = 36 mm
Tag Life, varies 30-180 days



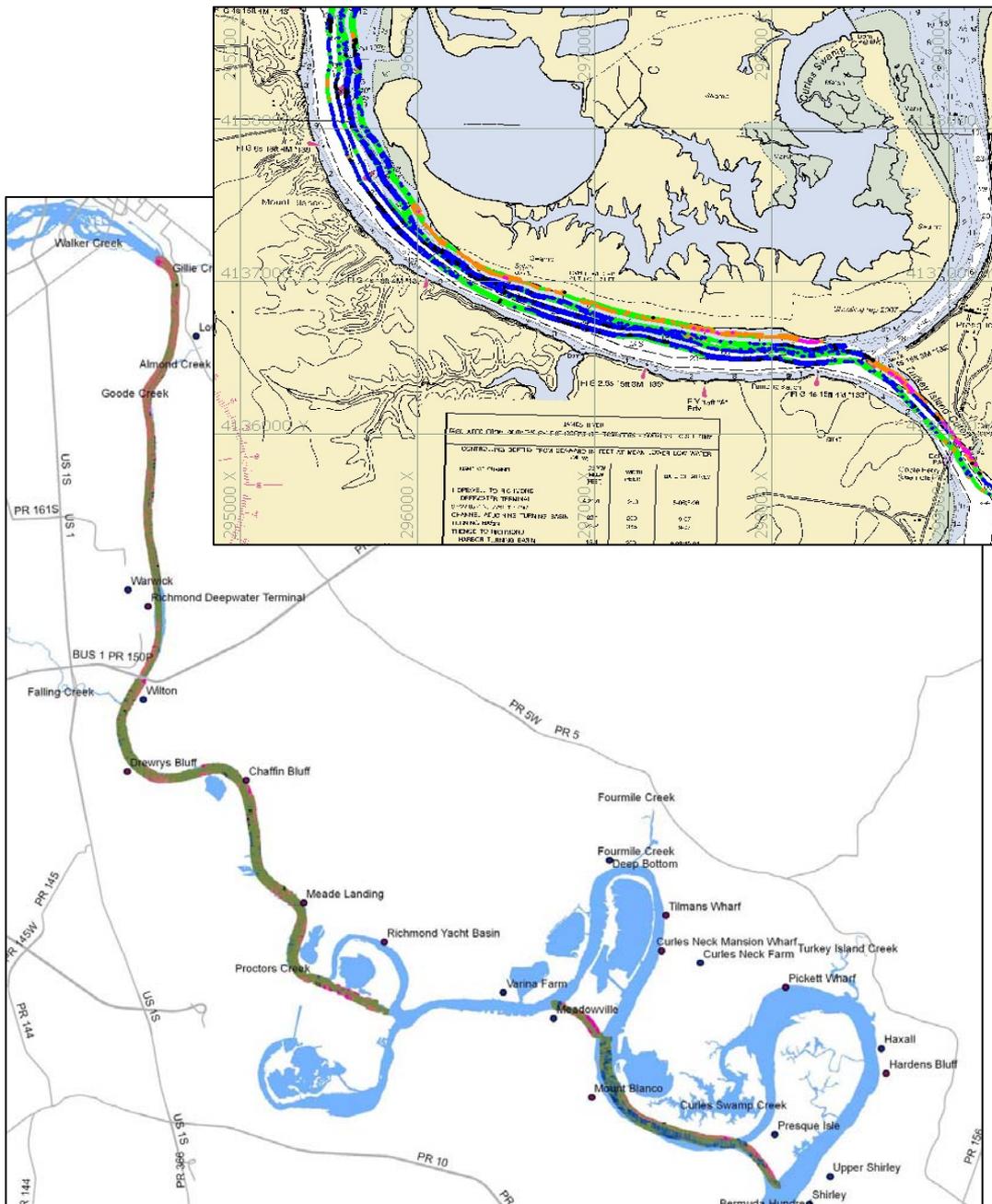
VR2W Receiver
Datalogger



Tethering Studies for Hydroacoustic 'Signature'

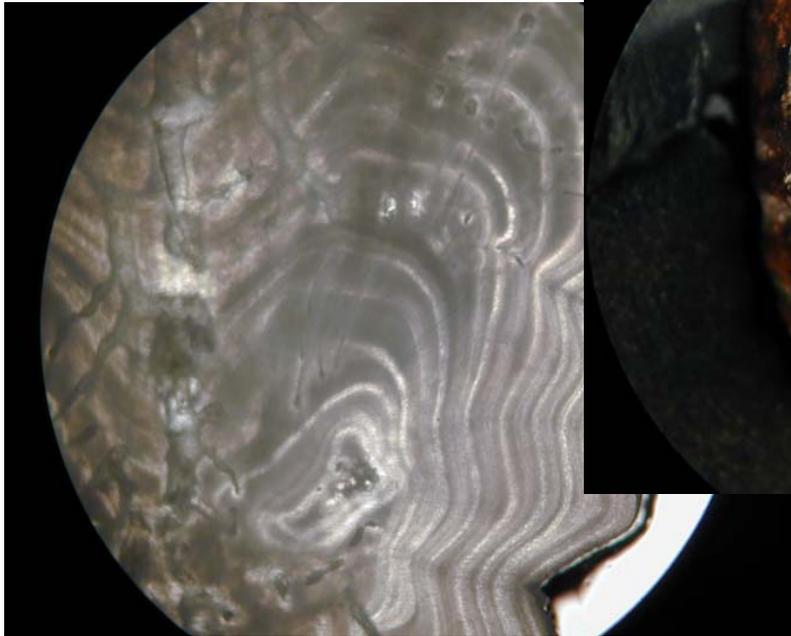


Habitat Mapping by Side-scan Sonar



Studies of Basic Biology

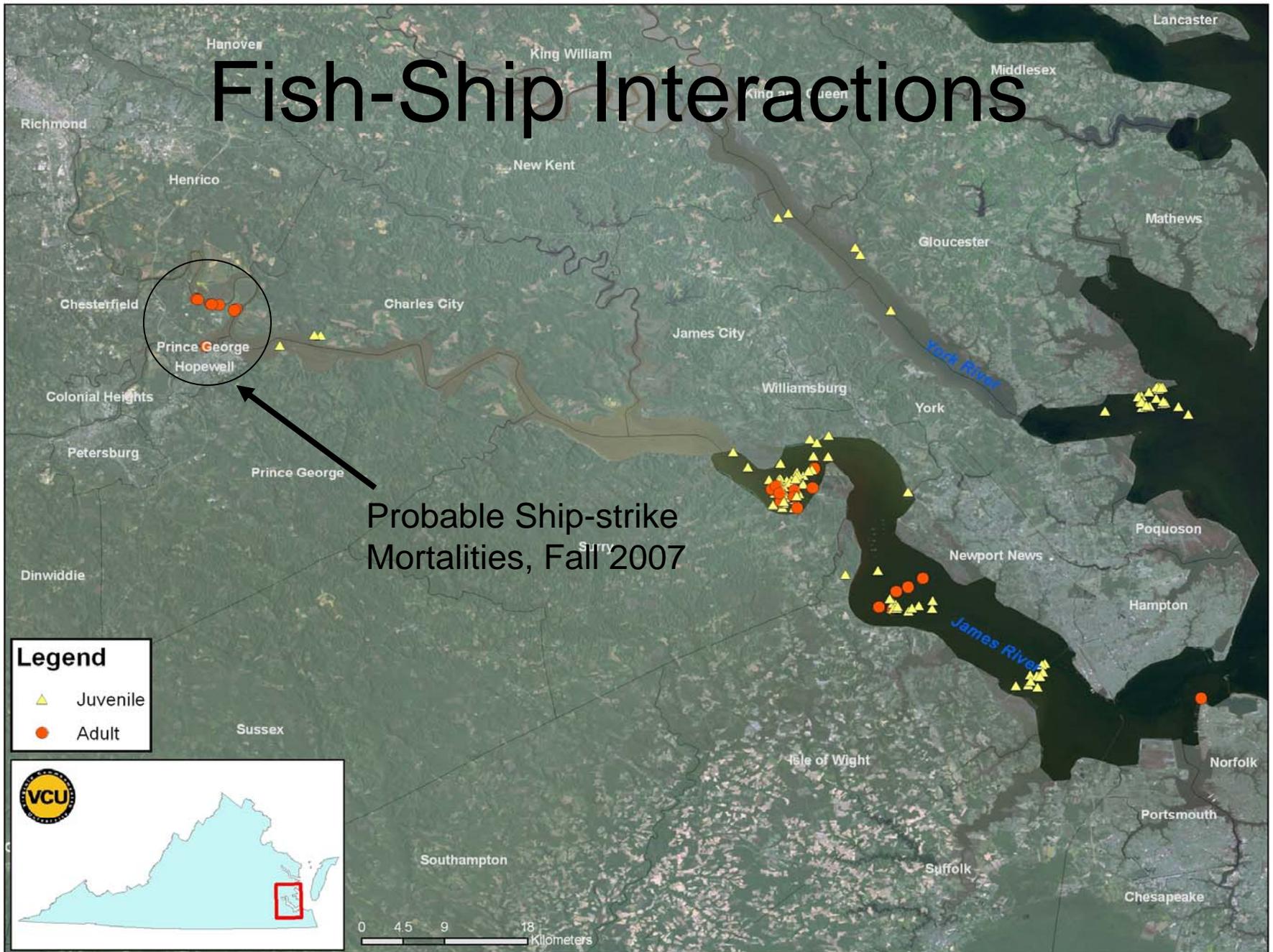
- Age Structure and Growth Parameters
- Comparison to James River population *ca.* 1611



Fish-Ship Interactions



Fish-Ship Interactions



Comments or Questions?



Contact: Dr. Greg Garman; ggarman@vcu.edu