

Population Assessment of Alosine in the Upper Chesapeake Bay

Maryland DNR



2022 SRAFRC Annual Meeting
6 December 2022

Outline



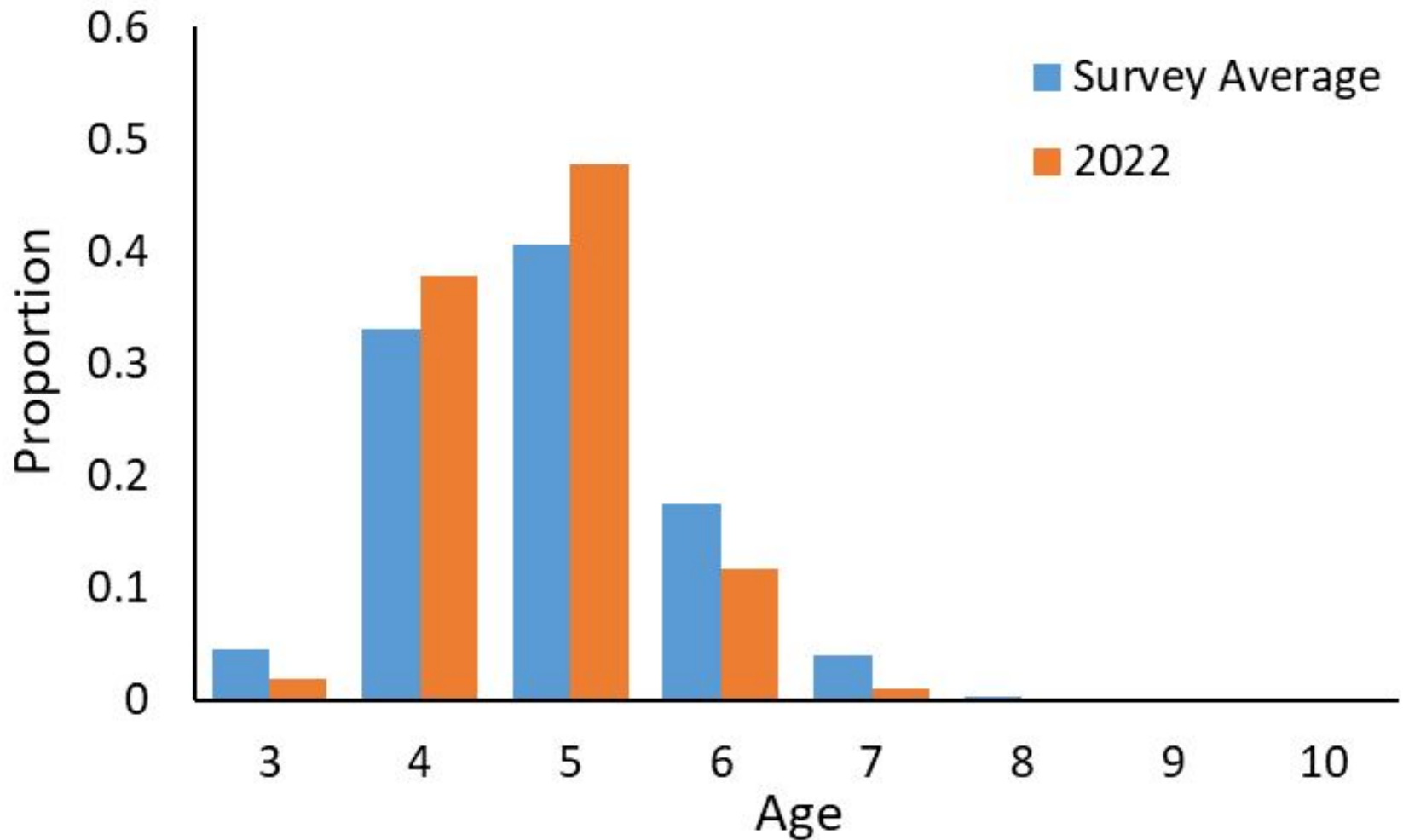
- Hook & Line Tagging Survey
 - Conowingo Tailrace
 - 1986 – 2022
 - Adult American shad
- Creel and Logbook Surveys
 - Fisherman’s Park / Susquehanna River
 - 2000 – 2022
 - Adult American and hickory shad
- Striped Bass Spawning Stock Survey (Gillnet)
 - Upper Chesapeake Bay
 - 1991 – 2022
 - Adult American and hickory shad
- Estuarine Juvenile Finfish Survey (Seine)
 - Upper Chesapeake Bay
 - 1959 – 2022
 - Juvenile American shad and river herring

Hook & Line

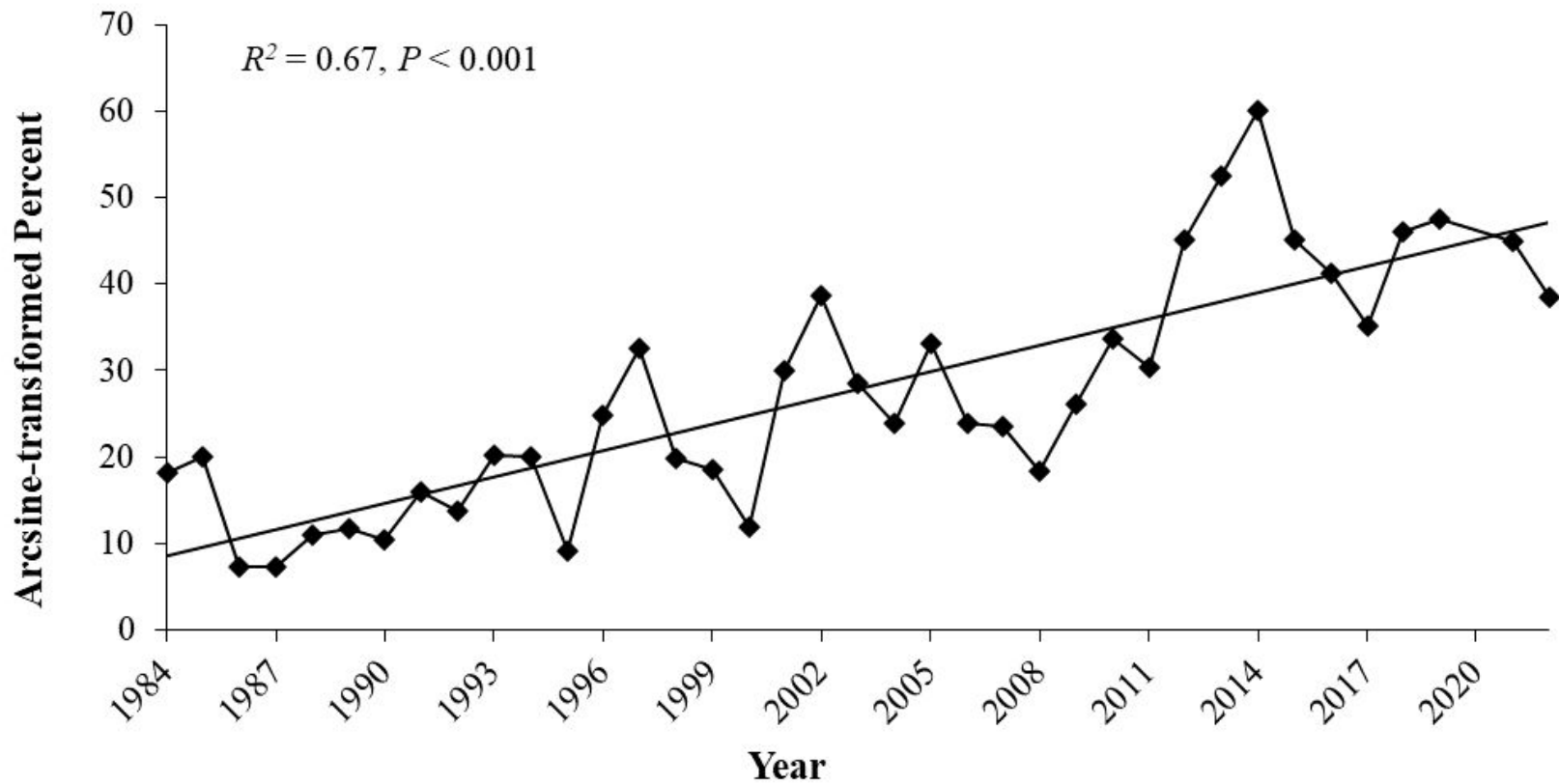
- 1986 – 2022
- Mid/late April – May
- 2-3 lines fished from a boat in the tailrace
- Measure, sex, remove scales, and tag all healthy/non-spent fish
 - 113 caught
 - 111 successfully aged
 - 105 tagged



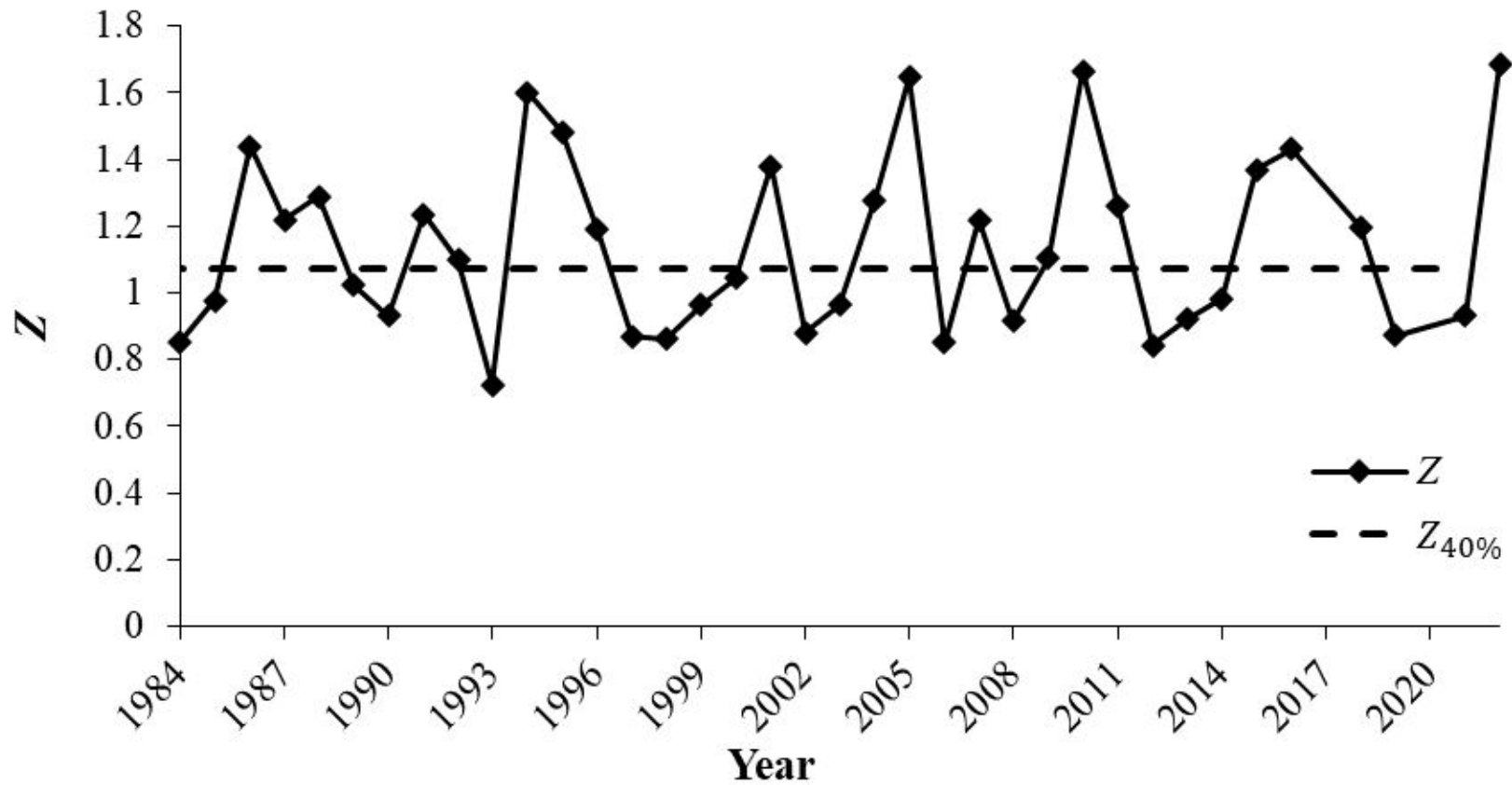
Age Distribution



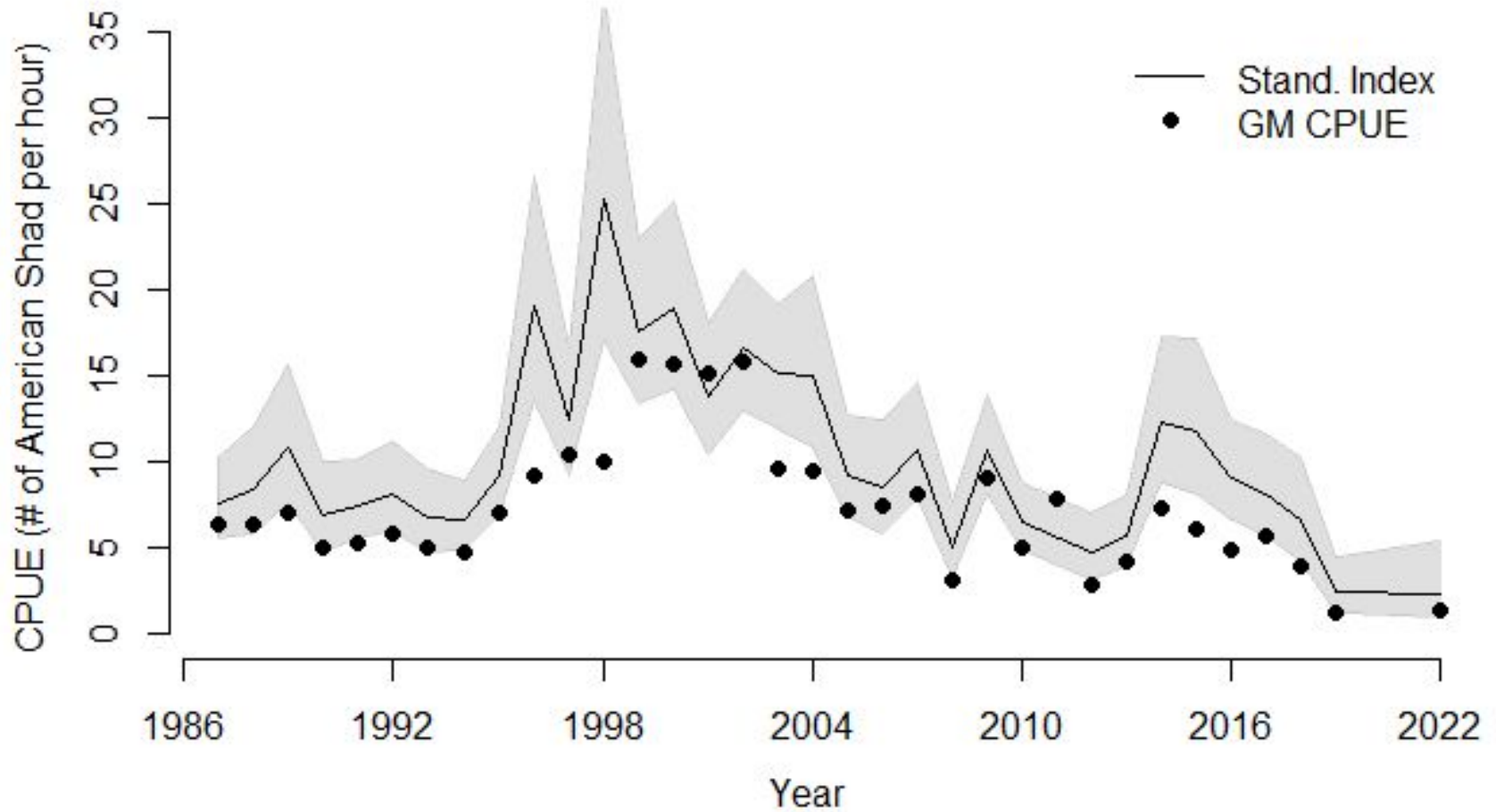
Repeat Spawning



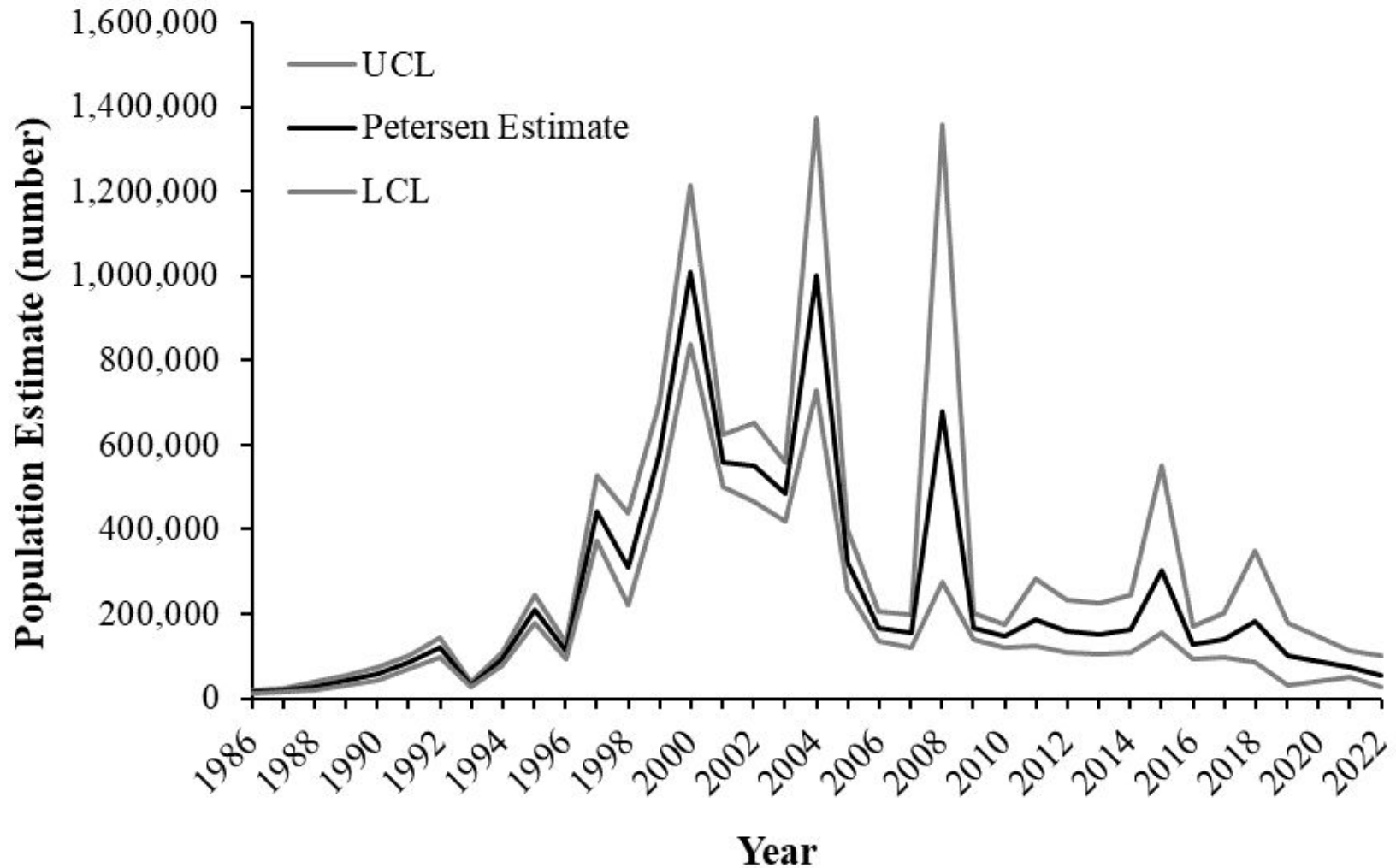
Mortality



H&L Index



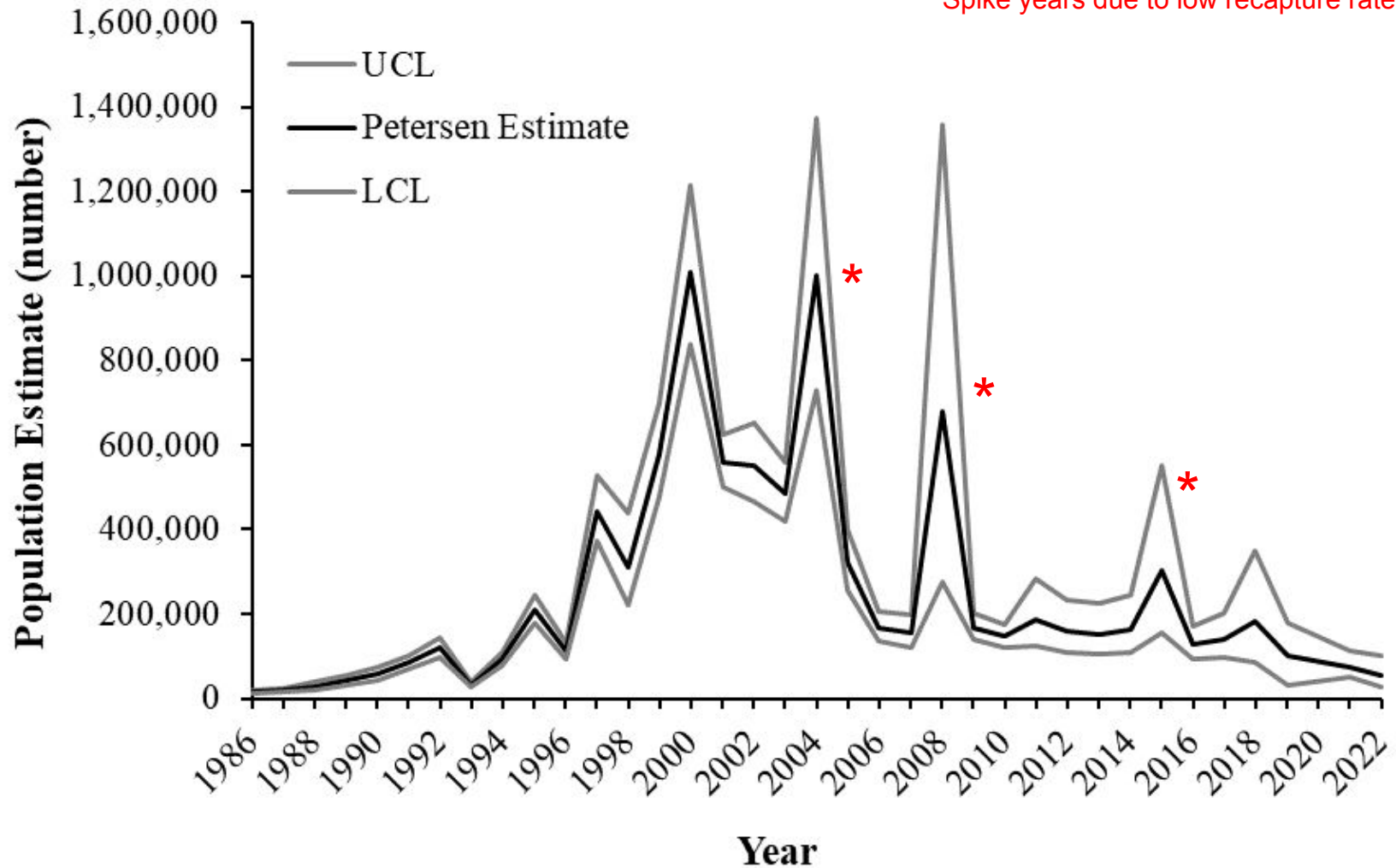
Population Size



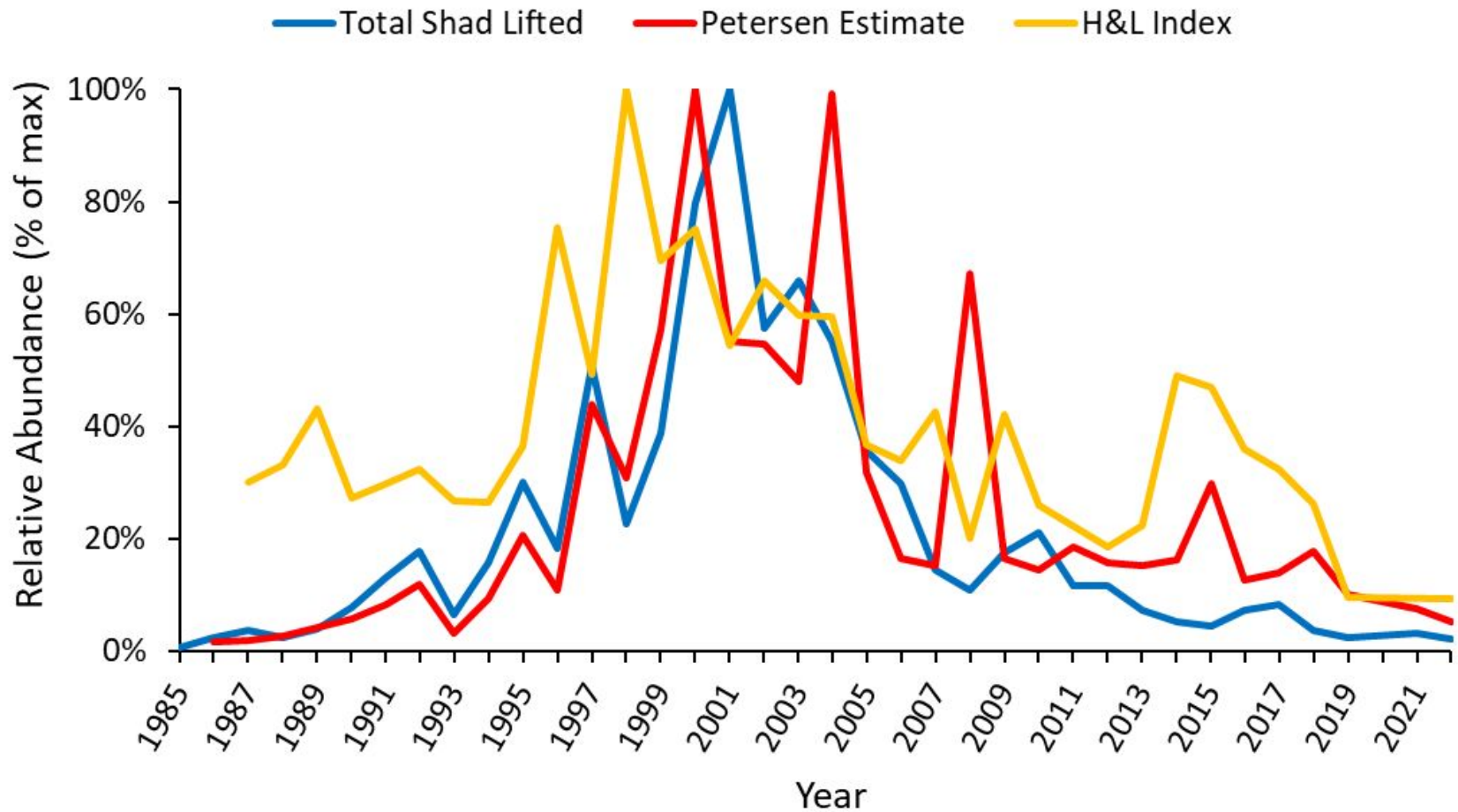
Population Size



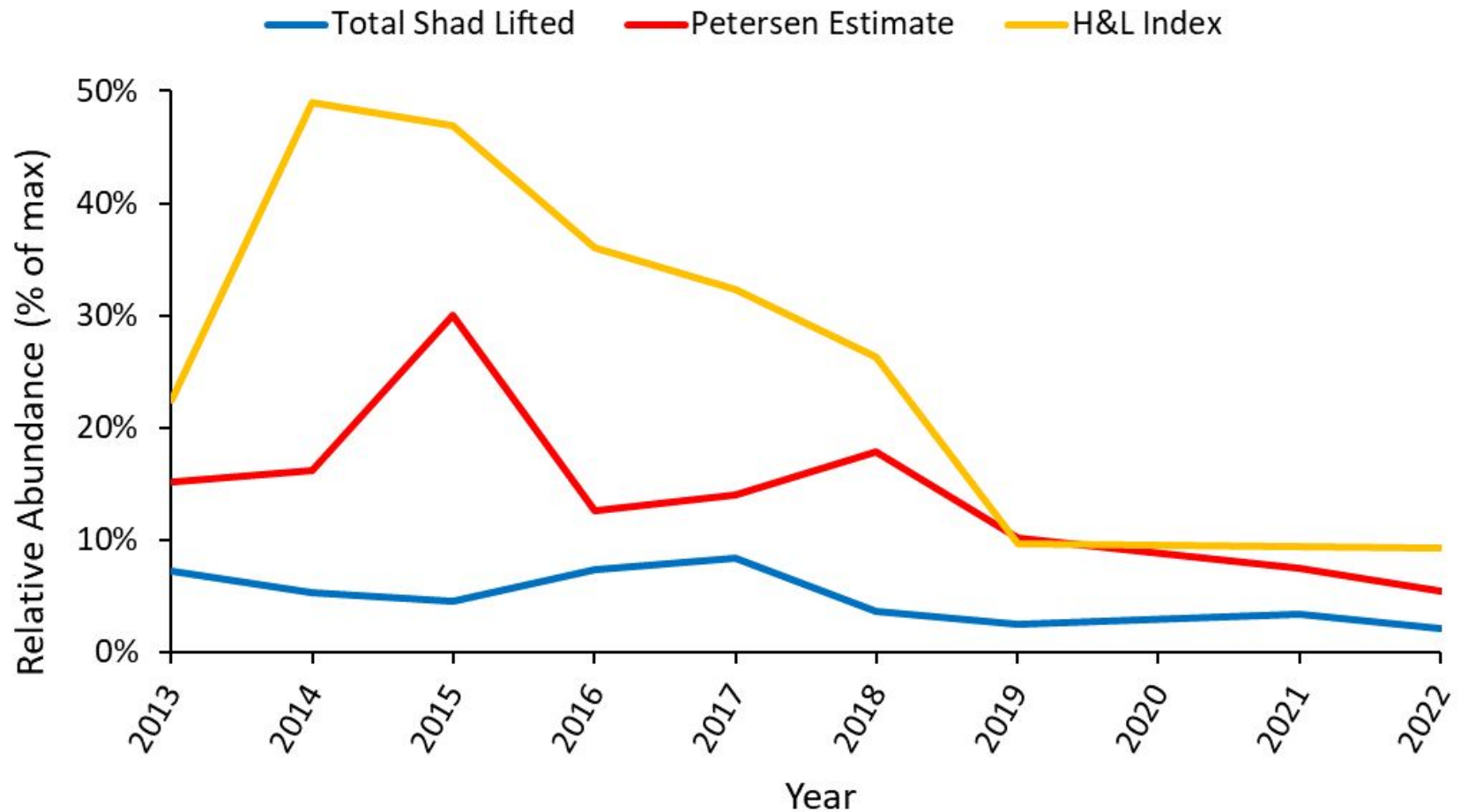
Spike years due to low recapture rates



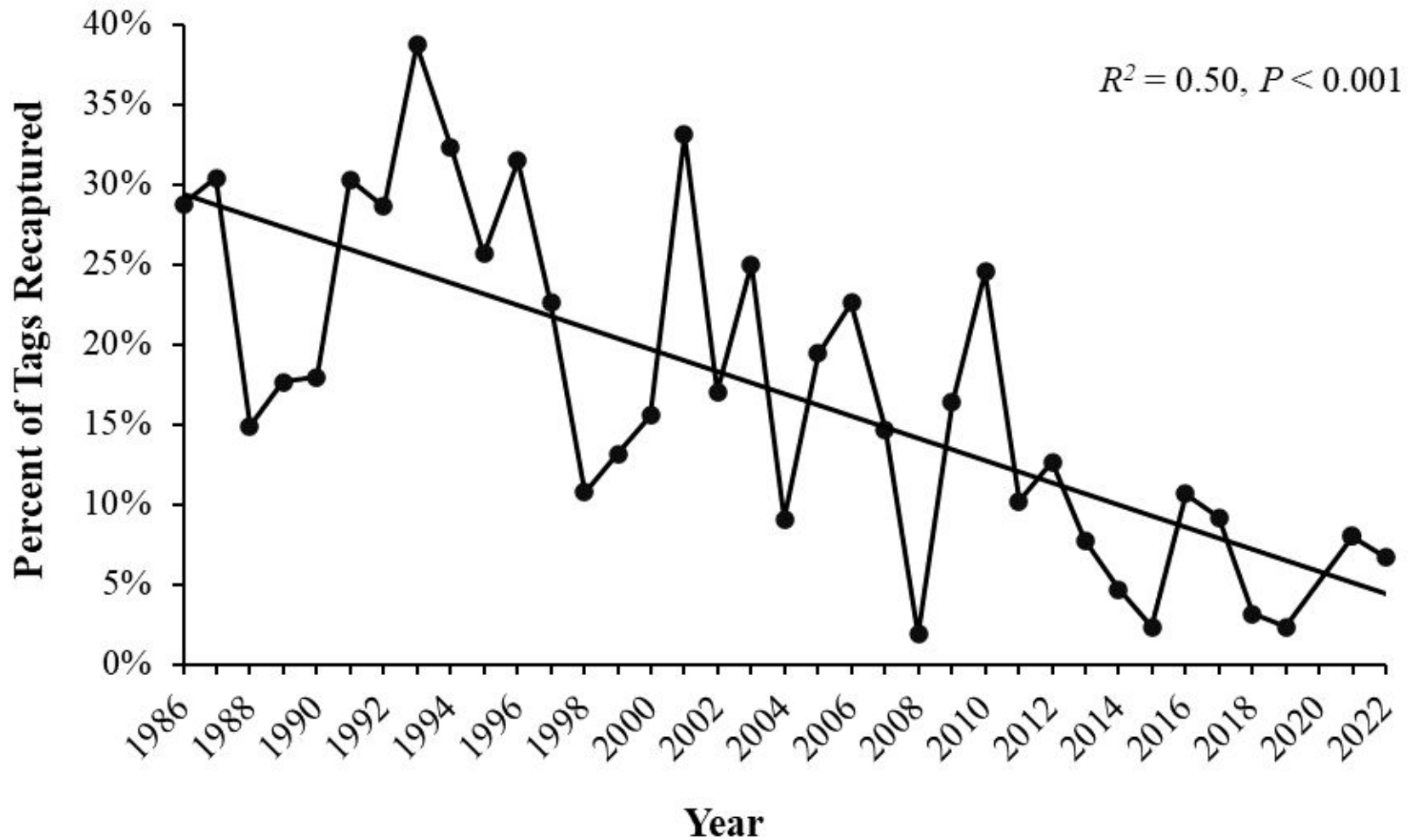
All Analyses



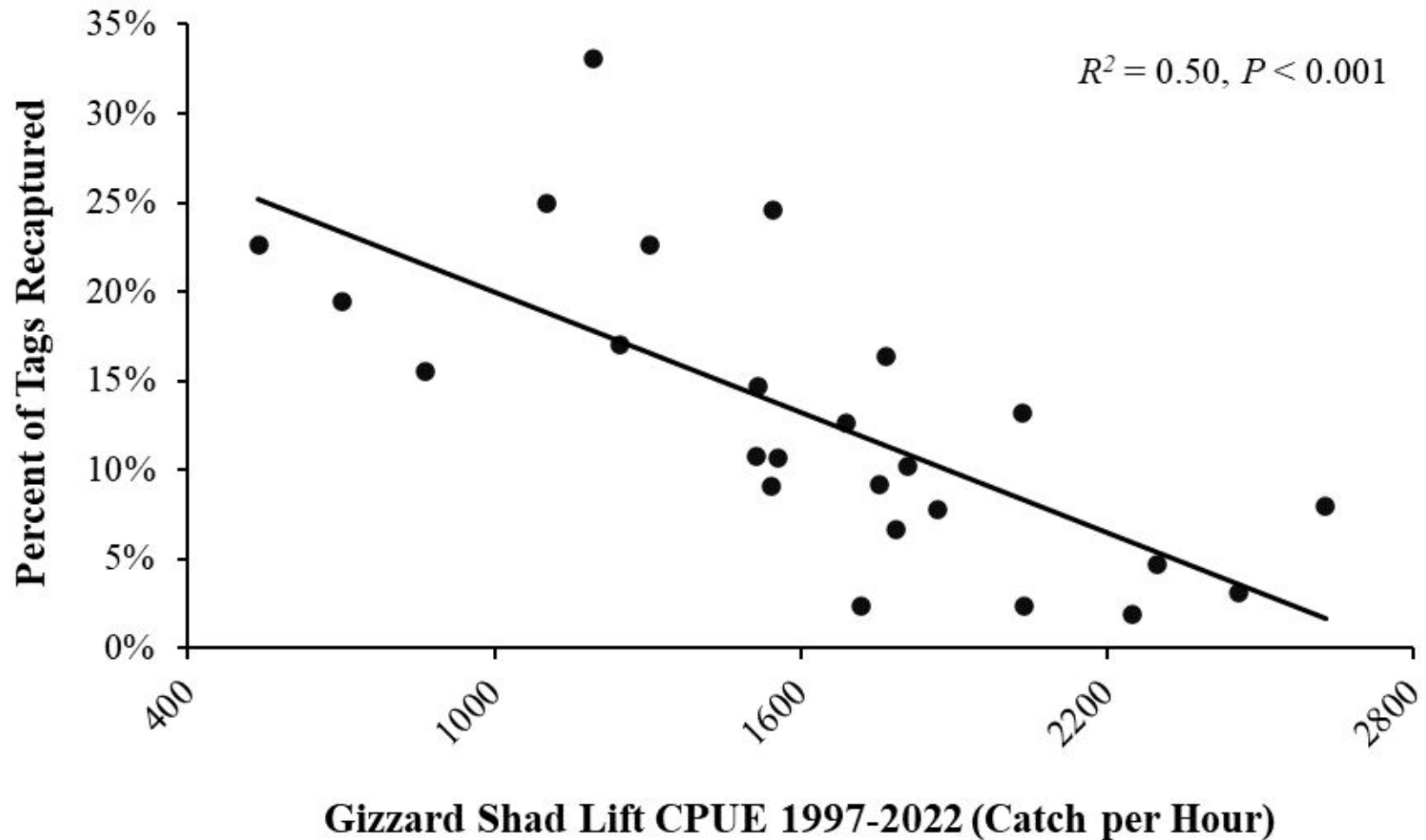
Last 10 Years



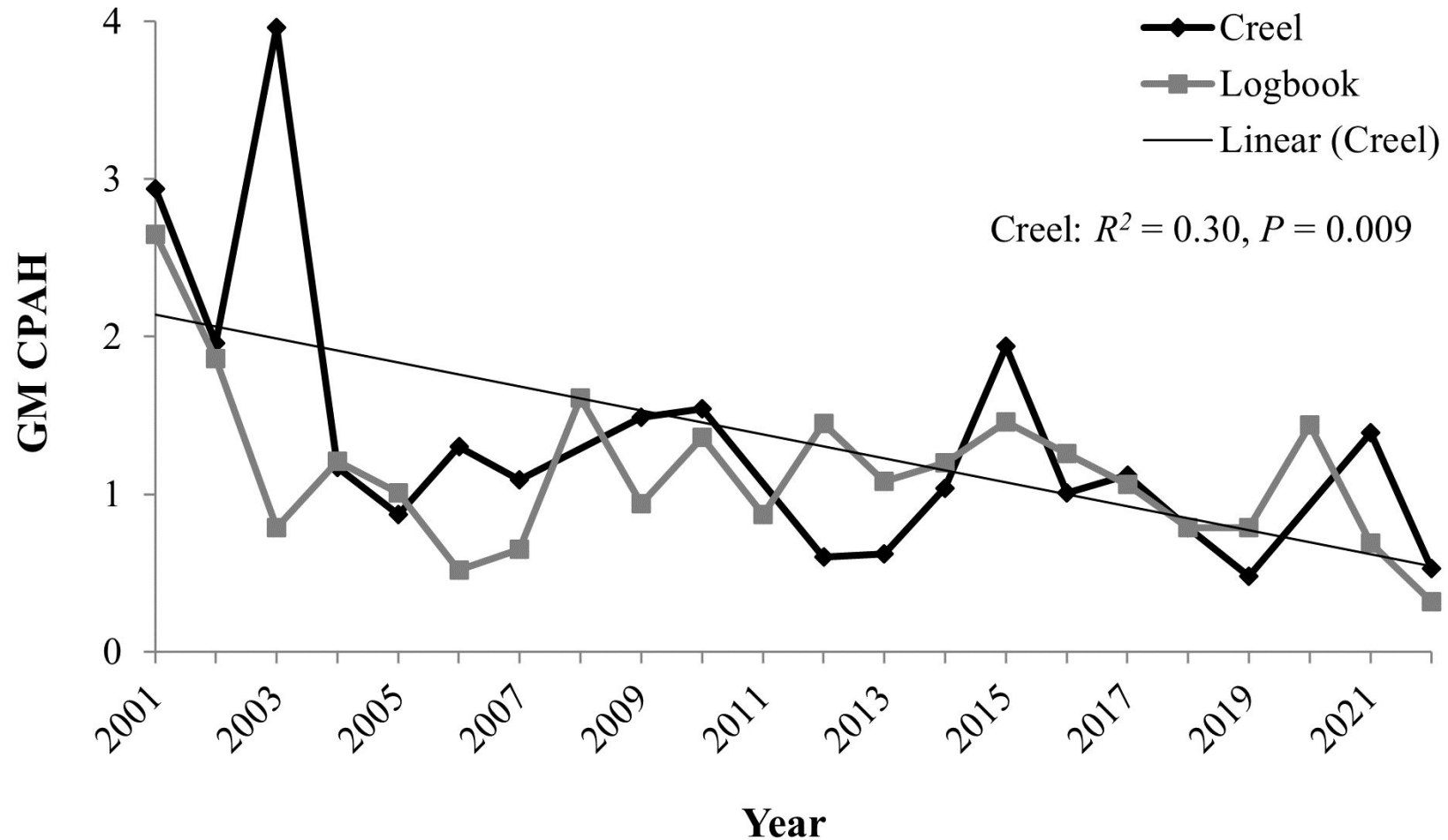
Fish Lift Tag Recap Rate



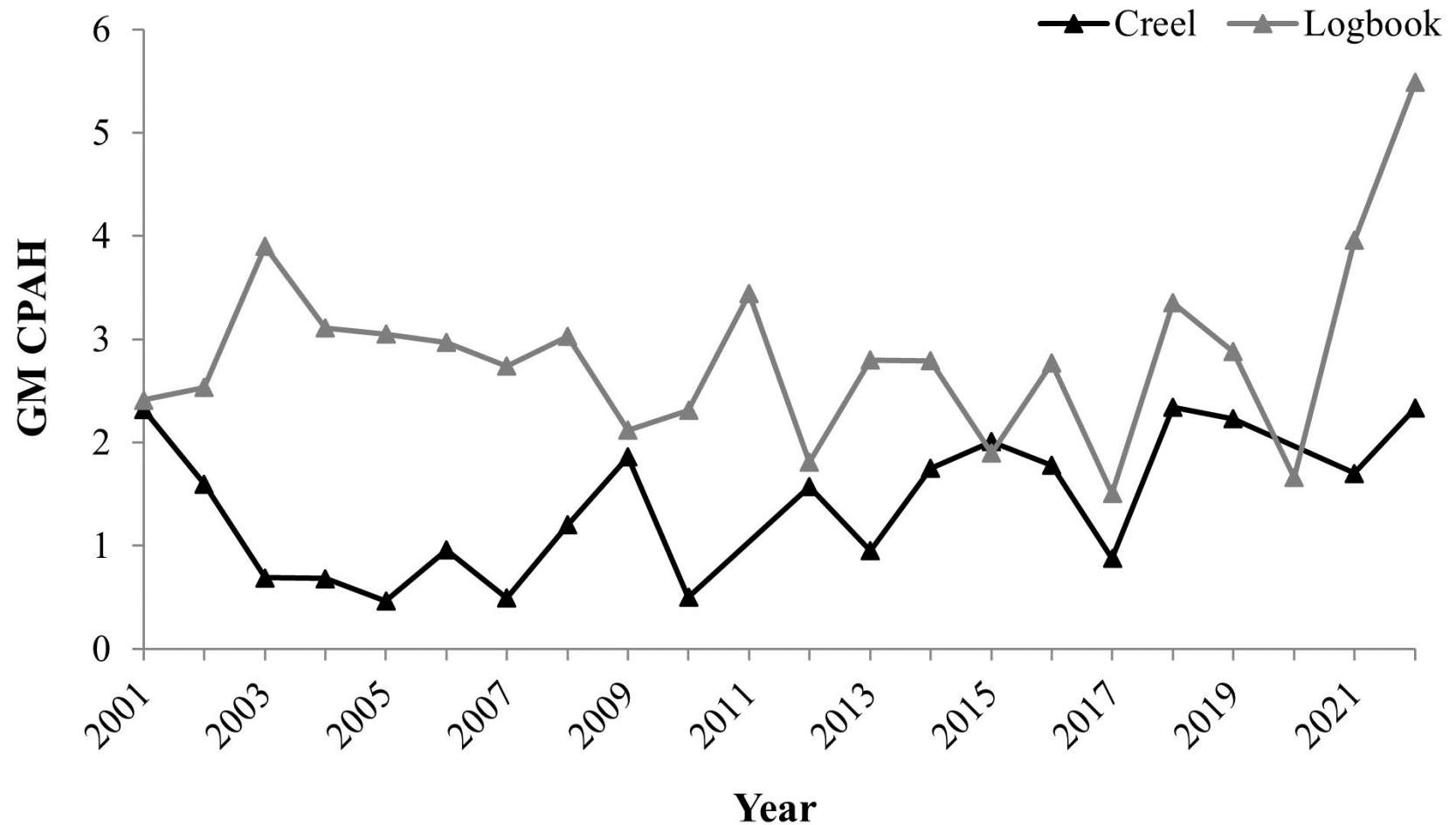
Tag Recaps Vs Gizzard Shad Abundance



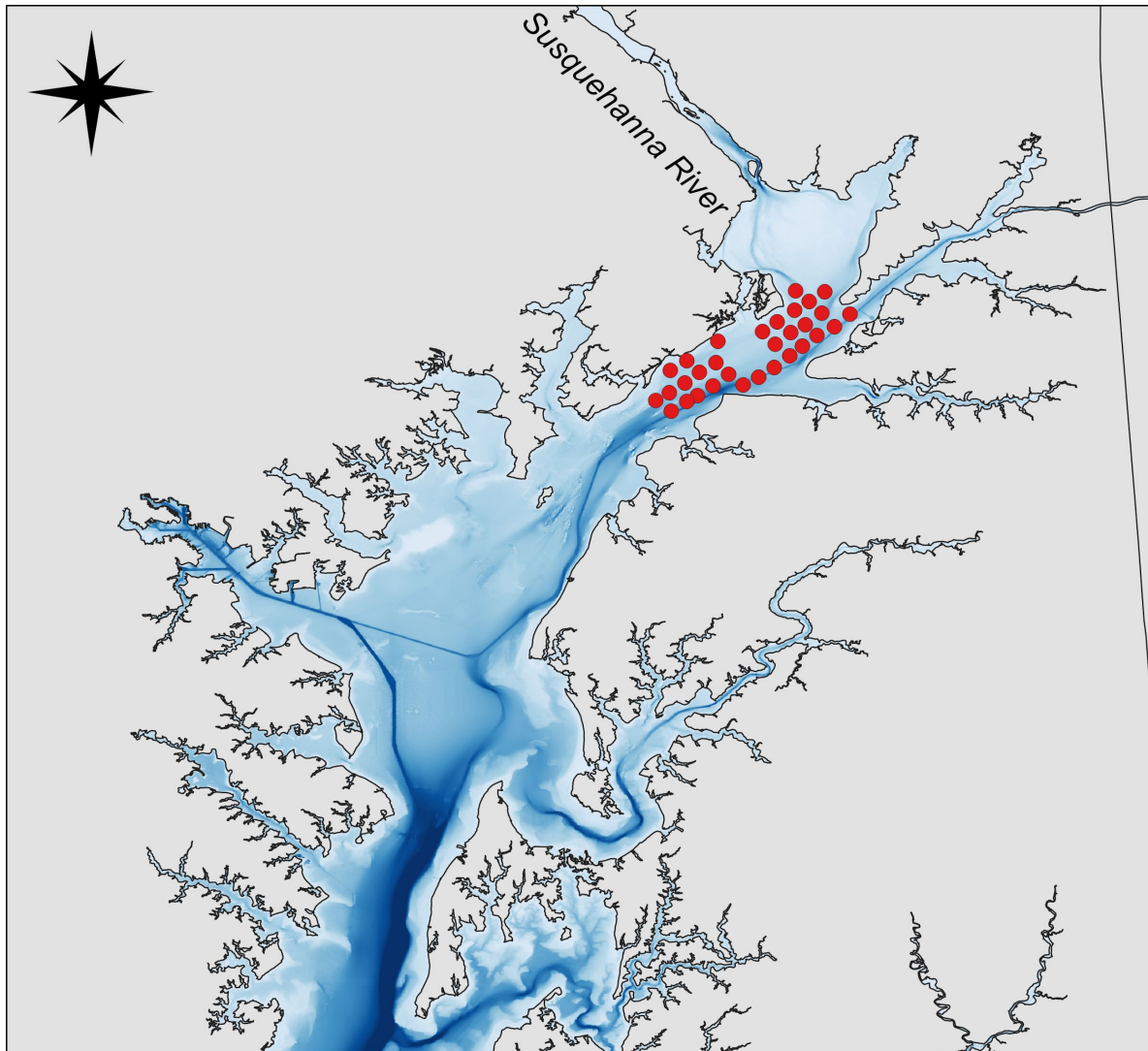
Creel and Logbook American Shad



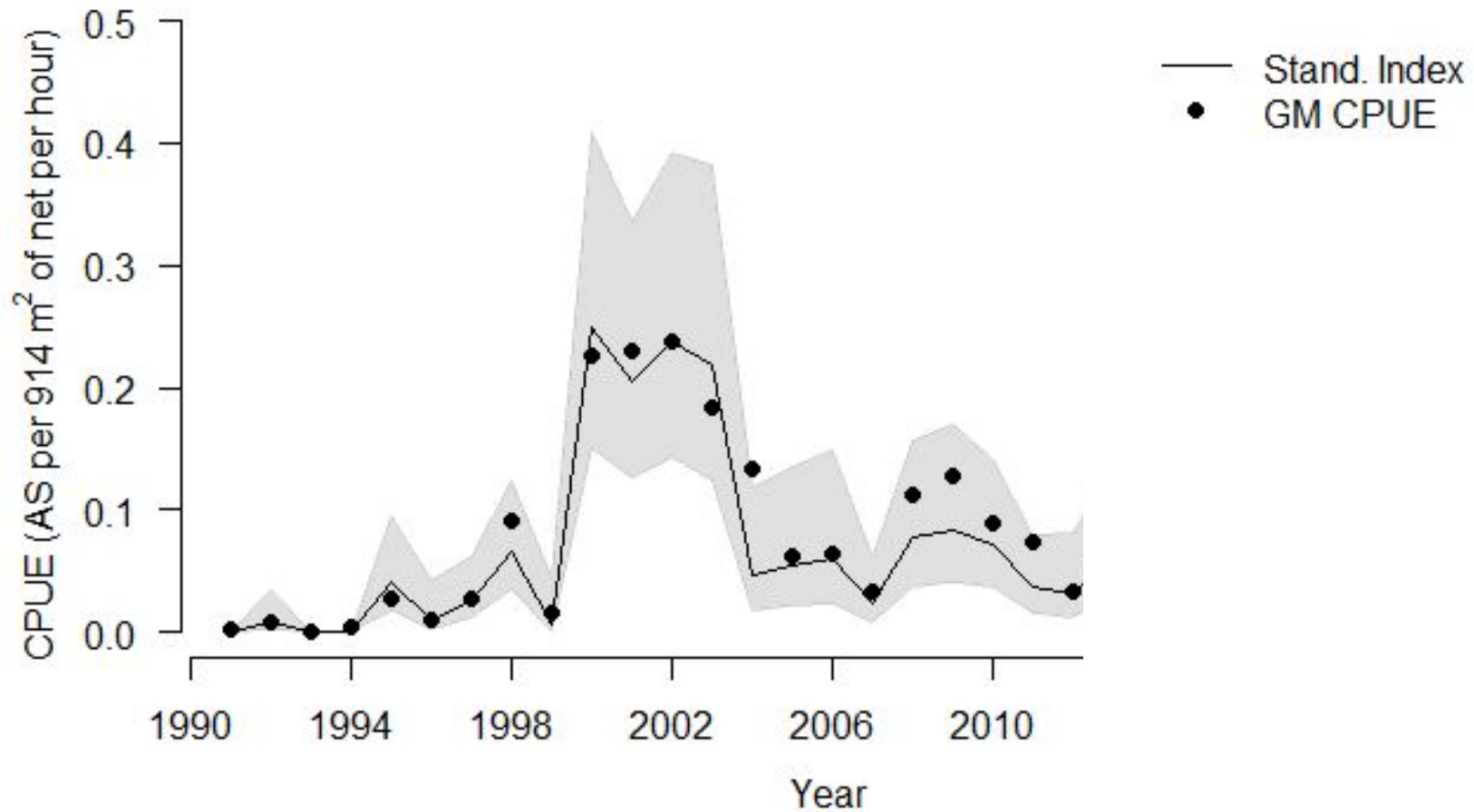
Creel and Logbook Hickory Shad



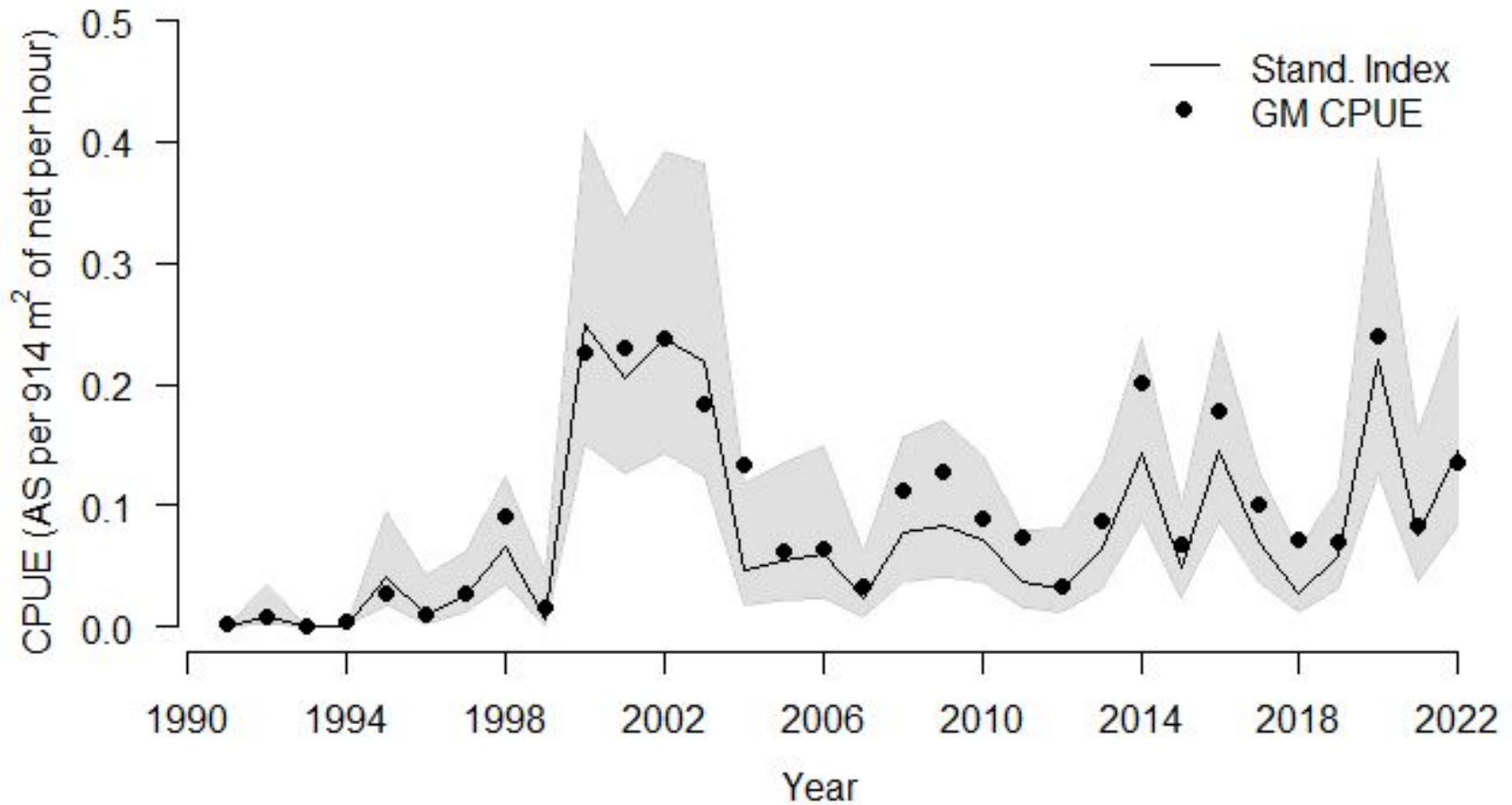
SBSSS (Upper Bay)



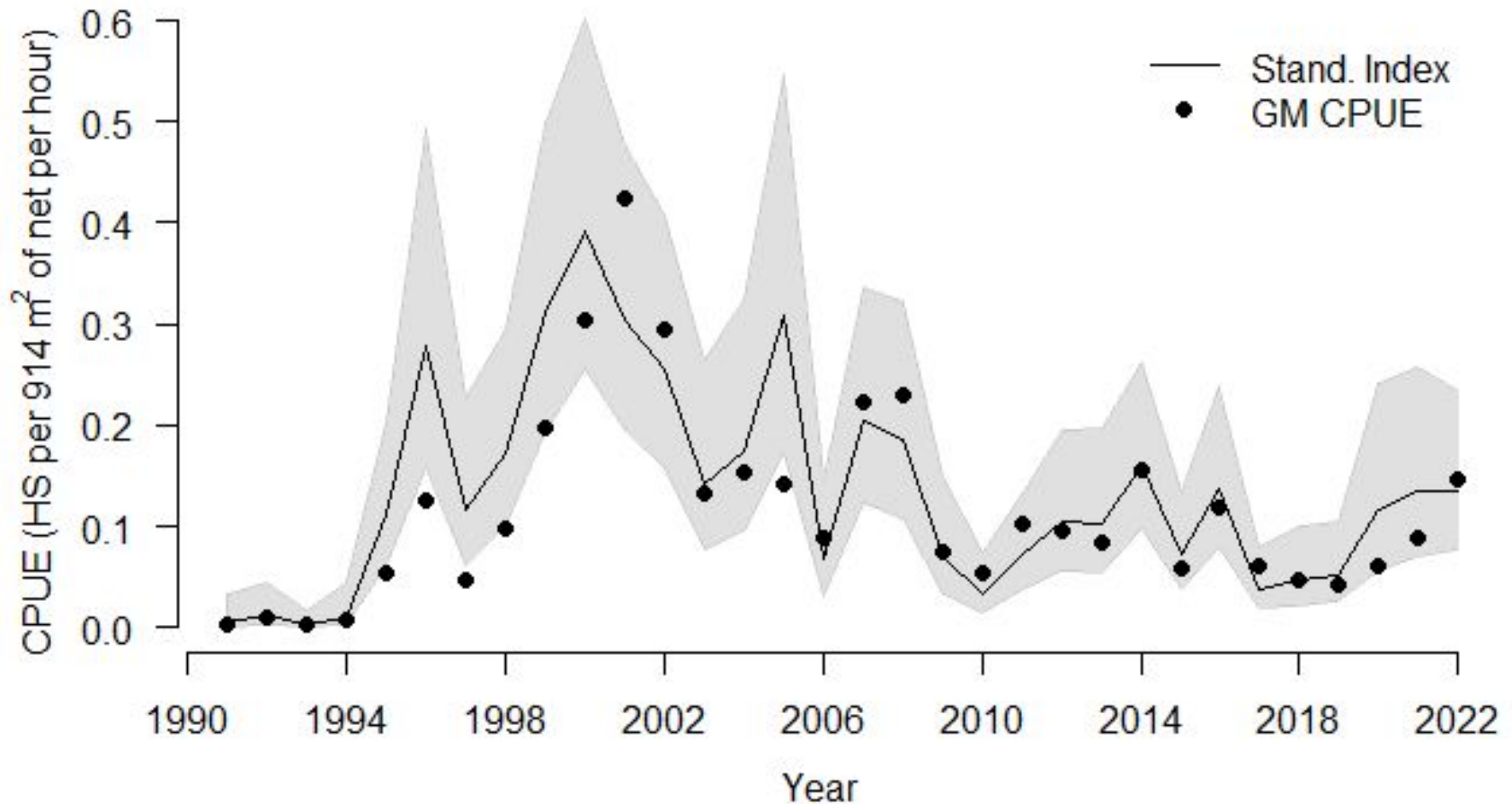
SBSSS (Upper Bay) American Shad



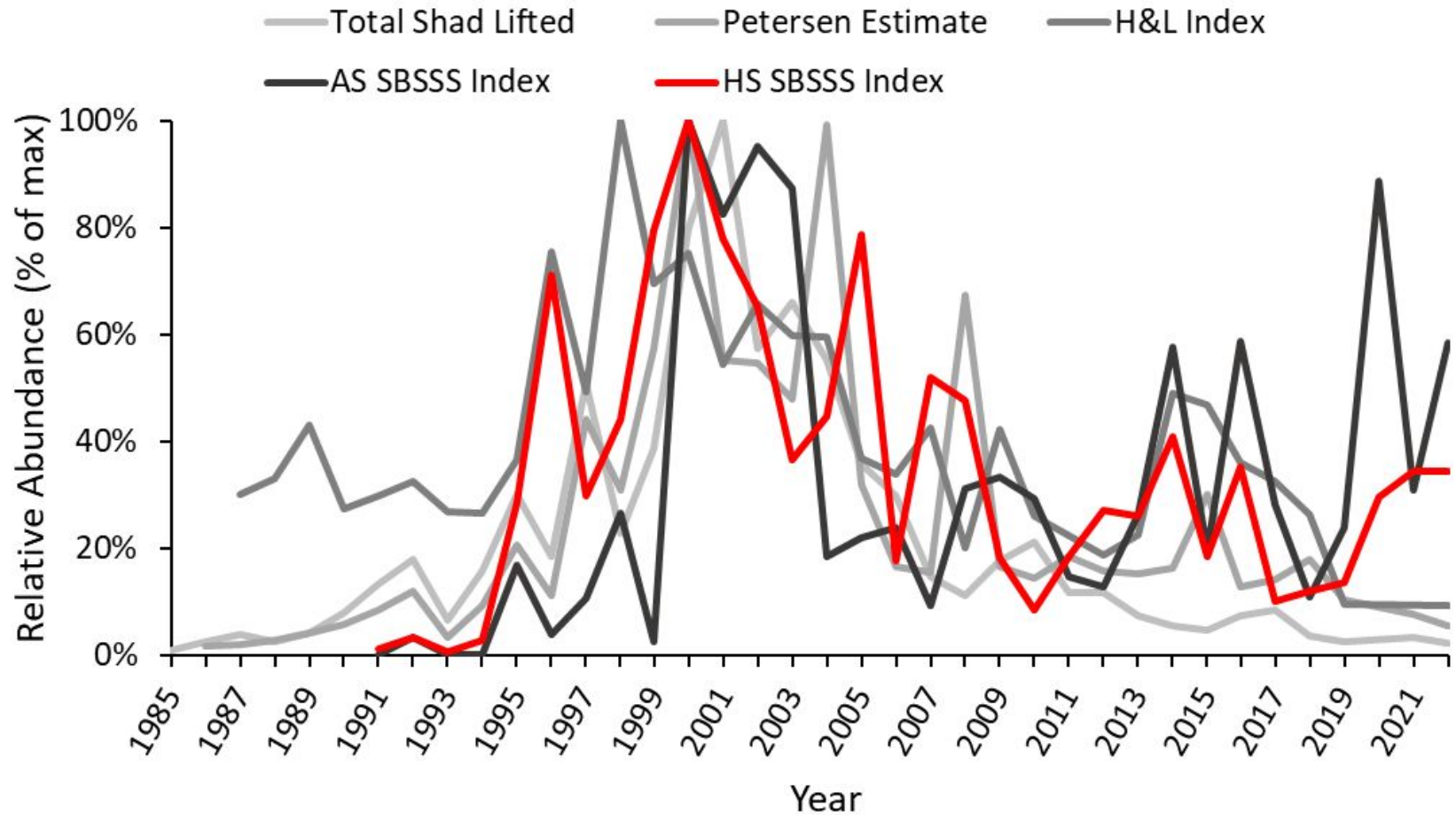
SBSSS (Upper Bay) American Shad



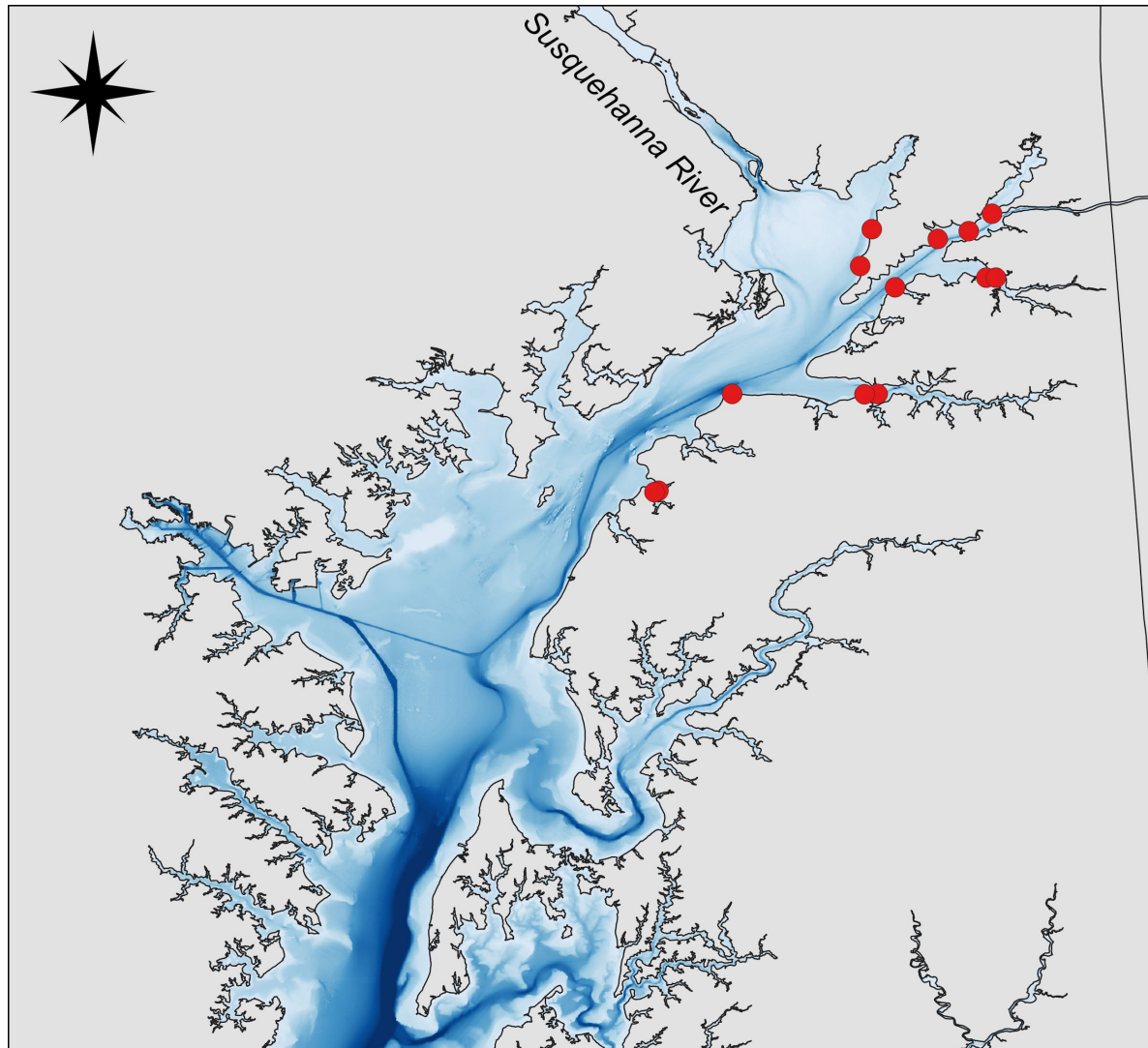
SBSSS (Upper Bay) Hickory Shad



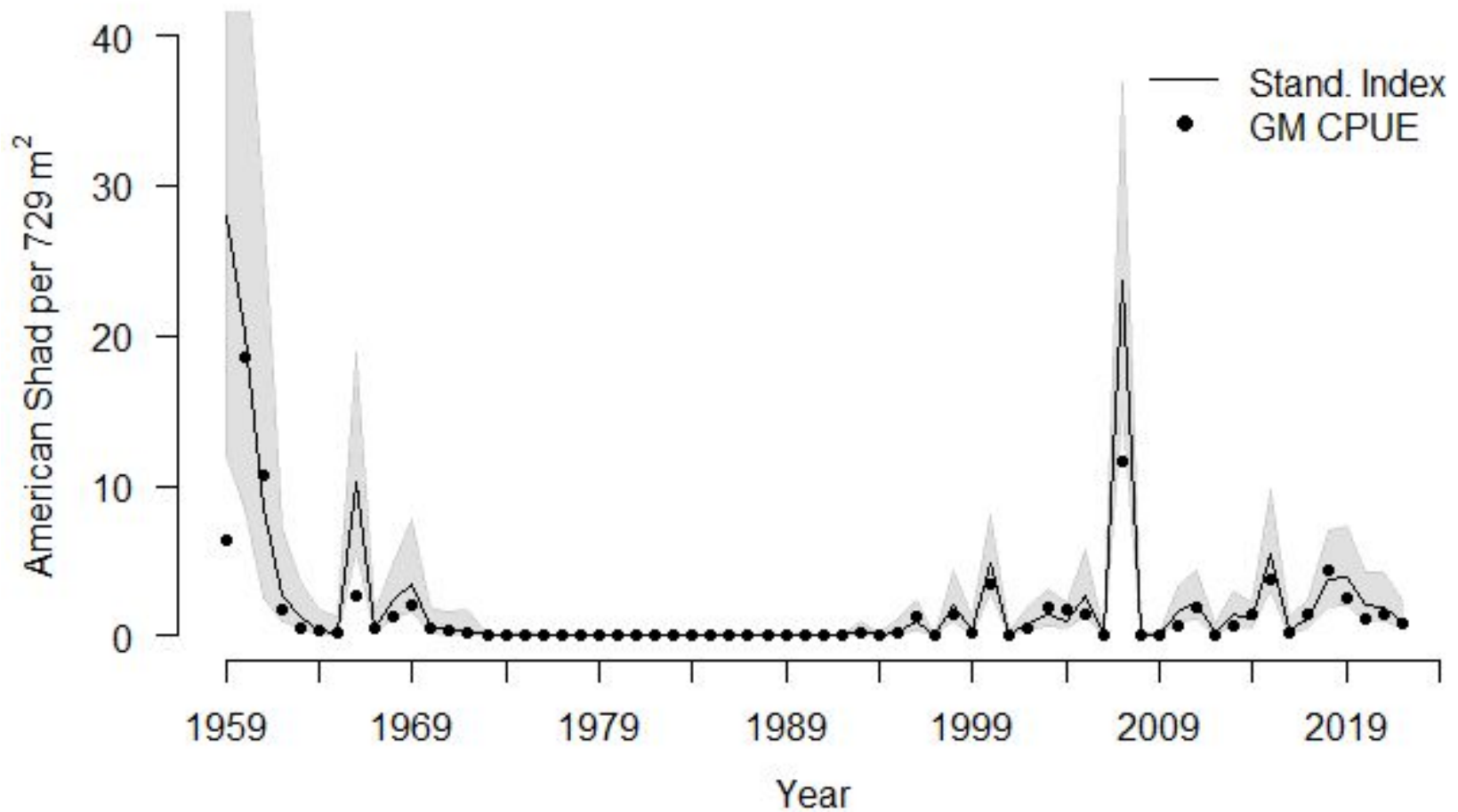
All Analyses



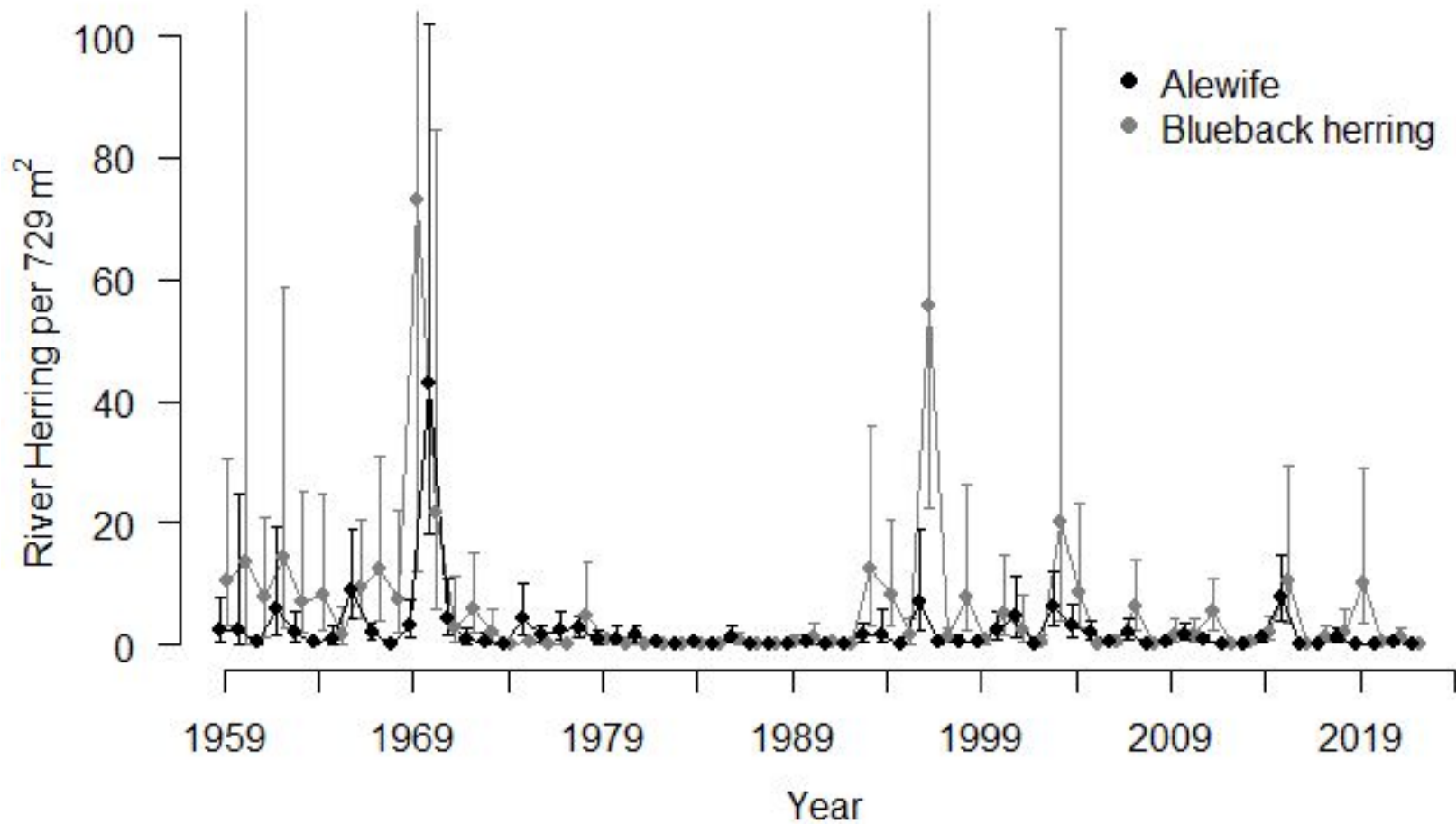
Juvenile Seine Survey



Juvenile American Shad



Juvenile River Herring



Questions?

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