

# Chapter 1 Time Series

## All Abundance Surveys and Landings

**Discussion** I need help with the Inf, NaN and NA issue still. Values are not showing up in some of the plots, expecially in SCECAP the Potting Survey.

I think that may be why my regressions used in this chapter's latest analyses show no relationships, when previous analyses show plenty of significance and correlation. The code for making the plots pretty seems good, but I'm not confident in my results.

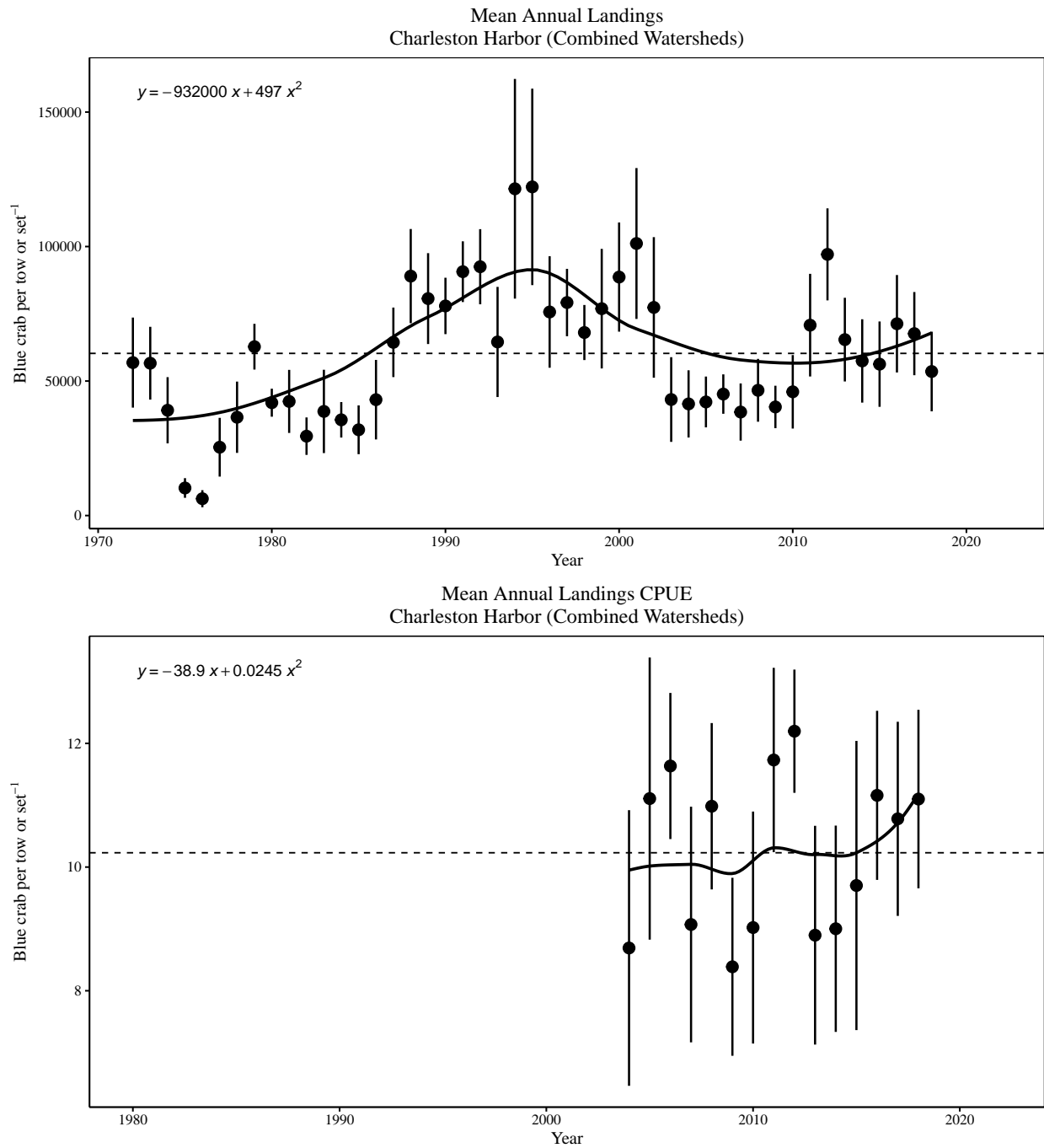


Figure 1: Total Annual blue crab Landings and total annual Landings CPUE (landings/number of pots pulled) (mean  $\pm$  standard error) for all reporting areas within the Charleston Harbor watershed. All samples were collected within the Charleston Harbor watershed (Ashley, Wando and Cooper Rivers and Charleston Harbor).

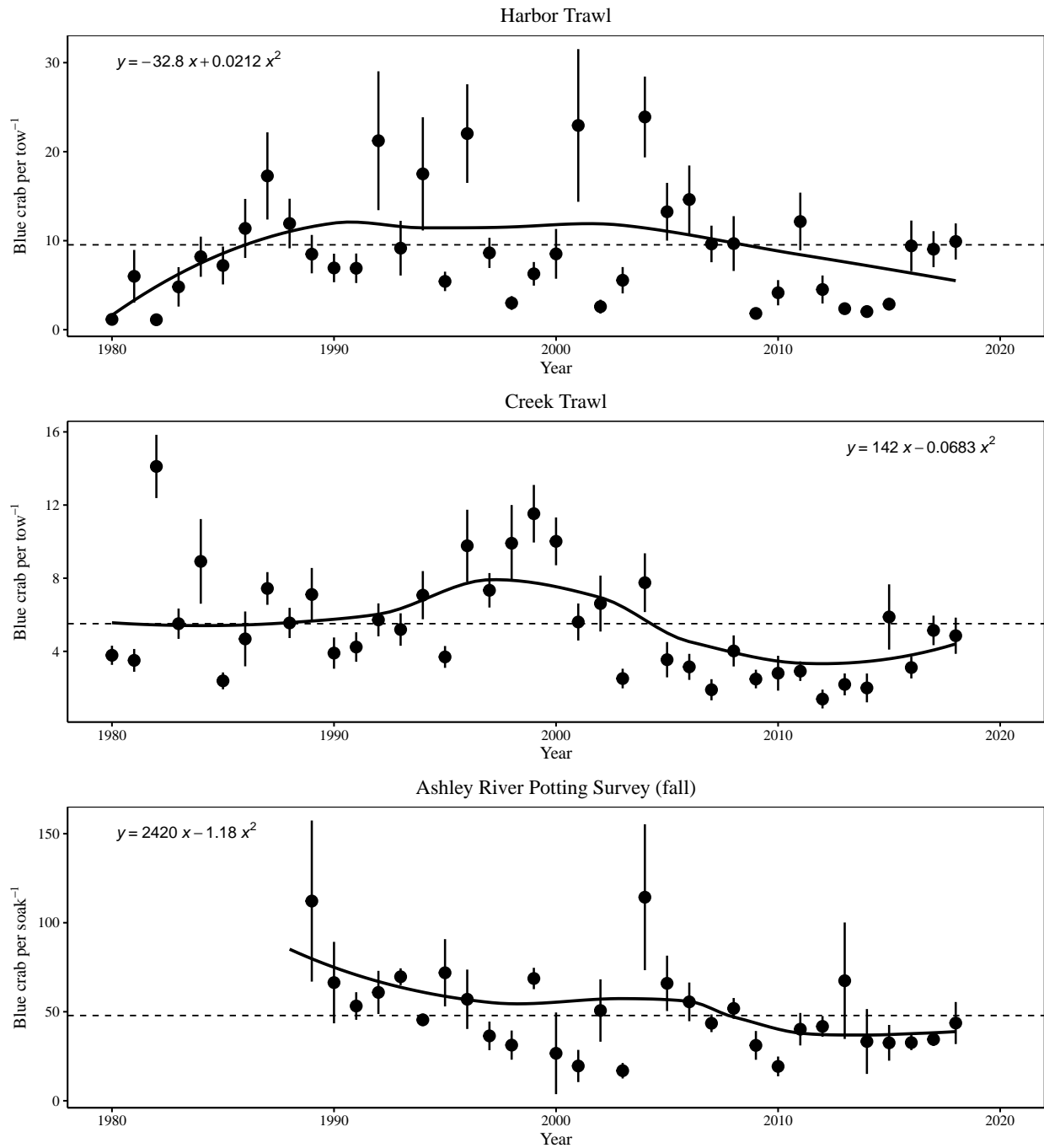


Figure 2: Annual blue crab (total catch) CPUE (mean  $\pm$  standard error) from CRMS surveys. All samples were collected within the Charleston Harbor watershed (Ashley, Wando and Cooper Rivers and Charleston Harbor). Creek Trawl samples from May through September. Ashley Potting samples collected October and November. Harbor Trawl samples monthly.

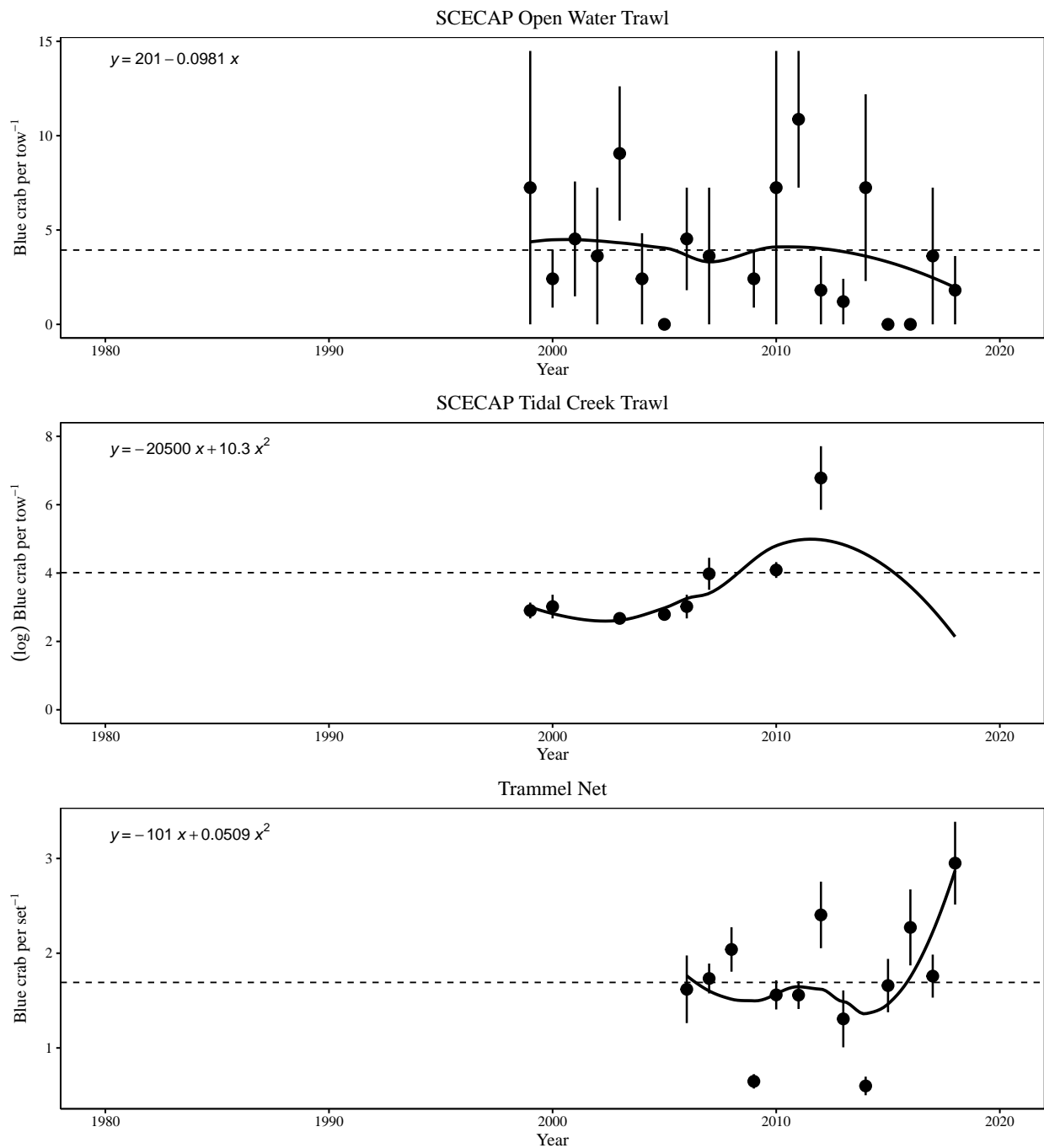


Figure 3: Annual blue crab (total catch) CPUE (mean  $\pm$  standard error) from non-CRMS surveys. All samples were collected within the Charleston Harbor watershed (Ashley, Wando and Cooper Rivers and Charleston Harbor). SCECAP samples June through July. Trammel Net survey samples monthly.

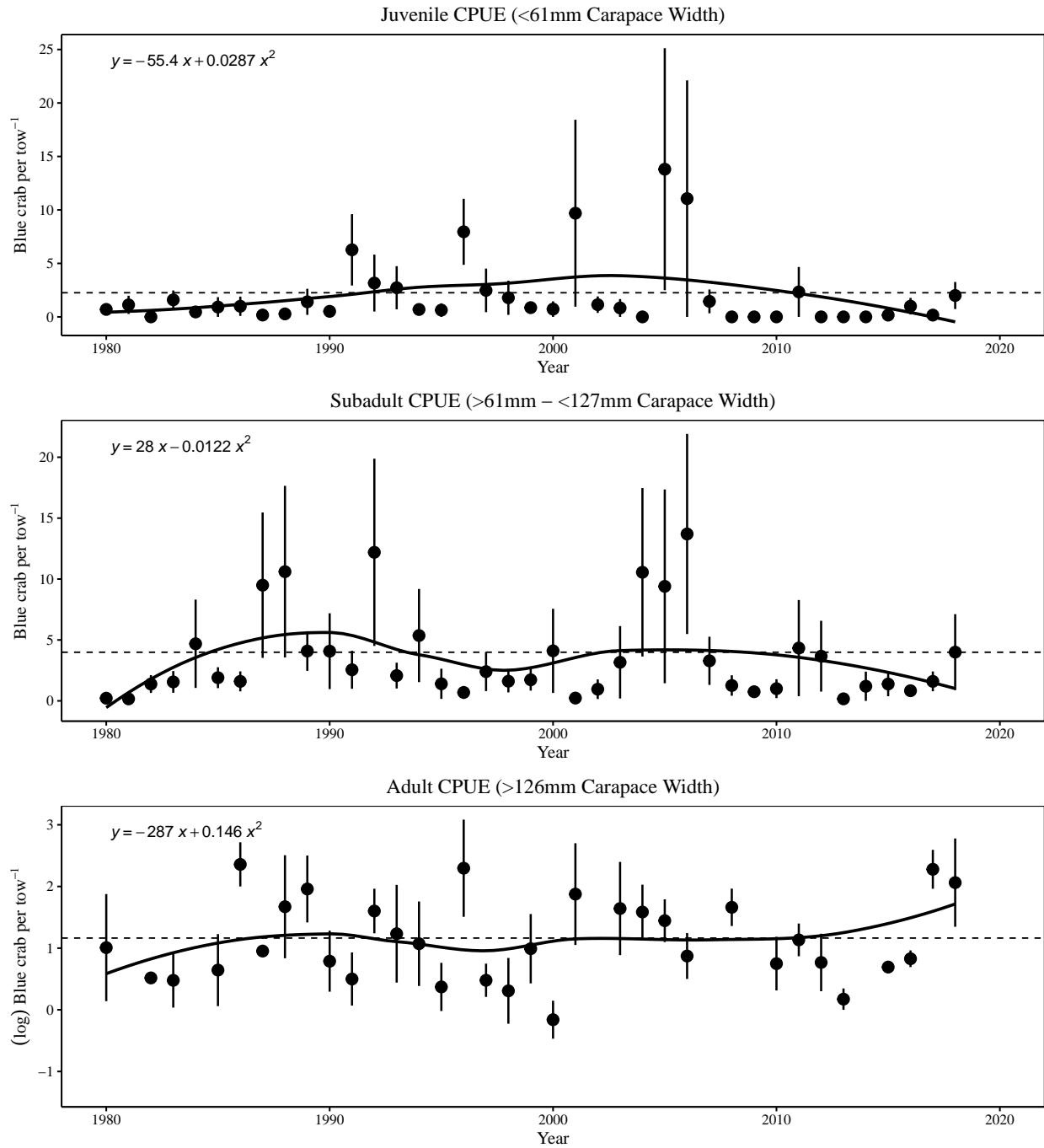


Figure 4: Harbor Trawl blue crab abundance by size (mean  $\pm$  standard error) for all sites within the Charleston Harbor watershed. Adult mean annual CPUEs were logarithmically transformed to help aid in visual scaling

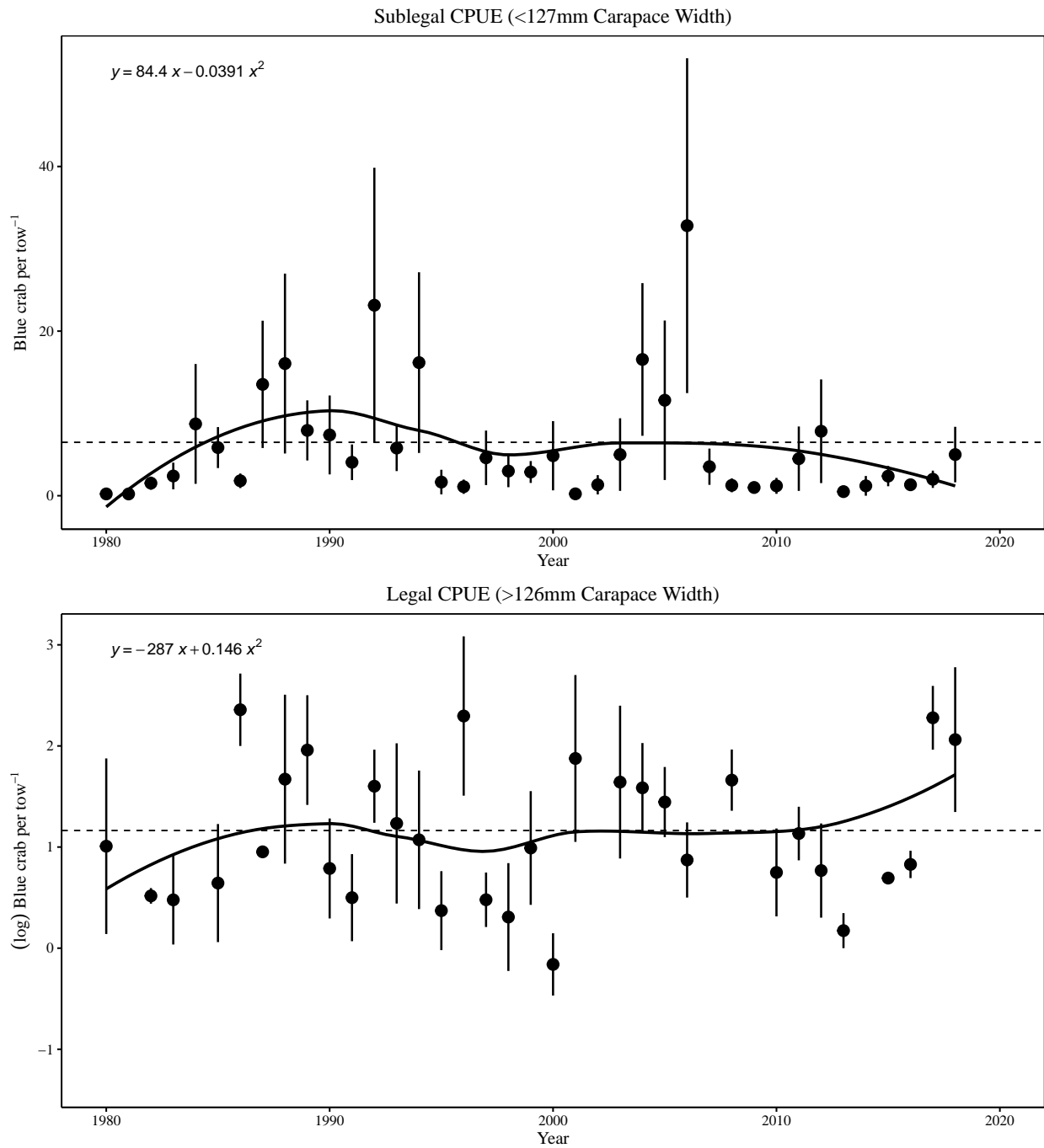


Figure 5: Harbor Trawl blue crab abundance by legal and sublegal size (mean  $\pm$  standard error) for all sites within the Charleston Harbor watershed.

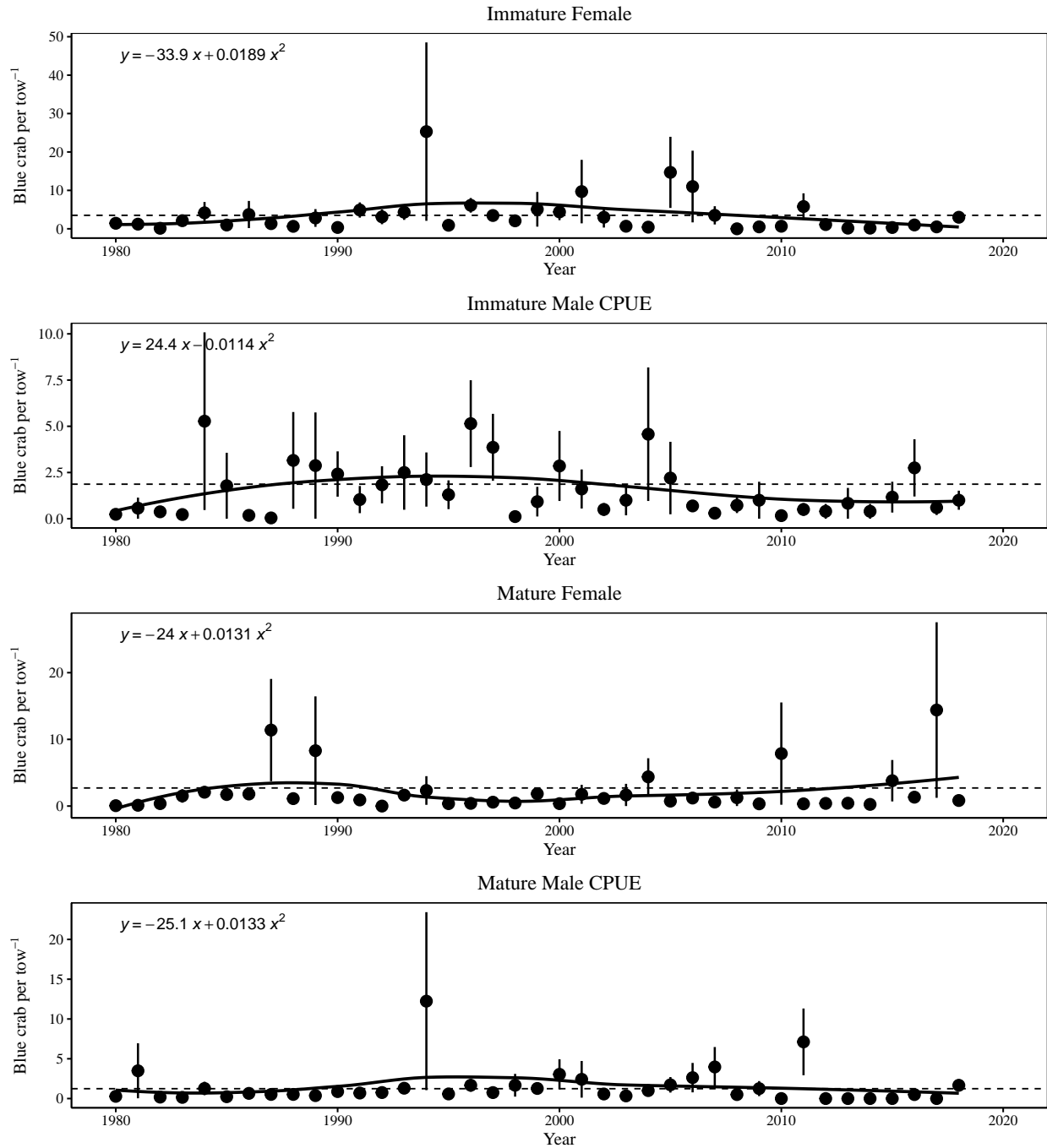


Figure 6: Harbor Trawl blue crab abundance by sex and maturity (mean  $\pm$  standard error) for all sites within the Charleston Harbor watershed. (SHOULD I LOG TRANSFORM IF, MF, AND MM?)

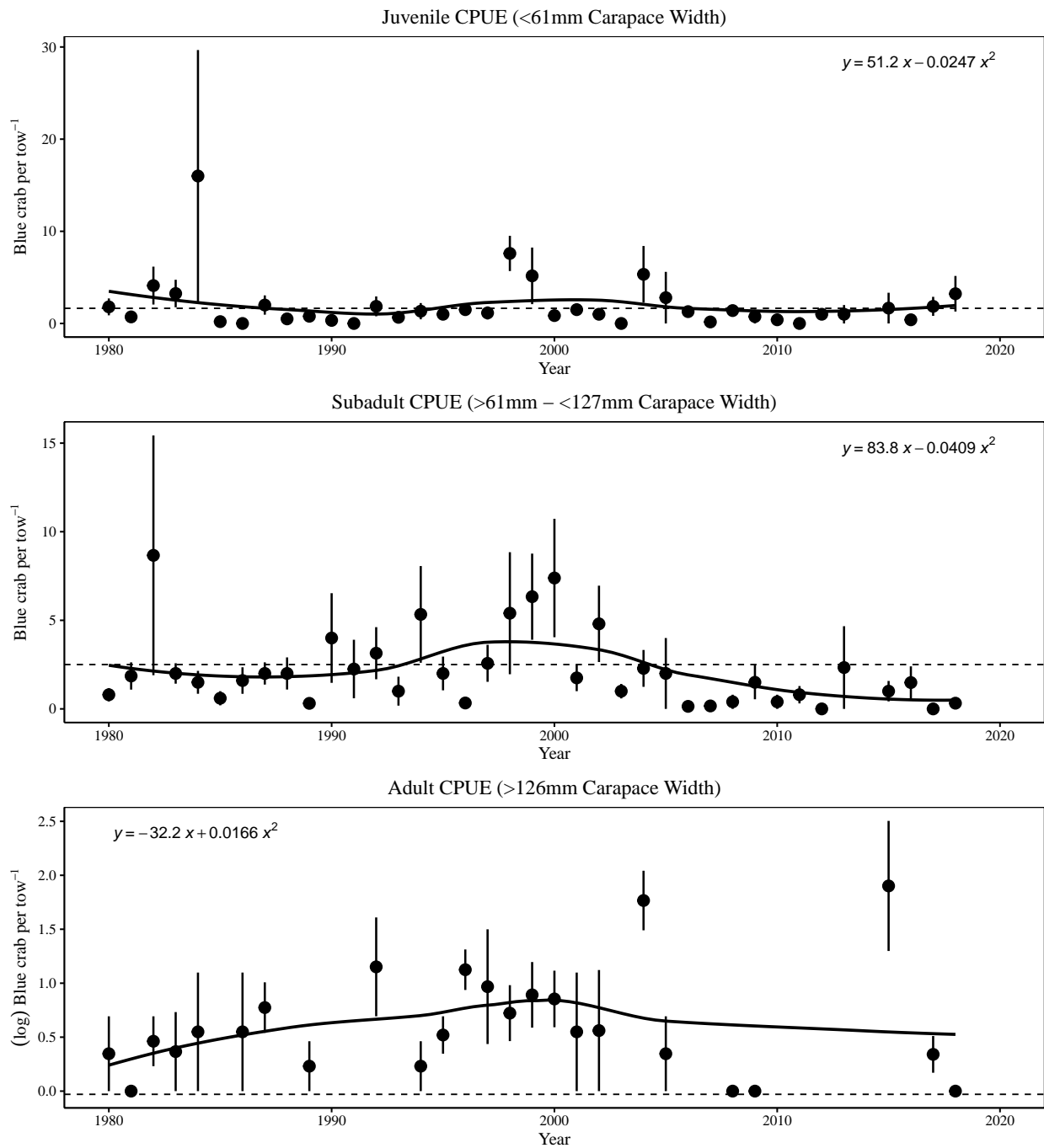


Figure 7: Creek Trawl blue crab abundance by size (mean  $\pm$  standard error) for all sites within the Charleston Harbor watershed. (LOG JUVENILE??)



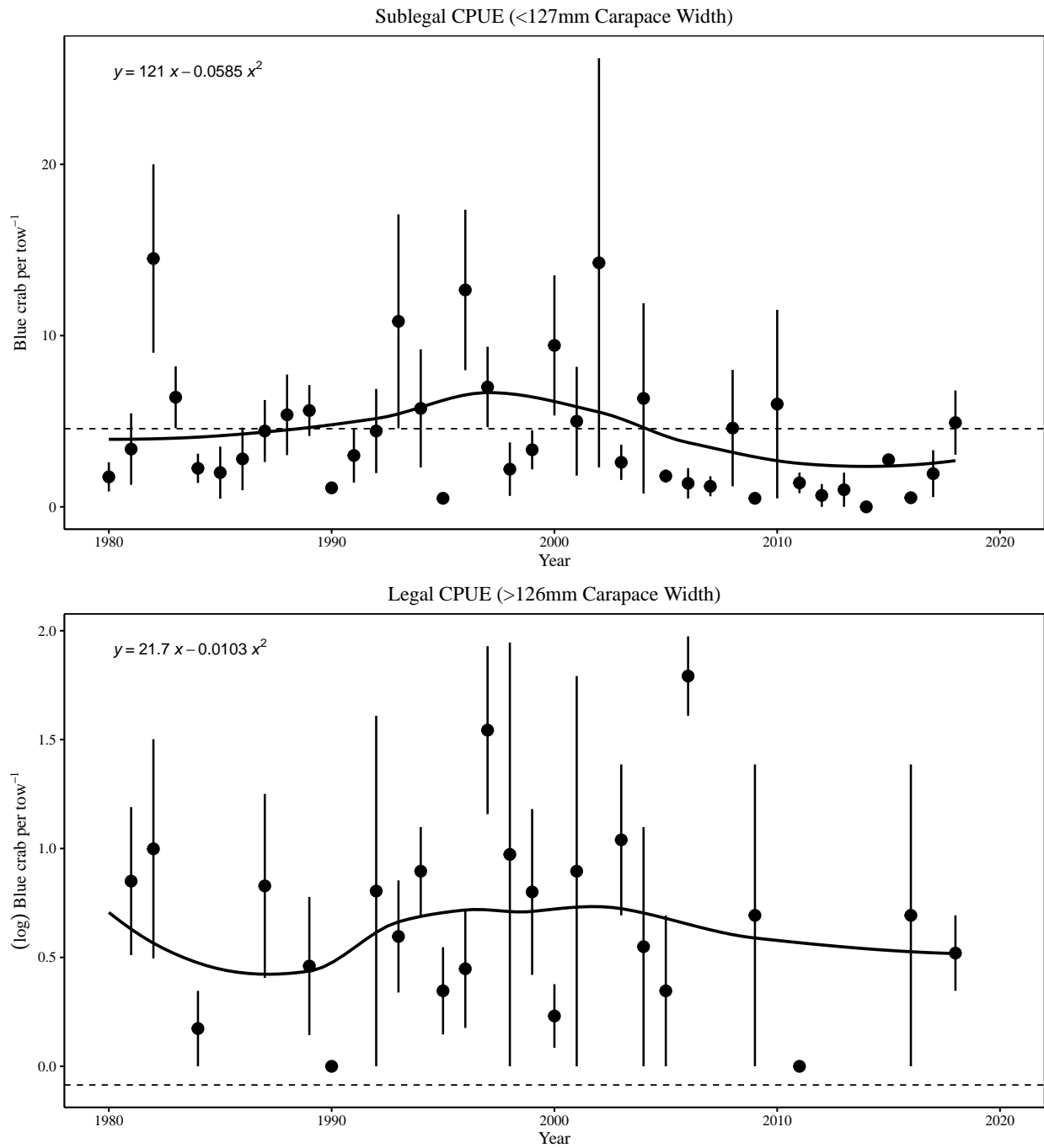


Figure 8: Creek Trawl blue crab abundance by legal and sublegal size (mean  $\pm$  standard error) for all sites within the Charleston Harbor watershed.

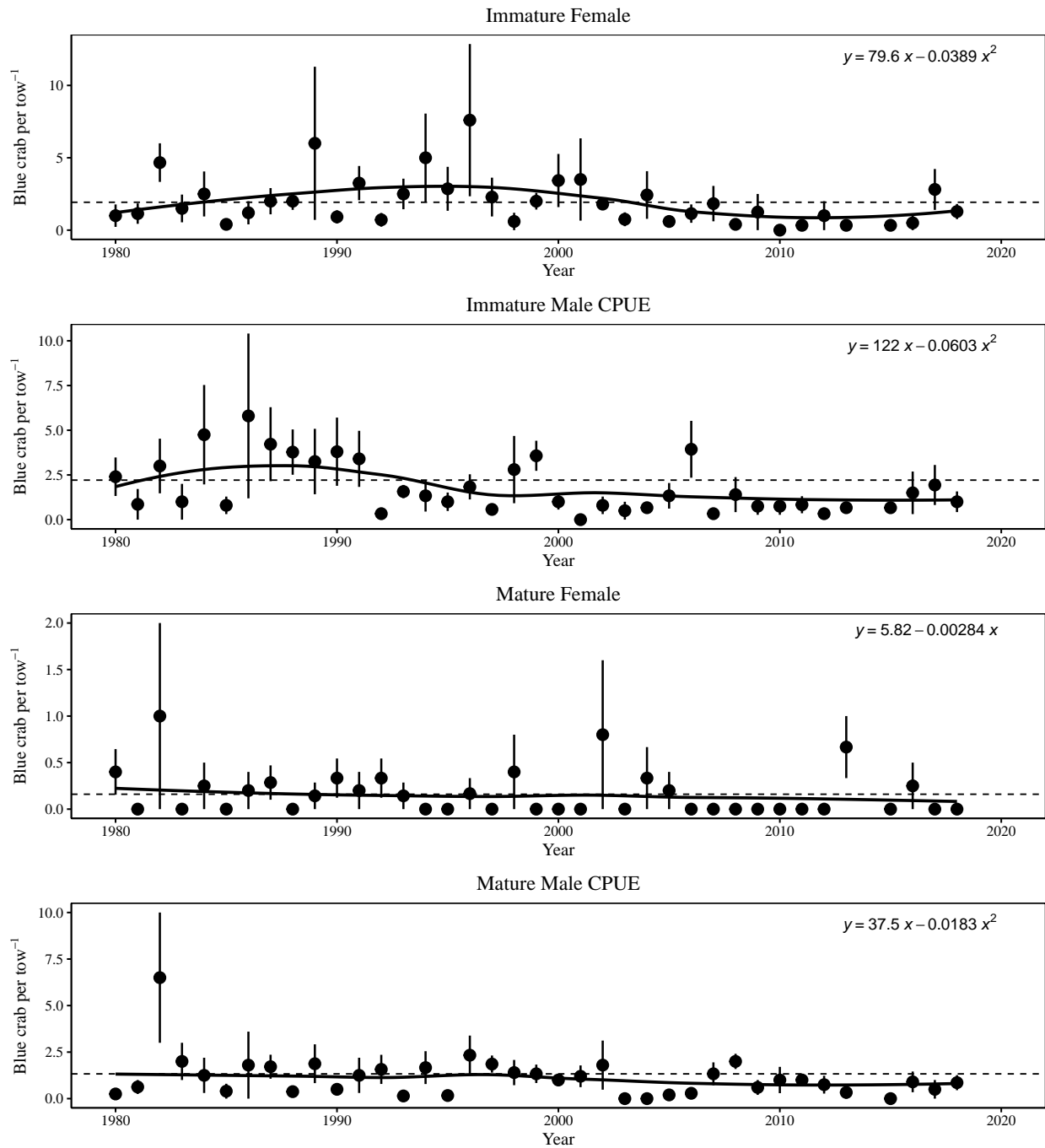


Figure 9: Harbor Trawl blue crab abundance by sex and maturity (mean  $\pm$  standard error) for all sites within the Charleston Harbor watershed. (LOG IF, MF AND MM??)

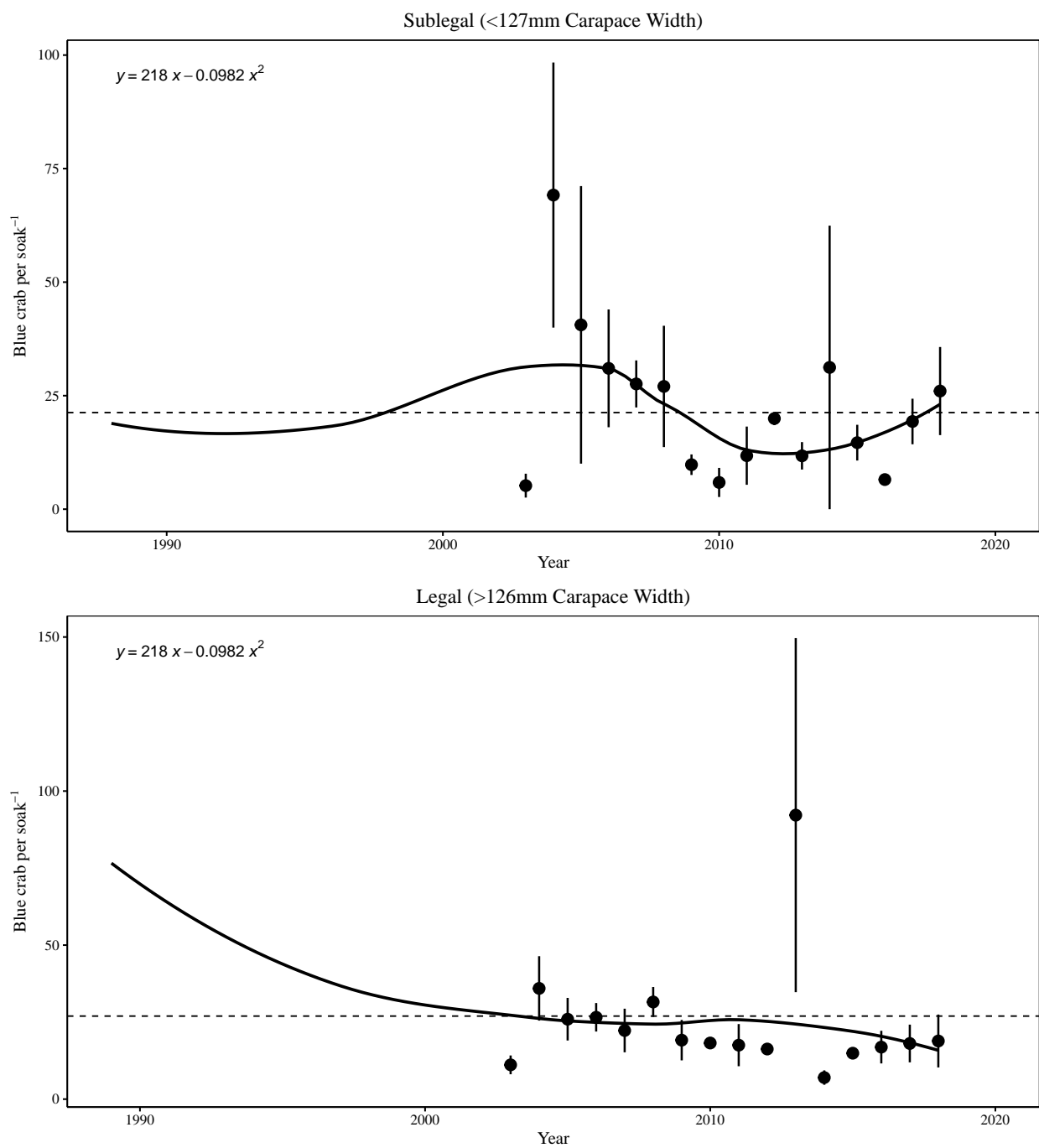


Figure 10: Ashley Potting Survey blue crab abundance by legal classification (mean  $\pm$  standard error). Ashley crab potting survey occurs October and November.

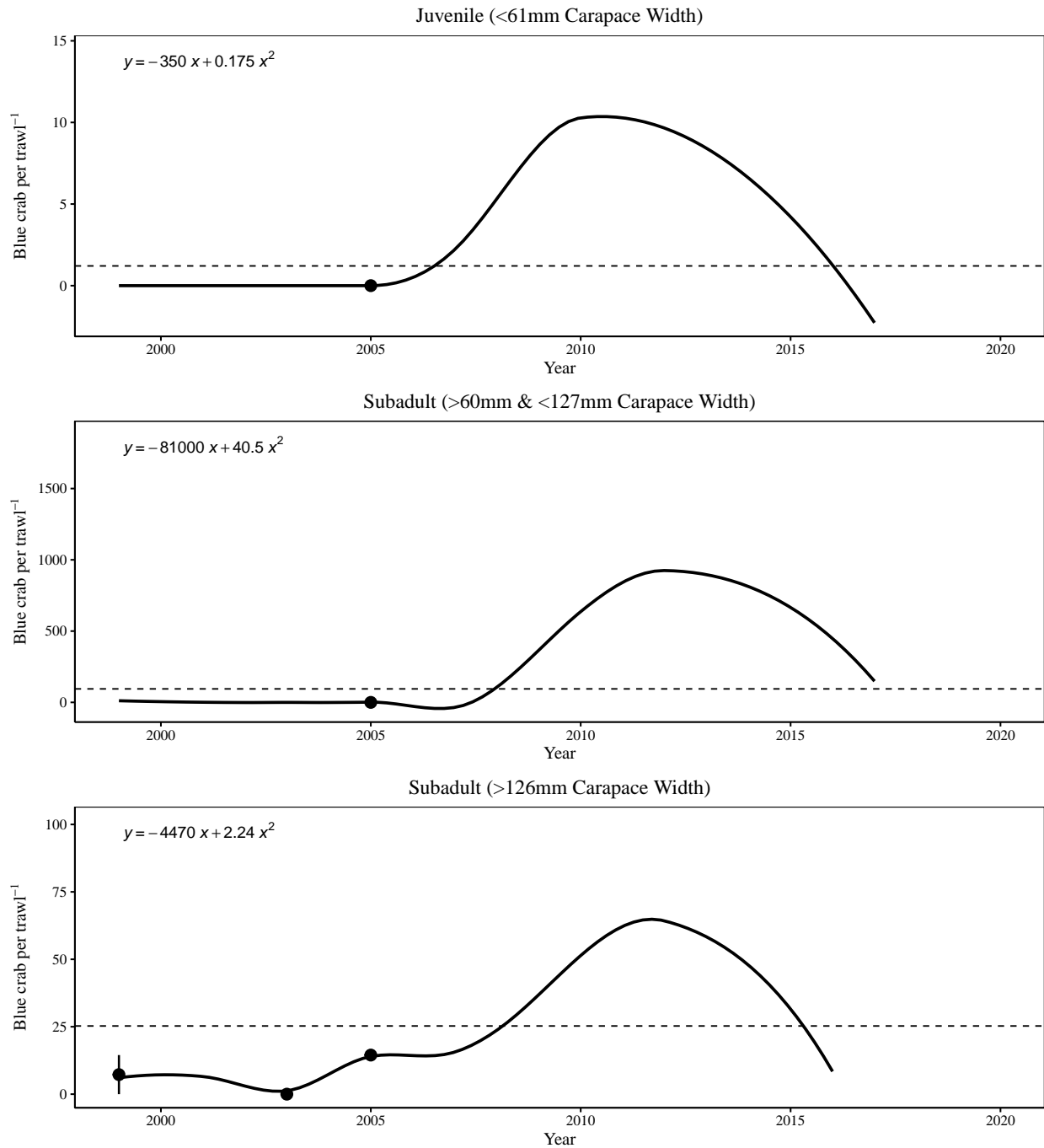


Figure 11: SCECAP Tidal Creek Trawl (<100m creek width) blue crab abundance for all sites sampled within the Charleston Harbor watershed by size (mean  $\pm$  standard error). SCECAP Tidal Creek Trawl survey is a statewide survey that occurs June and July. Tidal Creeks within the Charleston Harbor watershed were not sampled in 2009, 2011, 2013 or 2014.

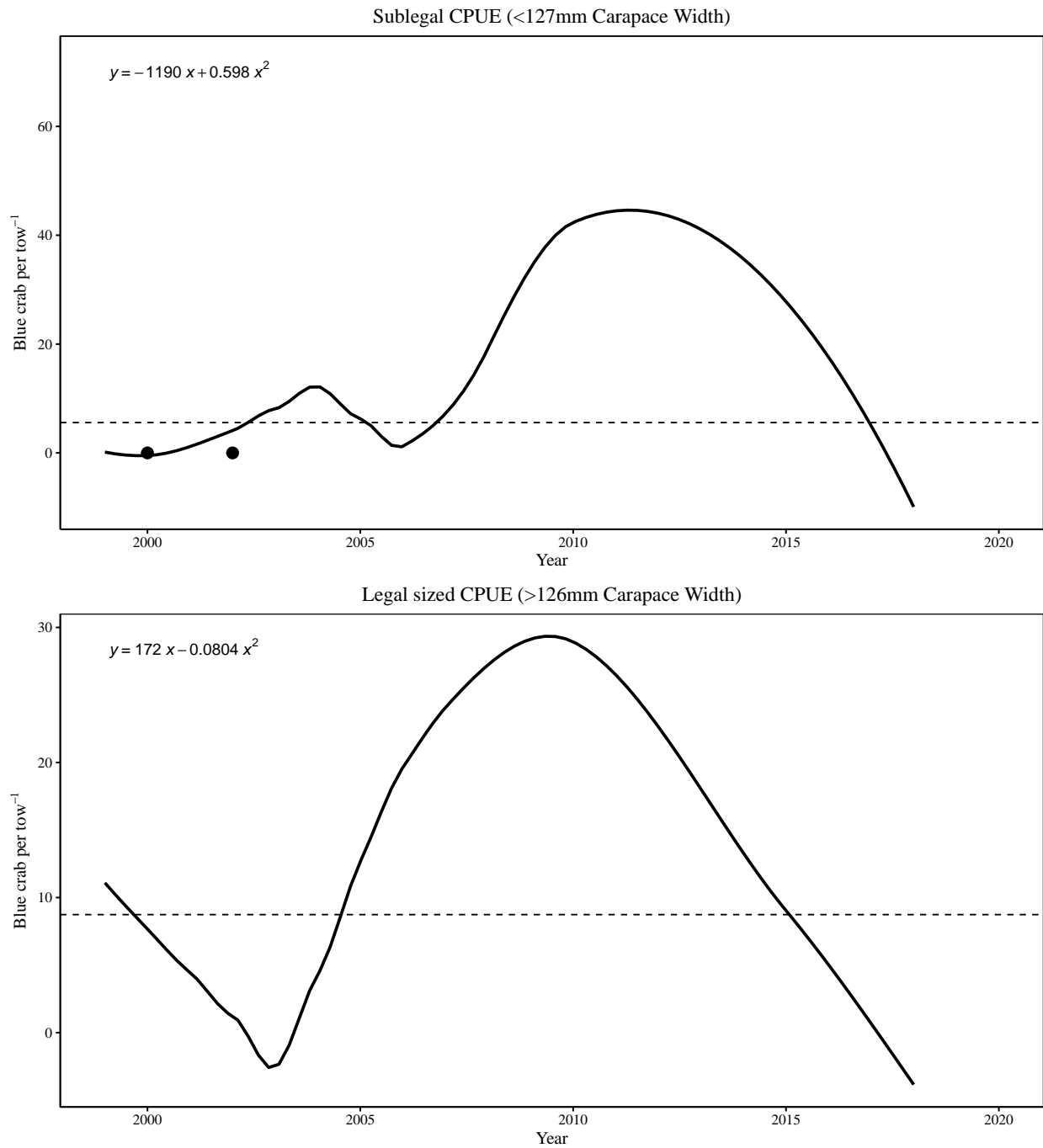


Figure 12: SCECAP Tidal Creek Trawl (<100m creek width) blue crab abundance by legal and sublegal size (mean  $\pm$  standard error) for all sites within the Charleston Harbor watershed. Tidal Creeks within the Charleston Harbor watershed were not sampled in 2009, 2011, 2013 or 2014.

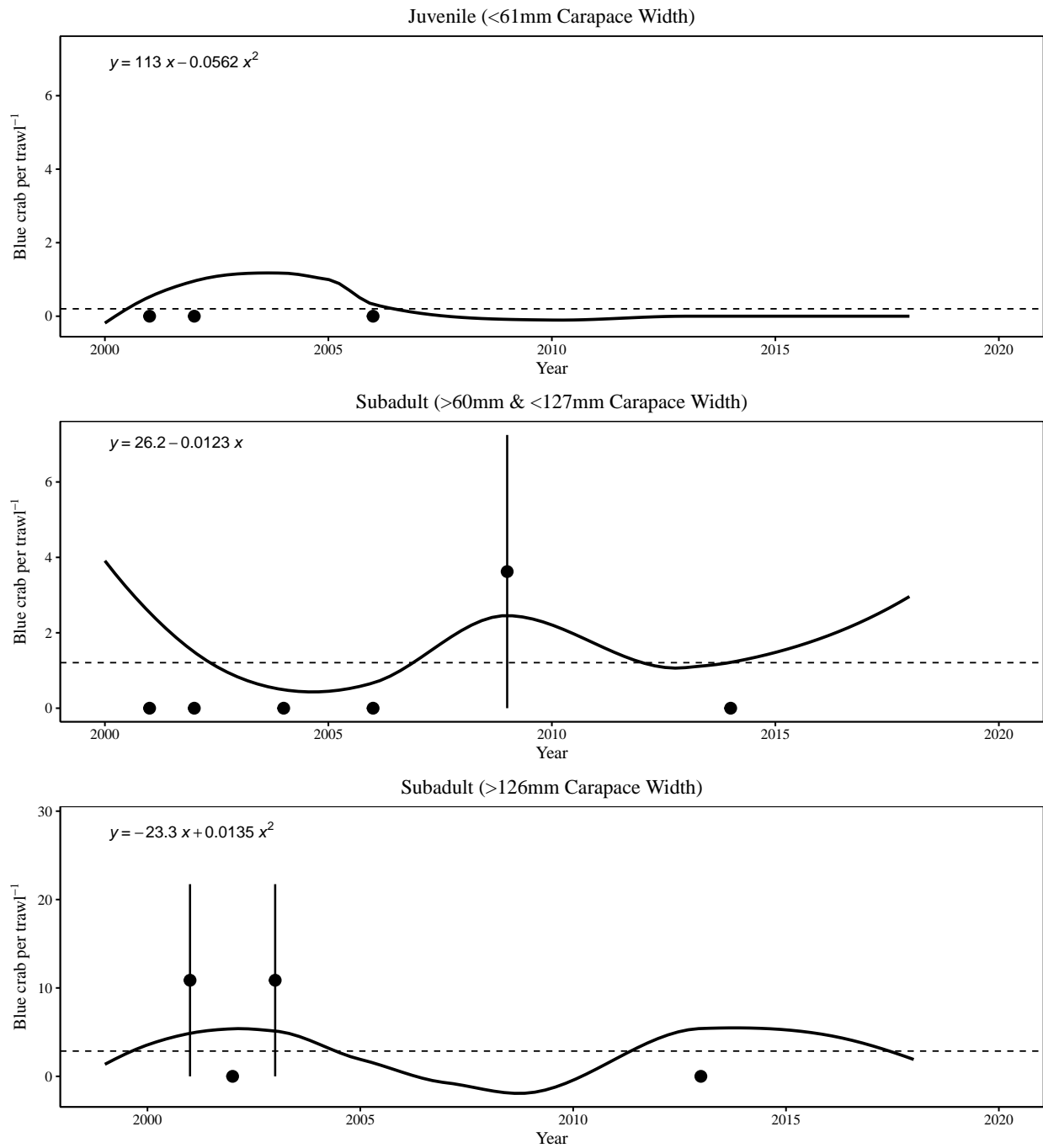


Figure 13: SCECAP Tidal Open Water Trawl (>100m creek width) blue crab abundance for all sites sampled within the Charleston Harbor watershed by size (mean  $\pm$  standard error). SCECAP Tidal Open Water Trawl survey is a statewide survey that occurs June and July, with no sampling occurring in 2008.

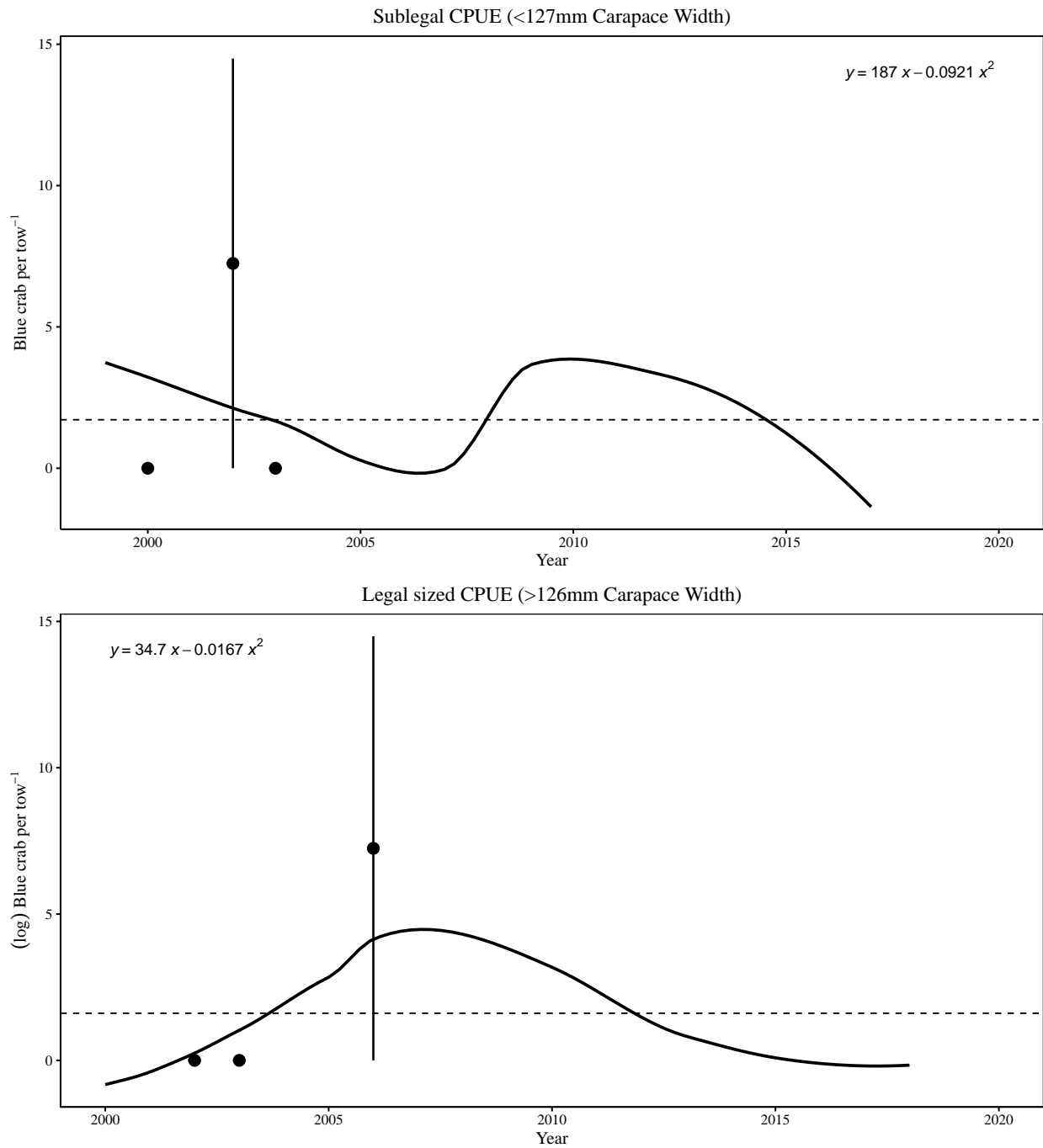


Figure 14: SCECAP Open Water Trawl (>100m creek width) blue crab abundance by legal and sublegal size (mean  $\pm$  standard error) for all sites within the Charleston Harbor watershed. SCECAP Tidal Open Water Trawl survey is a statewide survey that occurs June and July, with no sampling occurring in 2008.