

Figure S1. Measured effects of salinity and prey type on average weight (g) of juvenile southern flounder during a controlled laboratory experiment. Fish were measured at the start of the experiment and then every 15 days until the experiment was terminated. Each symbol represents the average weight (in g) of all fish within a single replicate tank, horizontal lines represent the average of three replicate tanks.

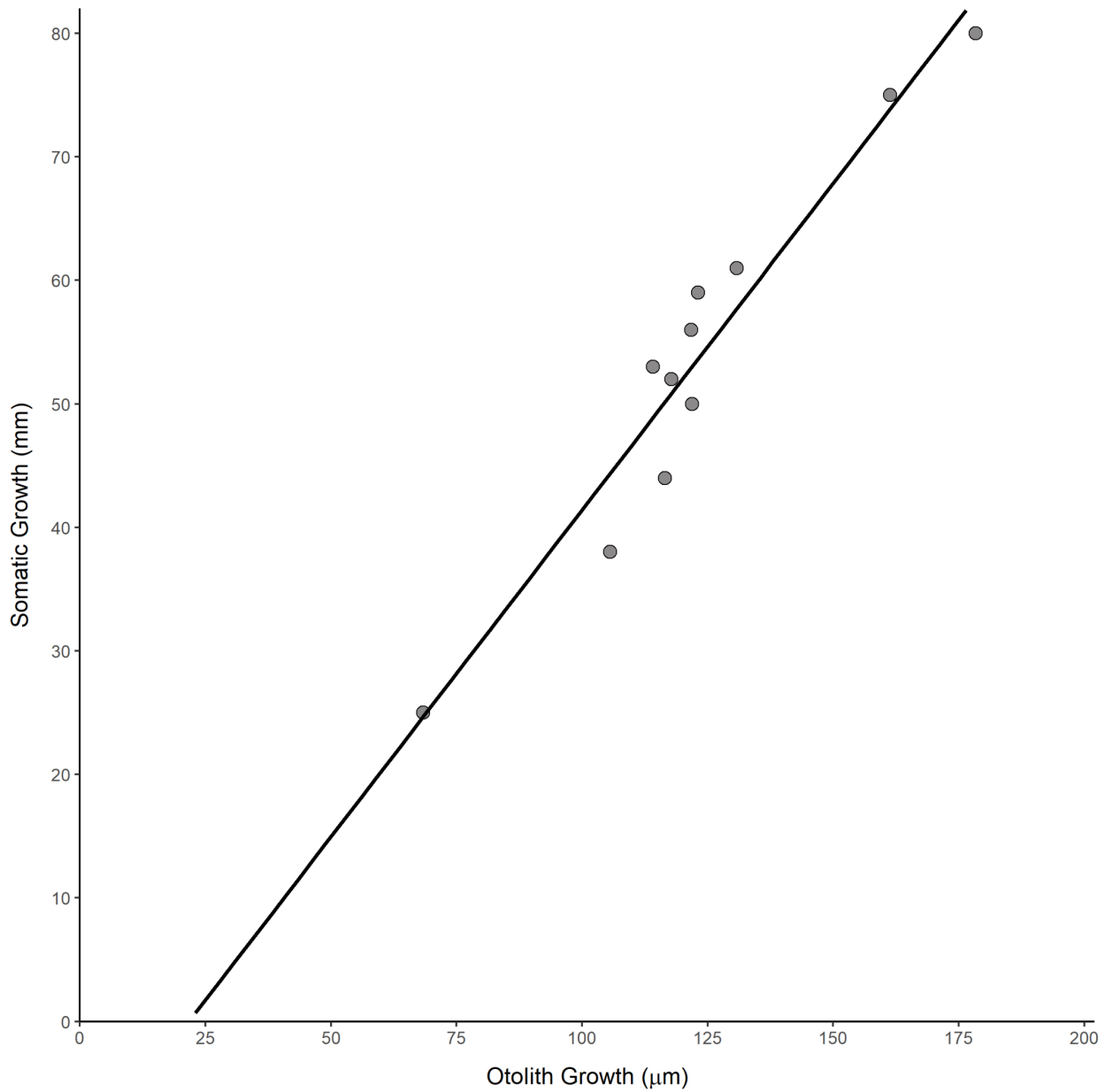


Figure S2. The relationship between somatic growth (mm) and otolith growth (μm) for marked juvenile southern flounder held under laboratory conditions.

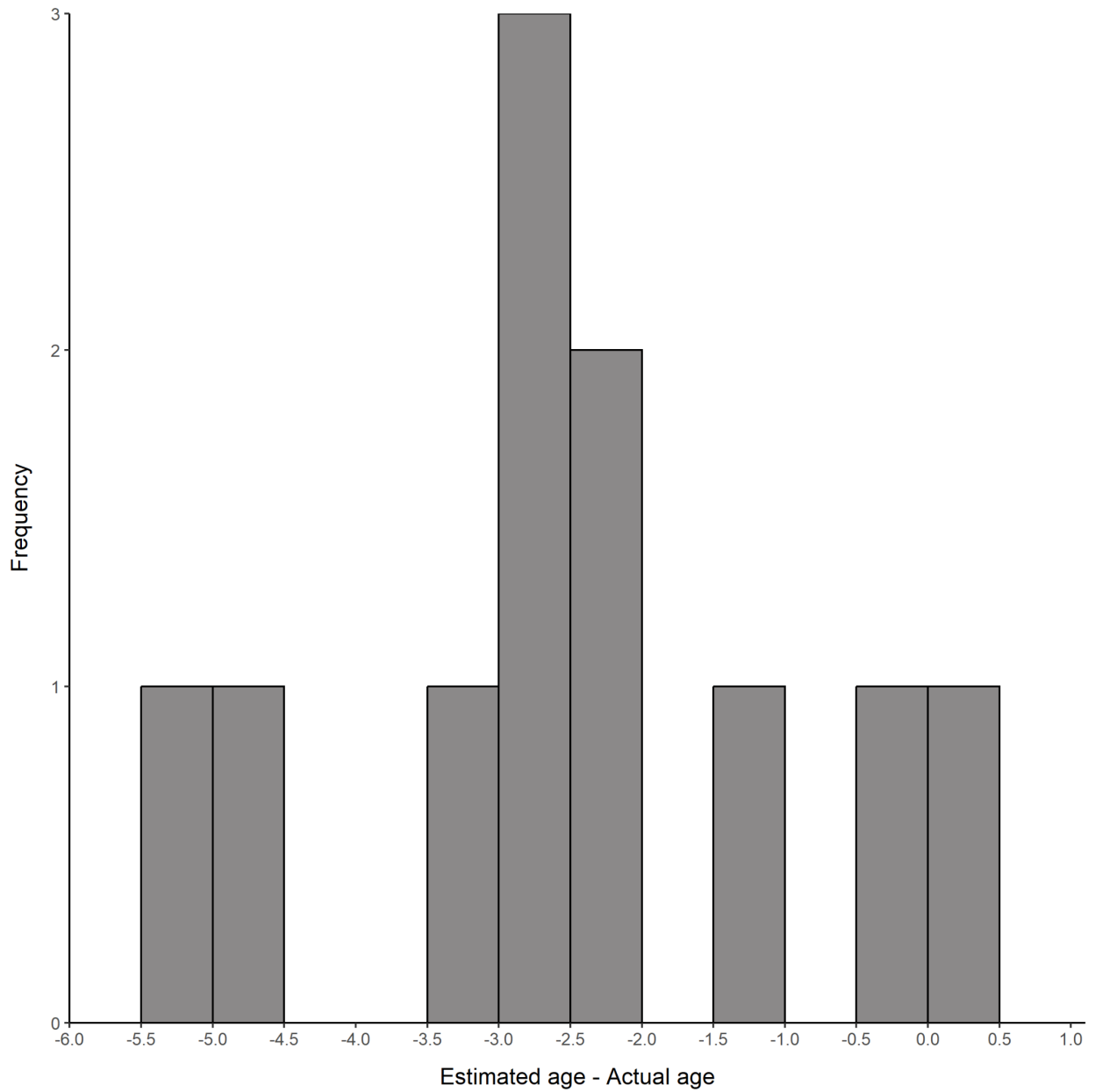


Figure S3. Difference between the estimated (increment counts) and actual (days since marking) age of marked southern flounder held under laboratory conditions.

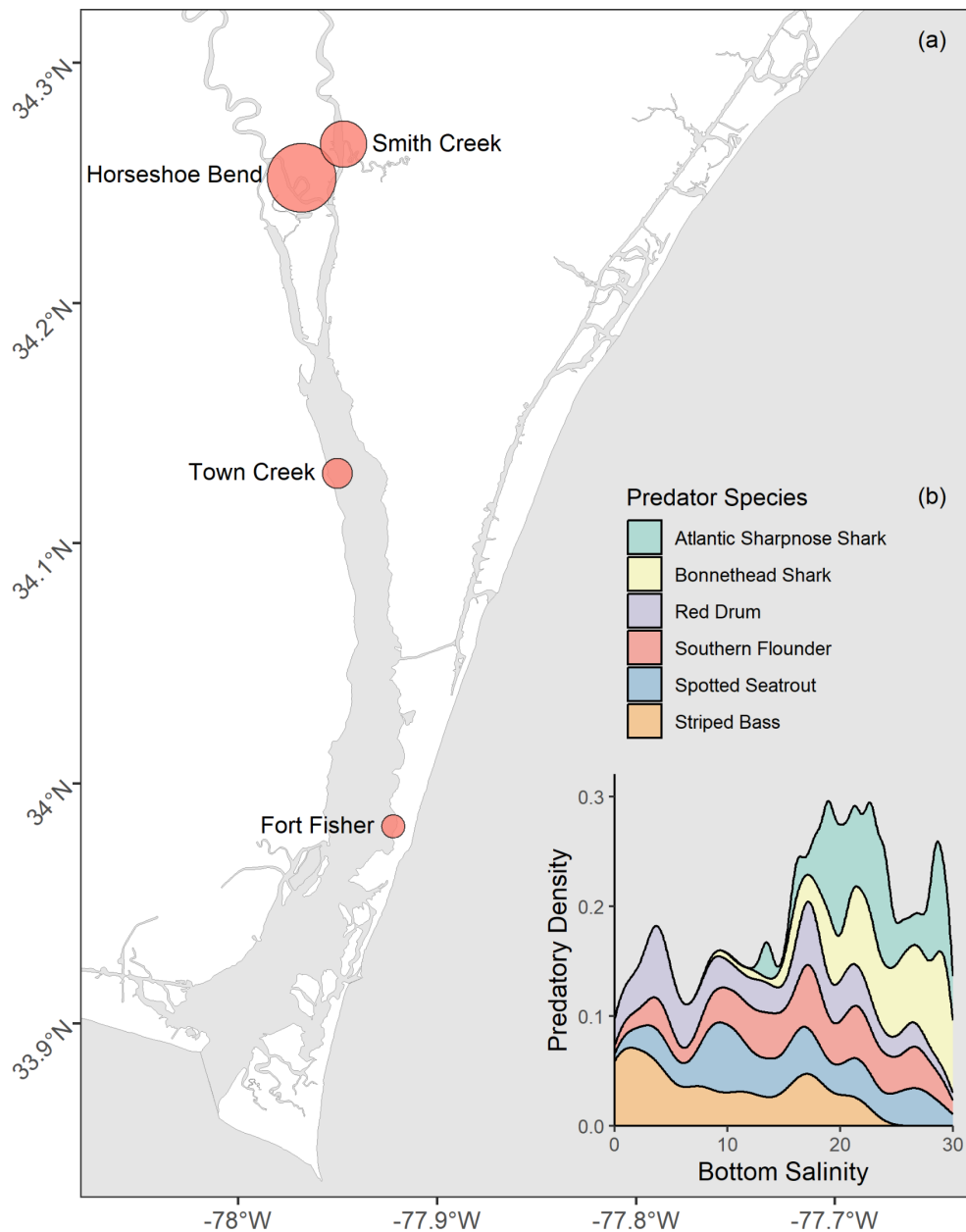


Figure S4. Annual mean catch of juvenile southern flounder (a) at four fixed sampling locations (mean \pm se = Horseshoe Bend = 6.22 ± 2.27 , Smith Creek = 1.60 ± 0.36 , Town Creek = 0.19 ± 0.06 , Fort Fisher = 0.06 ± 0.24) during an early summer (May/June) fishery-independent trawl survey conducted by the NCDMF (1978 – 2022). Density of potential predators (b) of juvenile southern flounder across the estuarine salinity gradient within the Cape Fear River based on capture rates within the North Carolina Division of Marine Fisheries fishery-independent gill net survey during 2009-2019. Plot generated using 35% of the default bandwidth from the kernel density estimate.