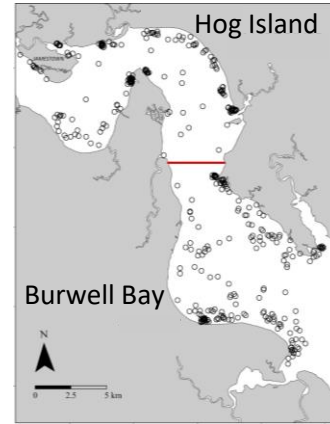
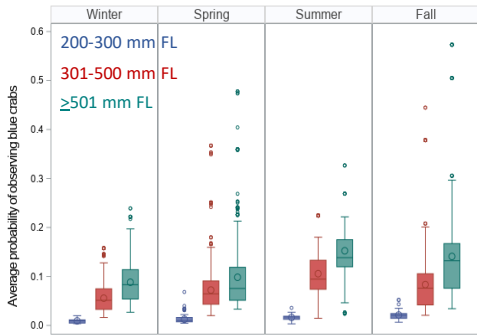


Predation Impacts of Invasive Blue Catfish on Blue Crabs in Estuarine Environments

- Predation likelihoods varied spatially, temporally, and with blue catfish size (range: 200-1102 mm)
- Crabs were consumed throughout the year, with no discernible seasonal signal
- Consumption of blue crabs was 1.75 times more likely in Burwell Bay than in Hog Island, suggesting that higher salinity reaches are areas of greater predation intensity on blue crabs

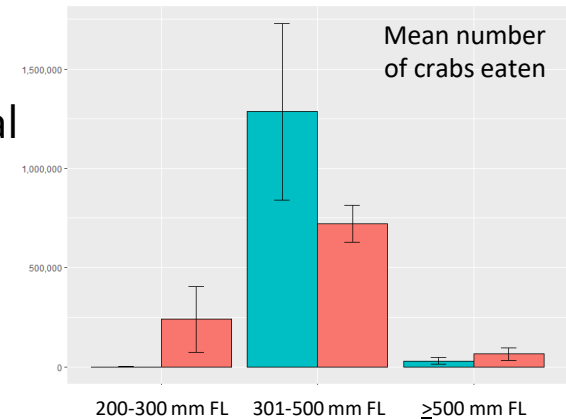


Sample sites (n=416) in James River, 2018-2020



- Blue catfish greater than 300 mm fork length [FL] were more likely to consume blue crabs than were blue catfish smaller than 300 mm
- Blue catfish greater than 501 mm FL were 7.65 times more likely to consume blue crabs than blue catfish smaller than 300 mm
- The average number of blue crabs consumed per day by an individual blue catfish varied between 0.98 and 1.57 depending on fish size, season, and salinity

- ~2.3 million blue crabs were removed annually through predation by blue catfish in the study area (199.2 km²)
- Predation impact of blue catfish reflected the relative abundance of size classes of blue catfish in the lower James River such that fish between 301 and 500 mm FL removed a greater number of blue crabs because of the relatively greater number of this size fish in the James River population



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