

❖ Measuring and evaluating nitrogen removal services in oyster reefs

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Recent research has highlighted the myriad services that oysters deliver and their value to humans. Unlike other foundation species in temperate estuaries such as sea grass and marsh grass, oysters are also valued as a resource to harvest, creating potential tradeoffs in reef management. Our research has focused on quantifying nitrogen removal from estuaries through denitrification on oyster reefs and has provided insights into the role of oysters in estuarine nitrogen cycling. Oyster mediated nitrogen removal has been determined to be an important and valuable service. Because it accounts for a significant proportion of the total value provided by ecosystem services from oyster reefs, coupled with the growing pressures and resultant impacts that estuaries face globally from urbanization and eutrophication, restoration efforts should incorporate consideration of denitrification augmentation associated with oyster reefs.