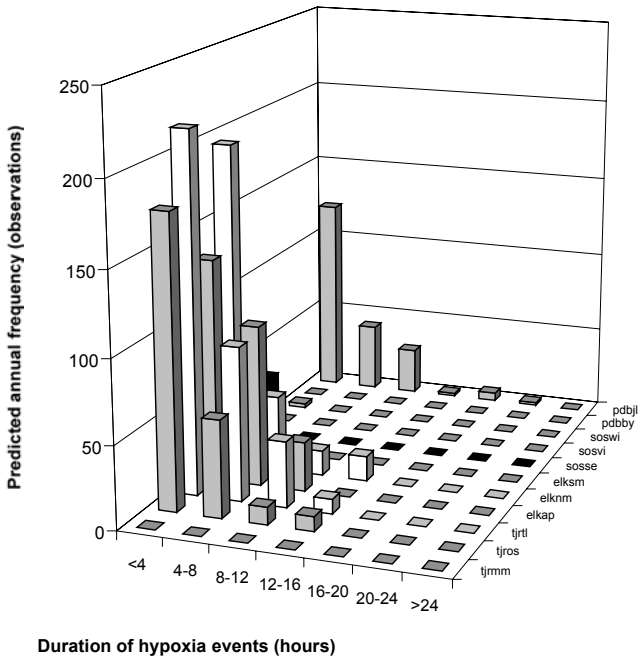

Figure 9. Predicted annual occurrence and duration of hypoxia at West Coast NERRs.

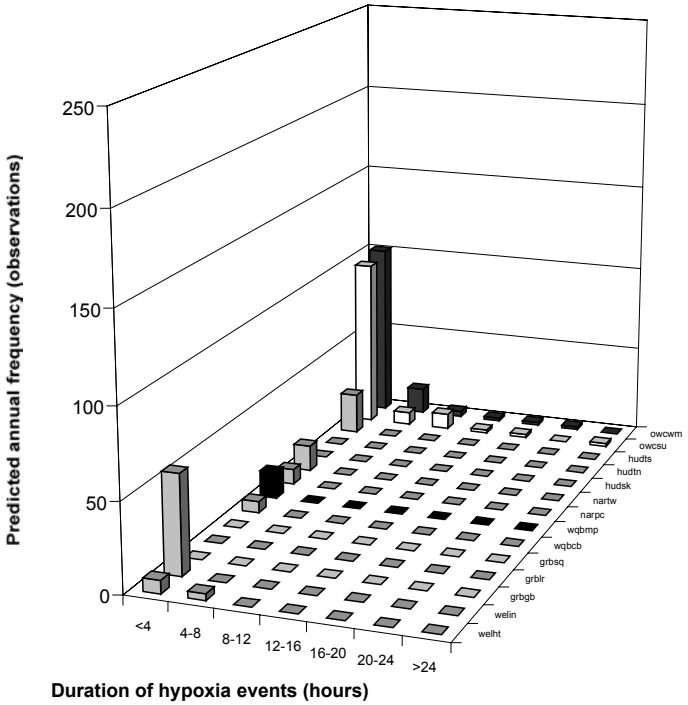

Figure 10. Predicted annual occurrence and duration of hypoxia at Northeast NERRs.

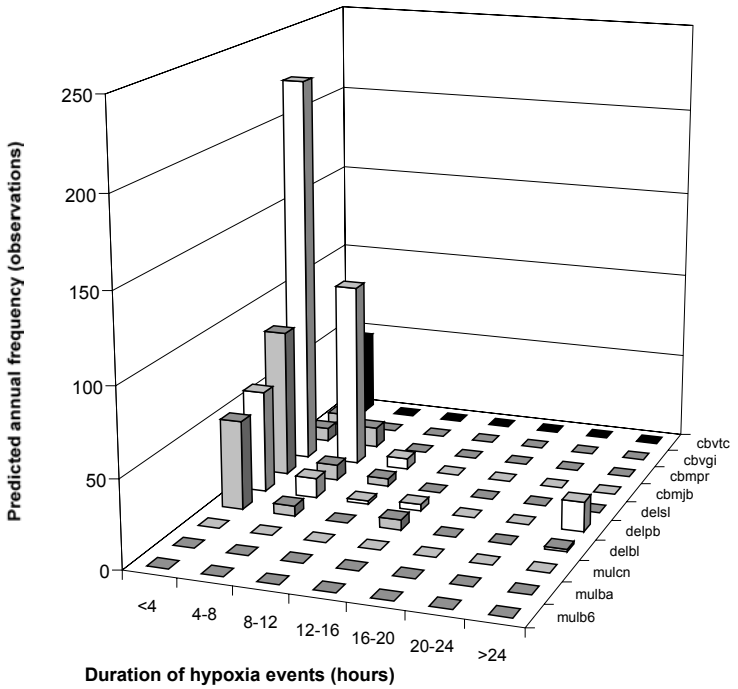

Figure 11. Predicted annual occurrence and duration of hypoxia at Mid-Atlantic NERRs.

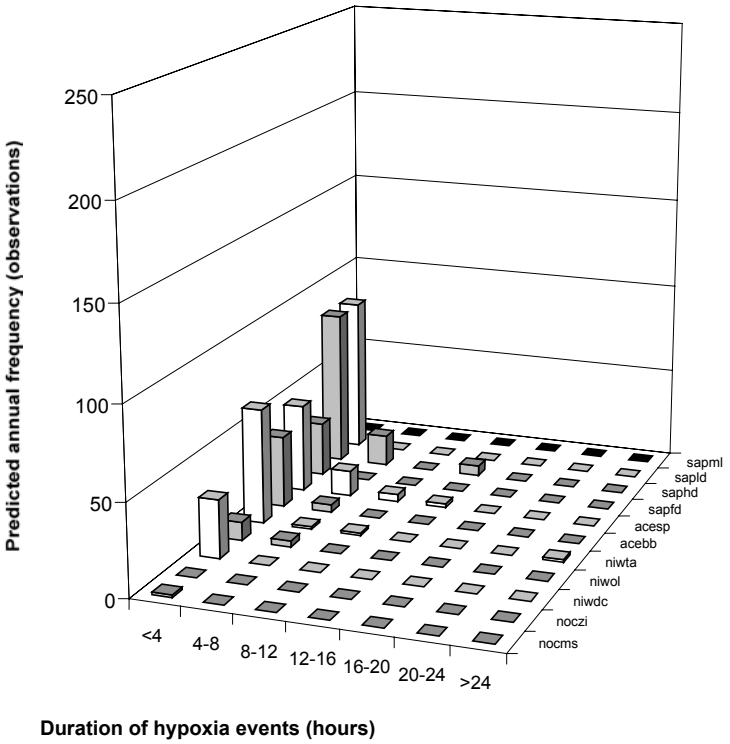

Figure 12. Predicted annual occurrence and duration of hypoxia at Southeast NERRs.

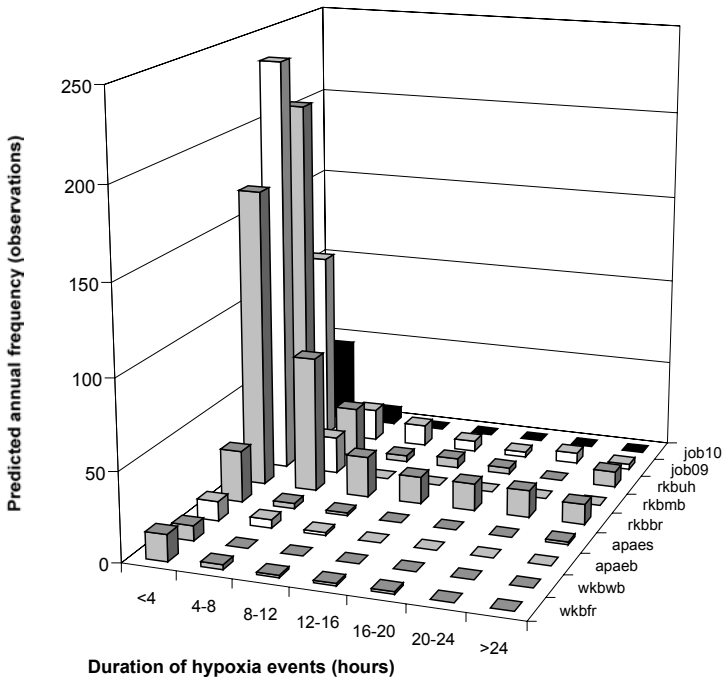

Figure 13. Predicted annual occurrence & duration of hypoxia, Gulf and Caribbean NERRs.

Analysis of Variance

Significant interactions were included in the model, but are not discussed here due to the goal of this synthesis to examine trends among Reserves rather than trends among individual sites. Overall model significance ($p < 0.05$) was used to determine which Reserves to include in the discussion of results; however, presentation and discussion of results is based on least-square mean values.

Hypoxia

Models from the Great Bay, Mullica River, Hudson River, North Carolina, and South Slough NERRs were not interpretable because very few values exceeded 0 or these values occurred in only one site, one season, and one year. Subsequently, these models returned no estimates on least-squares means for at least 2 of the treatments; thus, these Reserves were excluded from hypoxia analyses. Hypoxia models were significant (R^2 = 0.13 to 0.73) for all Reserves except Rookery Bay and Elkhorn Slough (Table 3).

Site differences were observed for two Reserves (Padilla Bay, North Carolina), with Joe Leary Slough having significantly greater percent of time hypoxia than Bayview Channel and Masonboro Island having greater percent of time with hypoxia than Zeke's Island, respectively. Seasonal differences in hypoxia were significant for 11 Reserves. Highest levels of hypoxia were observed in the summer at seven Reserves (Padilla Bay, Waquoit Bay, Old Woman Creek, Chesapeake Bay VA, ACE Basin, Sapelo Island and Apalachicola Bay) and in the spring at four Reserves (Wells, Delaware Bay, Chesapeake Bay MD, and Week's Bay). Lowest levels of hypoxia were observed in winter or fall for most Reserves, except Chesapeake Bay MD, where lowest levels of hypoxia were