

The following supplement accompanies the article

## Cellular biomarker responses to hypoxia in eastern oysters and Atlantic ribbed marsh mussels

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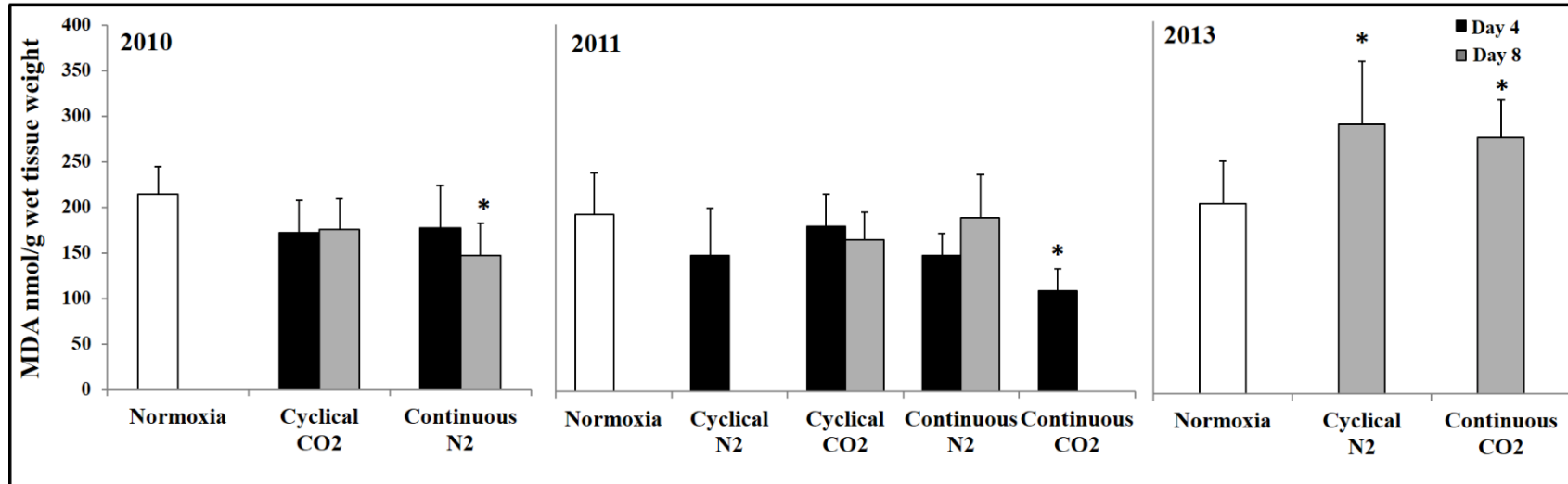


Fig S1. Malondialdehyde (MDA) concentrations in hepatopancreas tissues of oysters. Data are shown for four and eight days of hypoxic exposures performed in 2010, 2011 and 2013. Normoxic control organisms were exposed to normoxia throughout the exposures and are represented by white bars. Asterisks (\*) indicate significant increases from Normoxia (2010  $p < 0.01$ , 2011  $p < 0.01$ , 2013  $p < 0.05$ ). Values are means plus standard deviations,  $n=5-11$ .

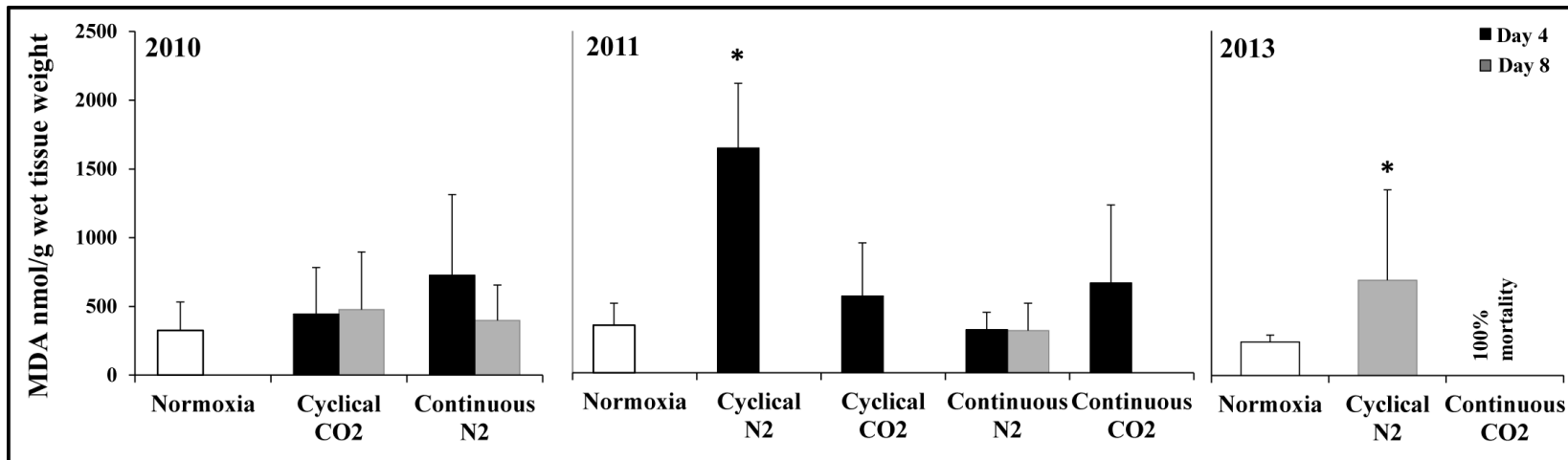


Fig S2. Malondialdehyde (MDA) concentrations in hepatopancreas tissues of mussels. Data shown for four and eight days of hypoxic exposures performed in 2010, 2011 and 2013. Normoxic control organisms were exposed to normoxia throughout the exposures and are represented by white bars. Asterisks (\*) indicate significant increases from Normoxia (2011  $p < 0.01$ , 2013  $p < 0.05$ ). Values are means plus standard deviations,  $n = 5-11$ .

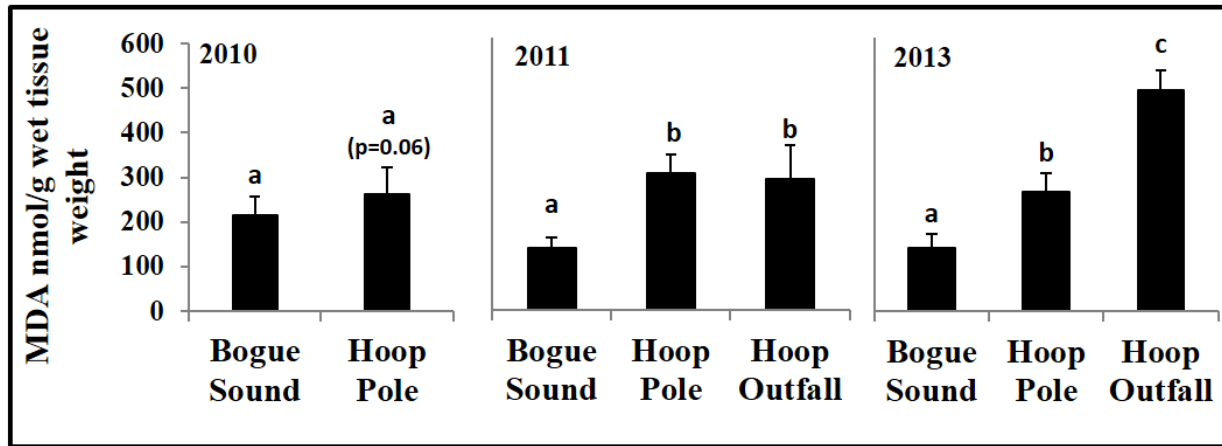


Fig S3. Malondialdehyde (MDA) concentrations in hepatopancreas tissues of oysters. Different letters represent statistical differences between sites ( $p < 0.01$ ). Data were collected during 2010, 2011 and 2013. Values are means plus standard deviations,  $N=5-11$ .

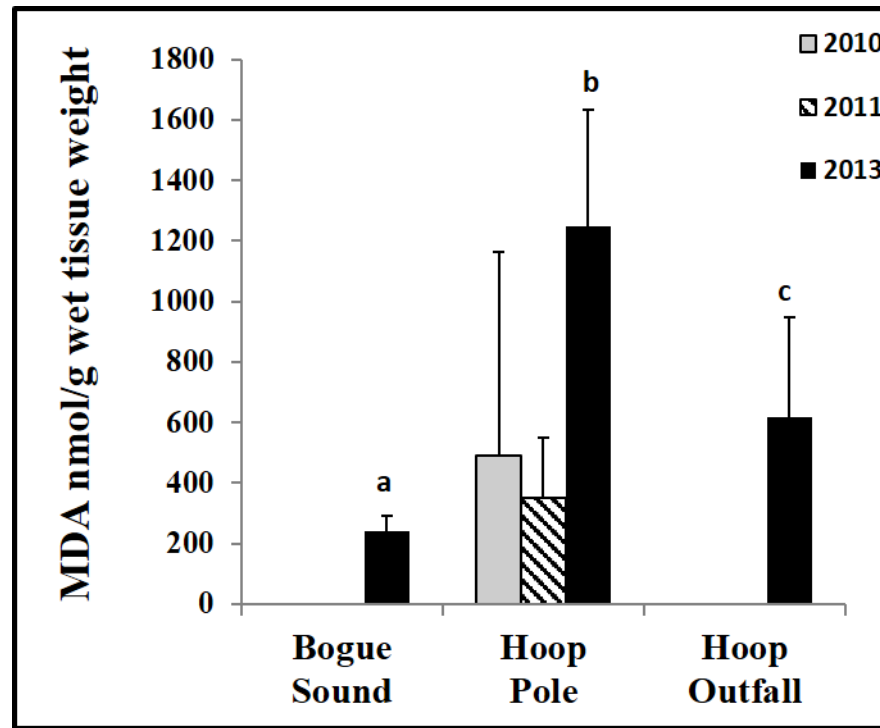


Fig S4. Malondialdehyde (MDA) concentrations in hepatopancreas tissues of mussels. Different letters represent statistical differences between sites ( $p < 0.05$ ); different colors/patterns represent different sampling years. Data were collected during 2010, 2011 and 2013. Values are means plus standard deviations,  $n=3-9$ .

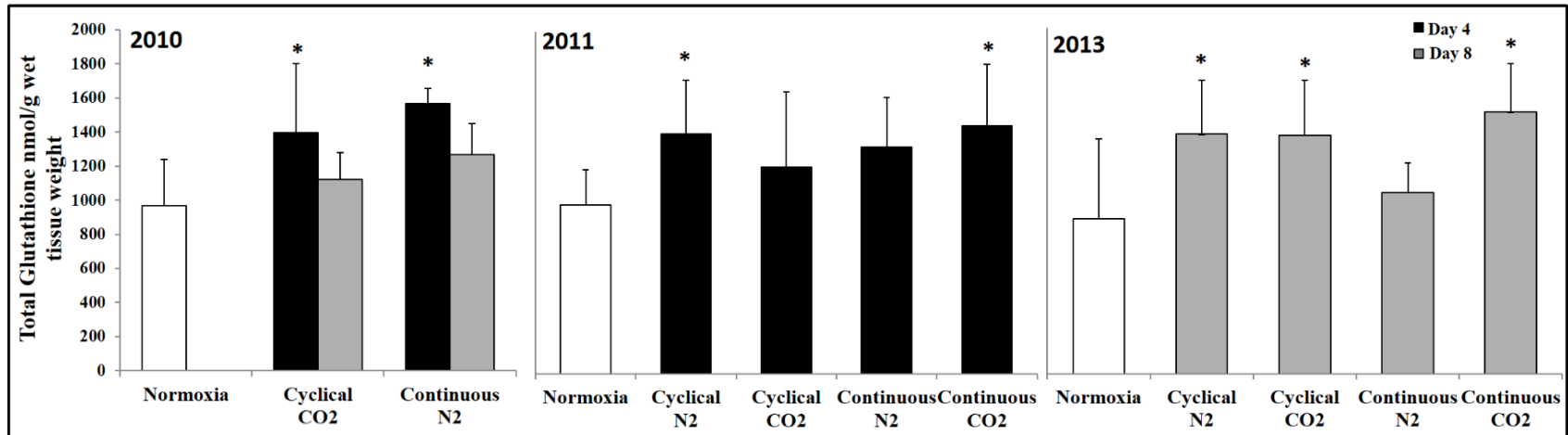


Fig S5. Total glutathione concentrations in hepatopancreas tissues of oysters. Data shown for four and eight days of hypoxic exposures performed in 2010, 2011 and 2013. Normoxic control organisms were exposed to normoxia throughout the exposures and are represented by white bars. Asterisks (\*) indicate significant differences from Normoxia ( $p < 0.05$ ). Values are means plus standard deviations,  $n = 3-12$ .

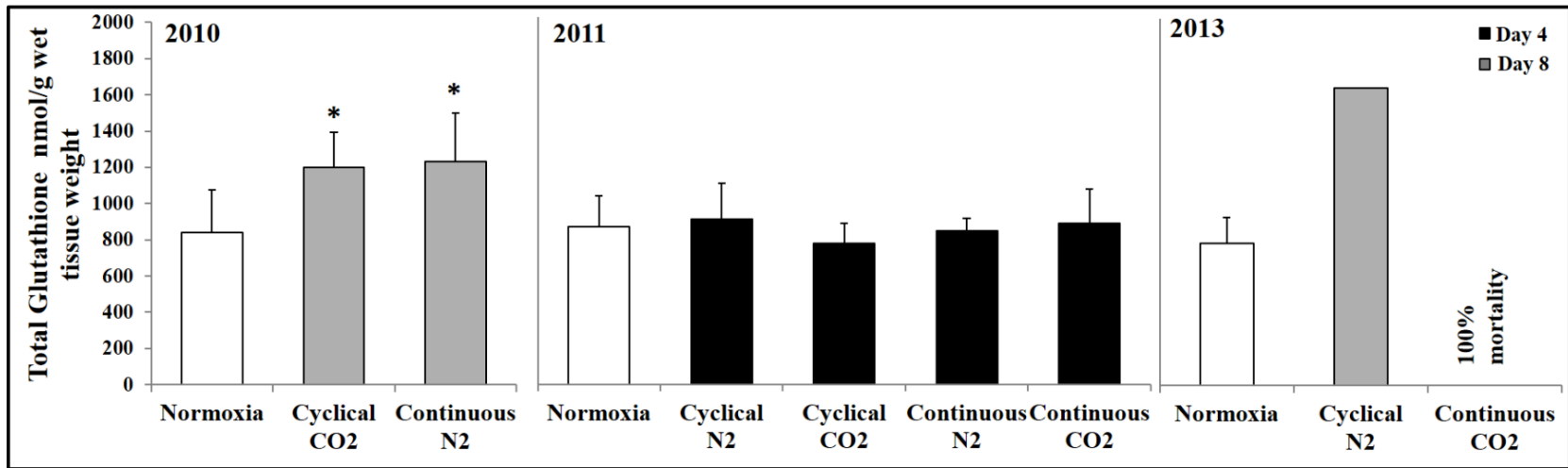


Fig S6. Total glutathione concentrations in hepatopancreas tissues of mussels. Data shown for four and eight days of hypoxic exposures performed in 2010, 2011 and 2013. Normoxic control organisms were exposed to normoxia throughout the exposures and are represented by white bars. Asterisks (\*) indicate significant differences from Normoxia ( $p < 0.05$ ). Values are means plus standard deviations,  $n=6-12$ .

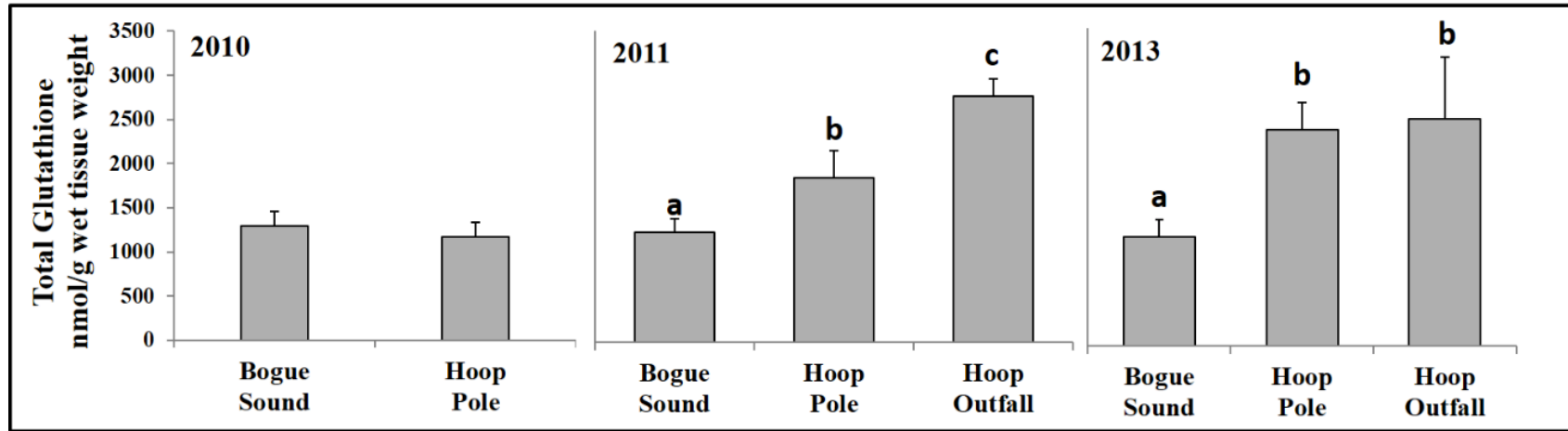


Fig S7. Total glutathione concentrations in hepatopancreas tissues of oysters. Different letters represent significant differences between sites. Data were collected during 2010, 2011 and 2013 (2011  $p < 0.01$ , 2013  $p < 0.05$ ). Values are means plus standard deviations,  $n=5-9$ .

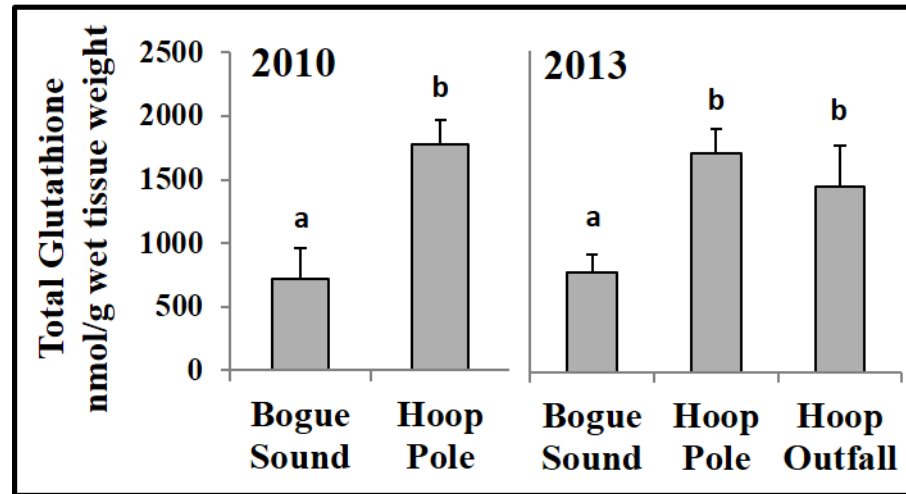


Fig S8. Total glutathione concentrations in hepatopancreas tissues of mussels. Different letters represent significant differences between sites ( $p < 0.01$ ). Data were collected during 2010 and 2013. Values are means plus standard deviations,  $n=6-26$ .