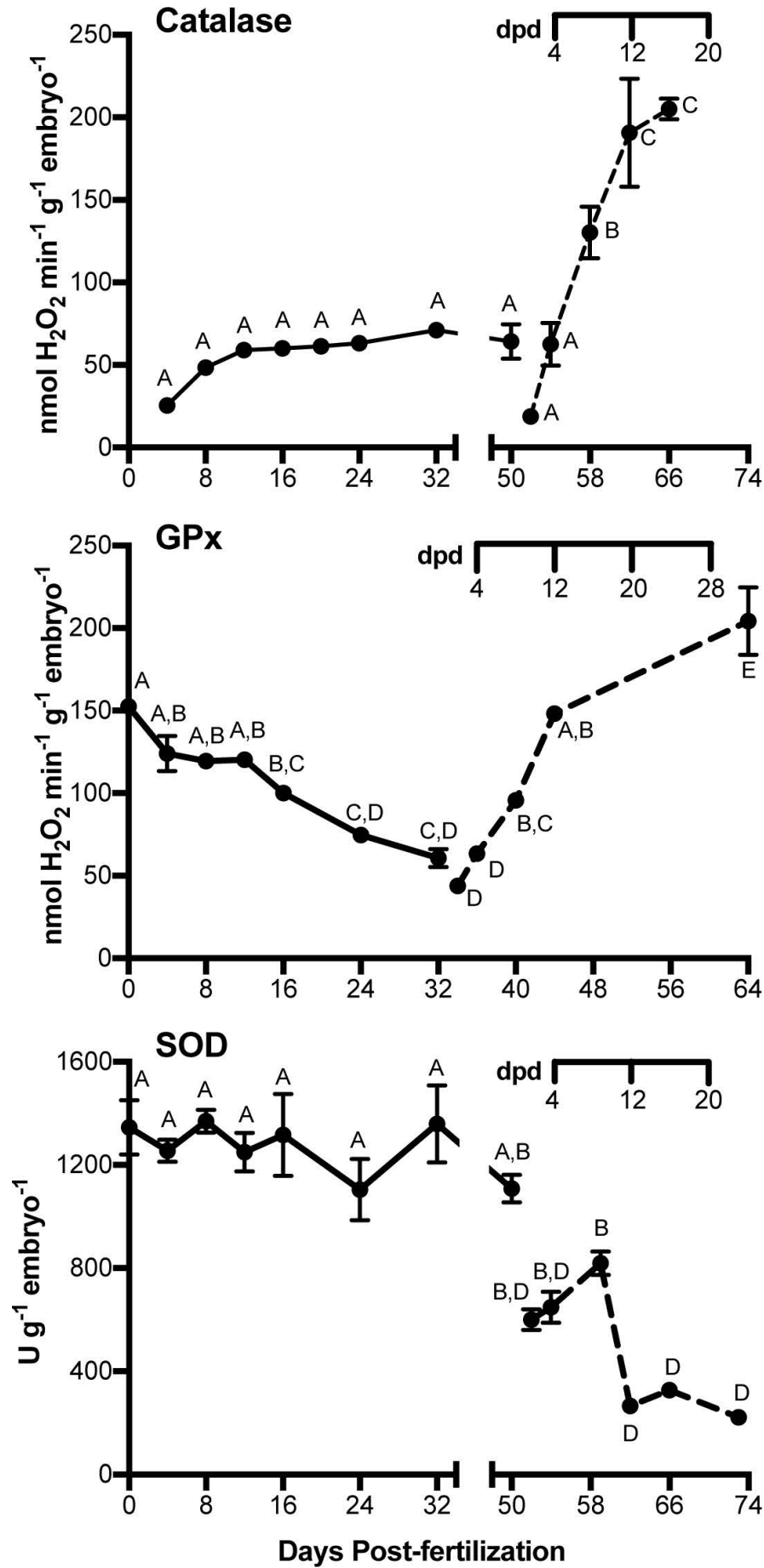
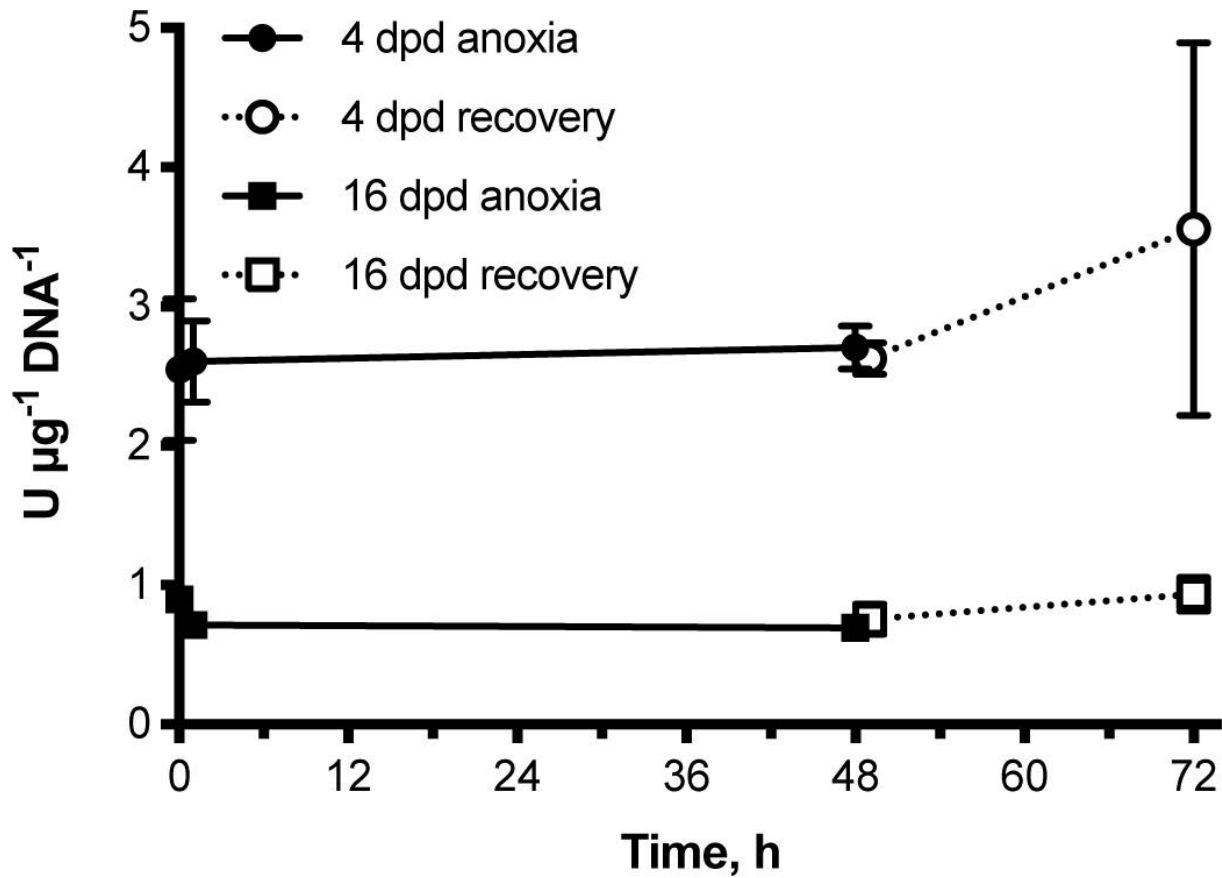


**Figure S1. Proportion of *A. limnaeus* DII embryos that exited diapause following H<sub>2</sub>O<sub>2</sub> exposure.** Embryos were monitored for 11 days following H<sub>2</sub>O<sub>2</sub> exposure for the resumption of embryonic development. Exposed embryos did not exit diapause II at a higher frequency than unexposed controls (one-way ANOVA,  $p = 0.166$ ). Bars are means  $\pm$  sem ( $n=3$ ).



**Figure S2. Antioxidant enzyme capacity expressed per g embryo.** When expressed by per g of embryo, enzyme activities of all three antioxidant enzymes showed unique profiles during *A. limnaeus* development. Catalase activity from whole embryo homogenates remained relatively constant in early development through DII. However, a significant increase occurred during post-diapause II development with activity reaching over 200 nmol H<sub>2</sub>O<sub>2</sub> min<sup>-1</sup> g<sup>-1</sup> at 16 dpd (one-way ANOVA with Tukey's MCT,  $p < 0.05$ ). In contrast, SOD activity remained high and relatively constant through early development and DII. During post-diapause II development, SOD activity dropped, and further declined to its lowest levels below 400 U g<sup>-1</sup>embryo by 12 dpd. GPx activity steadily declined during embryonic development and reaches its lowest activity levels during DII. During post-diapause II development, GPx activity increased steadily and reached its highest activity levels at the end of embryonic development (one-way ANOVA with Tukey's MCT,  $p < 0.05$ ).



**Figure S3. Total SOD activity expressed per  $\mu\text{g}$  of DNA remains stable during anoxia and recovery from anoxia.** Symbols are means  $\pm$  sem ( $n=3$ ). Closed symbols with solid lines represent time in anoxia, while open symbols and dotted lines represent time in aerobic recovery from anoxia.