

**TITLE: SHORT TERM IMPACT OF FIRE AND DROUGHT ON
MACROINVERTEBRATES IN POND CYPRESS DOMES**

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ABSTRACT: Drought and fire are principal driving forces in the ecology of pond cypress domes. This study examines the effects of the prolonged drought of 1998 caused by El Nino and a subsequent wildfire on benthic macroinvertebrates communities in natural and logged pond cypress domes in north central Florida. Three natural and three logged domes were sampled bimonthly for macroinvertebrates during inundated periods, and the logged domes were sampled 25 and 40 days following draw down. A wildfire burned the site on June 17 1998, approximately two months after the wetlands dried out. All domes were sampled for benthic macroinvertebrates 6 and 18 days after the fire. Preliminary data analysis suggest a decrease in abundance and species richness in macroinvertebrates during the drought and directly after the fire. Macroinvertebrate abundance began to increase as the domes became inundated again. Although the fire changed the vegetation and soil substrate, the drought appears to have had a greater short term impact on macroinvertebrates than did the fire.