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***Suppressing invasive bullfrogs with carbon dioxide***

Current management strategies for the control and suppression of invasive amphibians have had little overall effect on their abundance and distribution. This study demonstrates the effects of elevated levels of CO<sub>2</sub> on anuran larvae. Because it is recognized as a successful invader worldwide, we used the American bullfrog (*Lithobates catesbeianus*=*Rana catesbeiana*) as a model organism for testing the effects of elevated CO<sub>2</sub> on pre- and prometamorphic tadpoles. We estimated that the LC50 value for bullfrog tadpoles was 371 mg CO<sub>2</sub>/L. At higher concentrations of CO<sub>2</sub>, 100% mortality was documented. Overall, tadpoles that succumbed to experimental conditions had a lower body condition index than those that survived. We documented changes in blood chemistry during prolonged exposure to elevated CO<sub>2</sub>. Specifically, blood pH decreased by more than 0.5 pH unit after 9 h of exposure and both blood pCO<sub>2</sub> and blood glucose increased. The findings of this study suggest that CO<sub>2</sub> treatment may be a useful tool for controlling invasive amphibian larvae. Moreover, we documented concentrations of CO<sub>2</sub> that must be achieved in order to use this technique as a strategy for bullfrog control.