

## Swimming in Ash

3rd Place

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Image location: The image was taken in a laboratory at The University of Queensland, Brisbane, Australia, while I was conducting thesis research as a visiting research student.



### Image Description

Wildfires are drastically increasing in prevalence and severity worldwide, exacerbated by warmer and drier climates. Fires are considered to be a terrestrial issue, with landscapes burning, habitat destruction, loss of life, and poor air quality. While none of these effects should be dismissed, it is imperative to recognize that aquatic life is also at risk; water increases in temperature, and ash is deposited into the water, leaching contaminants (like metals and organic combustion products). My research investigates the effect of ash on the respiration and metabolism of aquatic invertebrates, using crustaceans as a model organism, to better understand how they may survive and cope with wildfires, aiding in global species conservation. This image from my research trip to Australia features a freshwater crayfish (species: *Cherax destructor*) swimming in Australian bushfire ash, with flecks of ash littering its back and it reaching to escape the contaminated water. The orange enhancements represent a reflection of the flame colour underwater. Water does not burn, but even aquatic organisms cannot escape the impact of fire.

### Image Creation

This photograph was taken with an iPhone SE and edited with Adobe Lightroom and Photoshop (version 24.5).