

**2006 Hawaii Conservation Conference**  
**Best Student Poster, Runner-up**  
**Abstract**

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**The Endangered Kaua'i Cave Amphipod Returns to Restored Habitat.** Efforts to restore cave habitat of the endangered species *Adelecosa anops* (No-Eyed, Big-Eyed Hunting Spider) and *Spelaeorchestia koloana* (Kaua'i Cave Amphipod) have begun on private property in the southern portion of Kauai. Methods include building temporary air blocks in unoccupied cave segments to improve the retention of moisture, removing alien vegetation from the surface and planting appropriate native species. After air blocks were installed, there was a significant reduction in the potential evaporation rate in the caves. The ultimate indication that the restored caves are becoming suitable habitat for the endangered species is that an individual of *S. koloana* has been found in one of the modified caves. This validates the hypothesis that the cave-adapted invertebrates live not only in caves, but also in the much smaller voids in the lava substrate between caves. The experimental restoration of native flora over the cave segments as well as continued experiments on the cave environment are designed to determine appropriate management protocols for developing a long-term management plan for the caves. Eventually, a 34 acre preserve will be restored and managed to protect the two endangered cave species.