

*[Abstract for presentation at the Nov. 2 Rock Art 2002 symposium, San Diego:]*

*[Title:]*

More "Unexpected" Echoes: the Puako Rock Art Site on Hawaii

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*[Abstract:]*

Puako -- the most densely decorated and oldest rock art site on Hawaii -- was chosen as another challenging test case for the theory of rock art acoustics. The morphology of Puako was considered "unlikely" to have acoustic properties since it is situated on "flat lava flow ... with nothing to bounce an echo off of". Acoustic testing, documented by audio recording and analysis, actually revealed a quite intense echo (Puako is not perfectly flat, but gently V-shaped in cross-section and has large tilted pieces of lava rock on one edge). These results are consistent with the possibility that motives for this rock art tradition included acoustics. Echoes were personified in legends of many cultures, including the South Pacific. Numerous rock art sites around the world have been found to be situated in acoustically rich environments (see <http://www.geocities.com/CapeCanaveral/9461>). Interventions that affect the acoustics of rock art sites should be avoided.