

Barbara J. Bentz, Ph.D., Research Entomologist with the USDA Forest Service, Rocky Mountain Research Station

Bio:

Barbara J. Bentz is a Research Entomologist with the USDA Forest Service, Rocky Mountain Research Station, and has been at the Logan, Utah Laboratory since 1992. Spanning the past 35 years, Barbara's research has focused on native bark beetles in western forest ecosystems. Her recent studies have been in high elevation forests comprised of multiple species including whitebark, limber, southwestern white, foxtail, Great Basin bristlecone, and Rocky Mountain bristlecone pines, and were focused on understanding thermal drivers of bark beetle population dynamics and tree defenses. Barbara received a BS in Forestry and Biology from Stephen F. Austin State University in Nacogdoches, TX, a MS in Forest Resources from the University of Idaho, Moscow, ID, and a PhD in Entomology from Virginia Tech, Blacksburg, VA.

Title:

Defense characteristics among high elevation *Pinus* and vulnerability to native bark beetles

Story:

Changing climate has increased awareness of native insects, particularly the mountain pine beetle, in high elevation pine ecosystems. True to its name, this bark beetle has adapted to mountain climates and recent warming at high elevations has facilitated population success and associated pine mortality in some forests. Is the observed mortality of long-lived trees a novel outcome of recent climate trends? Understanding the role of native insects in mortality of iconic high elevation pine forests is vital for projecting the future of these foundational ecosystems.