Documenting Basline Winter Activity Levels Of Bats In Montana With Acoustic Monitoring

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We deployed acoustic monitoring stations at 3 locations (Lewis & Clark Caverns, Toeckes Cave, and McDonald Mine) in Montana from January through mid-May, 2011. The goal of this monitoring effort was to document winter base-line activity data to potentially use acoustic monitoring as a surveillance tool for White-nose syndrome (WNS). Each monitoring station was equipped with an Anabat detector, temperature data logger, and solar panel array to allow long-term, remote monitoring. The monitoring stations recorded bat activity (bat passes) and temperature outside of hibernacula. External monitoring minimized potential human disturbance to the hibernating bats or any potential spread of *Geomyces destructans*, the fungus responsible for WNS. Studies conducted by Bat Conservation International at White-nose syndrome affected hibernacula in the eastern U.S., have shown dramatic increases in activity levels at WNS vs. non-infected WNS sites during the hibernation period. If this pattern also holds true in the western U.S., documenting pre-WNS baseline activity levels may allow for acoustic monitoring as a surveillance tool for potential spread of WNS.