Selecting wilderness areas to conserve Utah's biological diversity

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Abstract
Congress is currently evaluating the wilderness status of Bureau of Land Management (BLM) public lands in Utah. Wilderness areas play many important roles, and one critical role is the conservation of biological diversity. We propose that objectives for conserving biodiversity on BLM lands in Utah be to (1) ensure the long-term population viability of native animal and plant species, (2) maintain the critical ecological and evolutionary processes upon which these species depend, and (3) preserve the full range of communities, successional stages, and environmental gradients. To achieve these objectives, wilderness areas should be selected so as to protect large, contiguous areas, augment existing protected areas, buffer wilderness areas with multiple-use public lands, interconnect existing protected areas with dispersal and movement corridors, conserve entire watersheds and elevational gradients, protect native communities from invasions of exotic species, protect sites of maximum species diversity, protect sites with rare endemic species, and protect habitats of threatened and endangered species. We use a few comparatively well-studied taxa as examples to highlight the importance of particular BLM lands.

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