

Globally, aquatic ecosystems are under threat due to a host of factors, including anthropogenic climate change. This reality is particularly true for mountain systems where the conservation implications of rapid change are exacerbated by limited knowledge of natural history and local biodiversity. This issue is further compounded by management needs; at both the state and federal levels there is a growing need to incorporate aquatic biodiversity, and specifically aquatic insects, into policy. At the federal level, this need refers to the Endangered Species Act which two mountain stoneflies were listed under in 2019. For Utah, this refers to the decadal revision of the state's Wildlife Action Plan for 2025 and the inclusion of aquatic insects as Species of Greatest Conservation are needed in the state for the first time. Here, we propose a co-developed project between Utah State University and the Manti-La Sal National Forest to clarify the distribution, ecology, and genetic relatedness of a rare, endemic stonefly, *Gaufinia cristata*, that is only known from high-elevation streams in the Abajo and La Sal Mountains in southeastern Utah. We will perform contemporary surveys of sites where *G. cristata* has been previously collected as well as expected habitat. We will then use genetic barcoding to clarify the species' status and relatedness across populations. We will also assess habitat conditions where *G. cristata* is present to better understand its needs and future monitoring plans. Finally, we will assess the degree to which *G. cristata* populations are linked to rock glaciers-large masses of subterranean ice that are common in Utah-as these features may offer key environmental stability for headwater streams under climate change. Our results will be used by the Manti-La Sal National Forest to assess future management needs for *G. cristata* on the forest. They will also be used as part of the 2025 Utah Wildlife Action Plan revision to determine if *G. cristata* should be formally recognized as a Species of Greatest Conservation Need in the state. Collectively, our efforts will improve knowledge of the species, lay the groundwork for future monitoring efforts, and ideally, ensure that *G. cristata* is effectively monitored and managed so federal protection is never warranted.