

CITIZEN MONITORING OF SPRINGS VALUE TO WILDLIFE IN MADREAN LANDSCAPE LINKAGES AND OTHER FOCAL AREAS

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Sky Island Alliance (SIA), a bi-national Madrean Archipelago conservation organization has focused its conservation work on springs since 2012. Springs are critical water and habitat resource for regional biodiversity and wide-ranging Madrean wildlife. In order to better understand wildlife use of spring water sources and habitat within the Madrean Archipelago and to guide conservation management of these resources by our public land management agencies SIA developed a citizen-science monitoring program beginning in 2014 (SIA's Adopt-A-Spring Program, volunteer-led spring-specific repeat surveys). Beginning in 2016 we evolved our program to integrate citizen-science monitoring of springs and their wildlife values.

With a limited volunteer corps capacity and a desire to fulfill an unmet knowledge need, we have recently focused both our spring and wildlife monitoring on springs within threatened landscape-level wildlife linkages of the region, beginning on the U.S. side of the border, as well as a suite of springs that may show the range of climate-change impacts over time. As a basis for focusing our efforts on linkages, we have used existing regional linkage models. Major threats to linkages include recent proposals for increased border infrastructure and development and human-use near still viable highway crossings. This presentation will outline our new integrated citizen-science projects, based on springs and wildlife linkages. We provide results of wildlife use through cameras and biodiversity value at monitored spring sites. We also provide a set of ecosystem condition indicators that consulted managers and researchers believe will be best able to track trends in spring's site conditions of these exceptional landscape resources.