THE AVIAN KNOWLEDGE ALLIANCE: A NETWORK OF NON-GOVERNMENTAL ORGANIZATIONS WORKING TOGETHER ON BIRD CONSERVATION

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INTRODUCTION

The Avian Knowledge Alliance (AKA) was established in 2006 by a group of non-governmental organizations (NGOs) to take advantage of their unique capacities and roles within the bird conservation arena (Geupel and Nur 1993). The AKA is dedicated to collecting, caretaking, and communicating knowledge gained from the study of birds. At the core of AKA is the Avian Knowledge Network (AKN), a sophisticated data management and sharing system (Iliff et al. 2009) designed so that "no data are left behind." The AKA promotes and helps design coordinated monitoring projects, facilitates data contribution to the AKN, solicits feedback from managers and other stakeholders on what information and data visualization tools are most urgently needed, and helps ensure that important conservation information reaches intended audiences. While international in scope, currently this new alliance has members throughout the United States and Canada.

The essential elements of AKA's conceptual model include identifying the needs of stakeholders; collaborating on study designs to answer questions specific to those needs; collecting and managing data; followed by data synthesis, interpretation, and distribution when information is provided to stakeholders and other audiences. The model is iterative but incorporates changing stakeholder needs and questions, and shifts as data analyses suggest new directions of study; thus, the model conforms to a circular, adaptive management framework. This feedback loop allows organizations involved in the AKA to plug into this full circle approach at any or all phases, allowing members to work together to improve effectiveness in all stages of the circle (Fig 1).

The AKA takes full advantage of the goals behind the development of the AKN, which are to educate the public about the dynamics of bird populations, provide interactive decision-making tools for land managers, and advance new exploratory analysis techniques to study bird populations. With this technical infrastructure at its heart, the AKA coordinates in the design and maintenance of monitoring projects, and works with regional audiences to solicit feedback integral to the creation of pertinent Decision Support Tools, and principally, assures that all available data are put to work in the service of bird conservation.

PURPOSE AND GOALS

The AKA evolved out of a Partners in Flight Western Working Group meeting in Missoula, Montana in March, 2006. At this meeting, NGOs convened to discuss the value of working together to take advantage of their mutual objectives to help meet the monitoring needs of conservation decision makers for purposes of bird conservation. The attendees determined that establishing a partnership among NGOs would provide a synergy that would increase the effectiveness of data acquisition, synthesis, and dissemination. The AKA was then established to take advantage of the unique capacities of NGOs including their ability to, 1) maintain effective collaborations and partnerships across geographic, political, and other boundaries, 2) possess avian expertise and a focus on
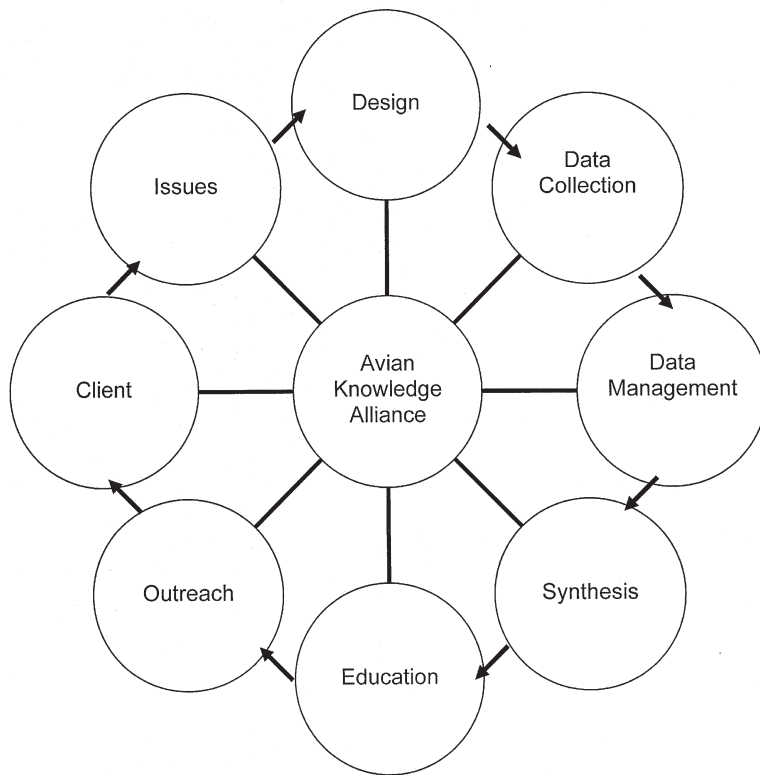
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FIGURE 1. A conceptual model of the Avian Knowledge Alliance.

accomplishing effective bird conservation, 3) be cost-effective, and 4) provide analyses that yield science-based decisions.

The AKA seeks to create and promote coordination among bird monitoring programs, which exploit the collective knowledge and expertise within NGOs about study design, data collection, and data management. The AKA provides an opportunity for organizations to promote and use monitoring data that were collected by established programs throughout North America and compiled in a centralized infrastructure, the AKN. The ability to compile and compare monitoring information from multiple owners at multiple scales will yield powerful results that can be used to look at range-wide trends and patterns in distribution, abundance, and demography for most avian species.

The intent of the AKA is to use the science-based bird monitoring and research data within the AKN to inform policy and decision-making. A critical step to the delivery of scientific information is to involve education and outreach experts and increase the synergy between those experts and scientists. These collaborations will strengthen and focus the conservation messages emanating from the data, and thus enable broader influence in conservation policy through outreach to appropriate partner organizations, agencies, and other audiences.

ACTIONS

The AKA is actively promoting and designing coordinated monitoring projects, facilitating data contribution to the AKN, soliciting feedback from managers and other stakeholders on what information and data visualization tools are most urgently needed, and helping to ensure that important conservation information reaches intended audiences. Members of the AKA have found that they can more efficiently and effectively meet their regional goals by working together. In addition, through increased knowledge-sharing among members, the AKA will produce and disseminate avian conservation products such as Decision Support Tools at expanded spatial scales.

The AKA is furthering its goals by the creation of regional and thematic nodes within the

AKN. These nodes enable host organizations to best serve their constituents, avoiding the need for costly information technology infrastructure at smaller, partner organizations (which contribute data to the AKN via appropriate nodes), and focusing development of regional or thematically-specific data resources to best help constituents use their data.

Well-established examples include the California Avian Data Center of PRBO Conservation Science, the Klamath Bird Observatory/Redwood Sciences Laboratory Avian Data Center, Rocky Mountain Bird Observatory Avian Data Center, and Bird Studies Canada. Each AKN node is committed to 1) archiving, describing and managing data collected through avian research and monitoring efforts, 2) facilitating the contribution of data to the AKN, 3) maintaining auxiliary data (i.e., vegetation data) that compliment data accepted by the AKN, 4) making available raw and summarized data, 5) providing information and data visualization tools that are most urgently needed in each region or theme, and 6) ensuring that important science-based information reaches intended audiences through established partnerships. Regional nodes are effective because they take advantage of the unique capacity of local NGOs to develop relationships within a region with diverse audiences and to assure that regionally-distinct scientific outputs are meeting the needs of intended audiences.

Many AKA members are producing Decision Support Tools (DSTs) designed to help decision-makers make more informed, credible, and effective decisions. DSTs are only as valuable as they are suitable to the clients needs, both in content and delivery. The AKA is working on developing a matrix that catalogs and describes DSTs to provide guidance in the selection of tools that match and clarify objectives, expand the use and appreciation of sound science, facilitate better decisions, provide for better tracking and evaluation, and mediate the adaptive improvement of bird conservation strategies (Alexander et al. 2009). The AKA is developing interactive web-based DSTs and is working to transfer these tools among regional nodes. This exercise demonstrates the utility of the AKA in increasing efficiencies across the network by sharing both knowledge and products that promote bird conservation.

CONCLUSION

The AKA is working through the many facets of bird conservation and is increasing the efficiency and effectiveness of member organizations through the strengths of participating NGOs. If your organization aligns with the AKA, please consider becoming a member. You can learn more about the AKA on the bulletin board (http://digir.prbo.org/aka/) or by contacting Jaime Stephens, jlh@klamathbird.org.

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