Integrating Avian Datasets for Management, Modeling, and Visualization

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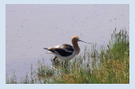
INTRODUCTION

- The 2003 purchase of more than 15,000 acres of salt ponds in San Francisco Bay created North America's second largest habitat restoration project.
- Utilizing an adaptive management framework, the South Bay Salt Pond Restoration Project (SBSPRP) requires access to historical and current data to assess past actions and inform future management.

Avian Data


Photo by J. Erbes



- PRBO Conservation Science, U.S. Geological Survey, and San Francisco Bay Bird Observatory have initiated a collaborative project to make all available avian data accessible to SBSPRP managers.
- These data represent millions of dollars in investments, and will provide the SBSPRP with accurate baseline estimates of bird numbers and a measure of progress for current activities.
- The system allows new data to be immediately available for managers and restoration assessment.

Data Entry

Data Import

Integrated South Bay Avian Database (ISBA-DB)

The Integrated South Bay Avian Database (ISBA-DB) utilizes the industry-proven infrastructure of the California Avian Data Center (http://www.prbo.org/cadc) to organize and facilitate the synthesis and visualization of avian data in the South Bay.

Data Integration

Supplemental Data

Water quality


Photo from USGS

Habitat surveys

Restoration Progress


Photo from USGS

Coordination with other South Bay Salt Pond Project Databases

- ISBA-DB infrastructure facilitates linkages and communication across other external databases.
- The ISBA-DB team will ensure that appropriate methods are available to allow cross database communication, and are optimistic that these synergies will facilitate even larger more integrative decision support systems that will improve SBSPRP restoration management.

Data Export

Modeling & Analyses

Carrying Capacity

Nest Survival

Modeling and analyses efforts will help set restoration targets and assist the SBSPRP team to make informed management decisions.

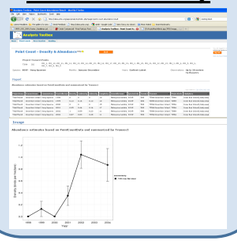
Assess & Inform Management Actions


Photo by Rob Holt

Web-based

On demand

Data Summary



- The ISBA-DB project team will be working directly with the SBSPRP project leads to ensure that the metrics and data summarizations are those needed for project assessment and planning.
- Training and support will ensure the tools are immediately used.

Can you help?

- We are actively engaging partners to contribute avian data to ISBA-DB and California Avian Data Center (CADC) as well as opportunities to integrate and link external and support data that will help SBSPRP efforts to restore San Francisco Bay.
- As a data contributor you will be provided access to all core CADC applications which may include data entry, reporting and summary tools, depending on the data type and protocols used.
- Contact Thomas Fonseca (tfonseca@prbo.org) or Julian Wood (jwood@prbo.org) to discuss what options are available to you.

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USGS
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BIRD OBSERVATORY

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