



Newsletter of the  
**LANDBIRD MONITORING NETWORK  
OF THE AMERICAS**

<http://www.klamathbird.org/lamna/>

February 2012

## Western Hummingbird Partnership Data Request

The Western Hummingbird Partnership (<http://www.westernhummingbird.org>) is a developing network of partners that work together to maintain thriving hummingbird populations and their habitats for present and future generations. Our current efforts are gathering hummingbird data from Mexico and Canada. The Partnership is building an effective and sustainable hummingbird conservation program through science-based monitoring, research, habitat restoration/enhancement, and education/outreach efforts. The Landbird Monitoring Network of the Americas (LaMNA; <http://www.klamathbird.org/lamna/>), PRBO Conservation Science, and the Avian Knowledge Network are working together to compile existing hummingbird data and make them available to the Partnership. Our intent is to advance knowledge of the distribution, trends, and population demographics of hummingbirds. In 2012, our efforts will focus on curating hummingbird data from Mexico and Canada. Please consider sharing your hummingbird monitoring data with the Partnership by contacting either John Alexander ([jda@KlamathBird.org](mailto:jda@KlamathBird.org)) or Josée Rousseau ([jsr@KlamathBird.org](mailto:jsr@KlamathBird.org)), Klamath Bird Observatory. With your help, historical datasets combined with current datasets can be used to guide conservation and maintain thriving hummingbird populations and their habitats for present and future generations.

There are many benefits to contributing data to LaMNA, including:

- Preserve your data from loss,
- Have metadata (data about data) available to a wide audience,
- Provide tools for data exploration and analysis,
- Increase communication between researchers, biologists and educators, and
- Facilitate cooperative research projects spanning regional boundaries.

LaMNA promotes the use of avian monitoring data, while honoring our partners' intellectual ownership rights. Data contributors may choose from a series of sharing levels from data not be exposed to public, limited aspects of data being made available, to complete datasets be made available for download on internet. All data are safely secured in encrypted servers and data warehouses.



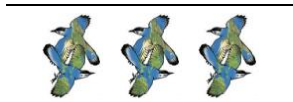
*The Anna's Hummingbird and other hummingbird species observed or captured by Humboldt Bay and Klamath Bird Observatories, and USFS Redwood Sciences Laboratory) during their research in Northern California and southern Oregon. Graphic by Gary Bloomfield.*

LaMNA has worked with partners to create tools that allow datasets from different sources to be compiled into one format, allowing for easier spatial and temporal analysis. Here is a summary of the data federation process:

- Large electronic source data sets that are not presently available to any entity are identified and acquired from various sources.
- Data sent to LaMNA in paper or electronic format are archived.
- Data are converted into Microsoft Office Access, and then edited (if required).

- Observation data are associated with their location data, effort, organization, with owners sharing level and protocol.
- Data are converted and compiled to a uniform format (federated).
- Data and tools for visualizations (maps and graphs) are made available through the web to partners for their own analysis (<http://data.prbo.org/cadc2/>).

-John D. Alexander, Klamath Bird Observatory  
jda@KlamathBird.org



## Collaborative Data Compilation for the North Pacific Landscape Conservation Cooperative

PRBO Conservation Science, America Bird Conservancy, and Klamath Bird Observatory are working together to aggregate bird datasets from throughout northwestern California and western Oregon and Washington. These data will be used to model current distribution and abundance and then derive future distribution and abundance models based on climate change scenarios that predict low, medium, and high temperature increases for the Pacific Northwest. This project, funded by the North Pacific Landscape Conservation Cooperative, will provide interactive tools for conservation planning. The products will allow regional managers to identify the locations of highest current and future conservation priorities for birds and the ecosystems upon which they rely.

Now in the initial stages of this project, we are compiling various datasets using tools that were developed through the LaMNA partnership. These tools document metadata, and use detailed descriptions of each dataset's fields and field domains to relate the datasets to each other. The LaMNA tools then use this information to federate the data into a common Avian Knowledge Network scheme called NodeDB. We have received bird data that cover the geographic scope of this project, representing oak, conifer, shrubland, grassland, and other habitats. In addition to the approximate 185,000 bird field records collected by Klamath Bird Observatory and USFS Redwood Sciences Laboratory, data from other sources from throughout the region have been contributed. To date we have received an additional 135,000 bird observation records from 13 cooperators. Cooperators include Army Corps of Engineers, City of Portland, Portland Audubon, The Nature Conservancy, U.S. Forest Service, U.S. Geological Survey, U.S. Fish & Wildlife Service, National Park Service, and individual researchers.

- Karen Hussey, Klamath Bird Observatory  
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- John Alexander, Klamath Bird Observatory  
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## Monitoring Recommendations for Northeastern National Wildlife Refuges

For three consecutive fall seasons, the U.S. Fish and Wildlife Service's National Wildlife Refuges in the northeastern U.S. gathered bird data using a wide range of monitoring techniques and effort under the guidance of USFS Redwood Sciences Laboratory and the Klamath Bird Observatory (KBO) with protocols that they designed in conjunction with the Refuges. The monitoring protocols ranged from minimum staff survey effort, such as area searches, to more intensive efforts, such as constant-effort mist-netting and relevé vegetation. The Refuges were interested in getting recommendations as to which type of survey and effort best guided their habitat management objectives for fall-migrating landbirds. The Klamath and Humboldt Bay Bird Observatories in partnership with PSW-Arcata compiled and analyzed the data, producing a detailed report that discusses the effectiveness of the protocols for targeting management objectives, and outlines recommendations and protocols for future monitoring. Data from these Refuges which include banding, census, vegetation, and fruit phenology are now archived with LaMNA.

- Josée Rousseau, Klamath Bird Observatory  
jsr@klamathbird.org



Blue Jay (*Cyanocitta cristata*). John Heinz National Wildlife Refuge. Public domain, courtesy of <http://digitalmedia.fws.gov>



## Millions of Records Now Archived: Data Archiving and Processing Progress Report On-line

### Summary of Data Archived and Processed by the Landbird Monitoring Network of the Americas (LaMNA), January 2012

Number of records of data received at LaMNA by organization and protocol type with summary of data processing.

"Country" and "State/Province" both reflect the location where the majority of the data received were collected.

"Census and Banding Data Processing" is summarized by number of records currently going through processing (In Progress) and those that have completed processing and are available on the internet (Online).

Country	State/Province	Organization	Activity Budget	Banding	Census*	Vegetation	Total records of all protocols	Census and Banding Data Processing:	
								In Progress	Online
Brasil		Louisiana State University and LSU AgCenter; Biological Dynamics of Forest Fragments Project / Projeto Dinâmica Biológica de Fragmentos Florestais		60,206	0		60,206	0	
Colombia, Belize		SELVA: Investigación para la Conservación en el Neotrópico		27,098	7,034		34,132	3,465	
Costa Rica		Alajuela			1,750		1,750	0	
Costa Rica		Caribbean Conservation Corporation, U.S. Forest Service, Costa Rica Bird Observatory, and others		45,856	53,783	6	99,645	7,394	38,462
Costa Rica		Center for Conservation Biology Stanford University		61,397	0		61,397	0	
Costa Rica		Maglianesi, Maria Alejandra		48	0		48	0	
Costa Rica		Save Our Songbirds, Ontario, Canada		10,245	0		10,245	0	
Costa Rica		Stiles, Gary		34,000	0		34,000	0	
		Universidad Nacional de Colombia							

USA	Virginia	U.S. Fish and Wildlife Service Rappahannock River Valley National Wildlife Refuge	11		1,633		1,644		0
USA	West Virginia	U.S. Fish and Wildlife Service Canaan Valley National Wildlife Refuge	211		444		655		0
USA	(many)	Institute for Bird Populations		297,160	7,317		304,477		0
<b>TOTAL RECORDS:</b>							<b>3,896,836</b>		<b>1,479,059</b>

\* Census data includes area search, point count, migration count, and species checklist data updated 1/27/2012

*Partial view of the data summary document (top and bottom of table) showing processing progress of data archived with LaMNA. The table is organized based the location where the data was taken (country and state), then by the organization. [The document is available for download on the LaMNA web site.](#)*

Every year valuable data are lost from a variety of causes such as natural catastrophes, neglect, and changing electronic media. These historical data are highly valuable to chart the changes in bird populations over time. This is one of the reasons behind LaMNA's push to archive bird research data. Also, we are also working to process data and make them available over the internet to interface with the analysis tools that we are developing.

Thanks to our LaMNA members, we have made steady progress in our efforts to archive and process data. As of January 2012, we have archived close to **4 million** banding, census, and related data records from 65 members in eight countries! Of those, almost **1.5 million** are now available online. You can view the summary document (sample shown above) at [http://klamathbird.org/lamna/LaMNA\\_DataArchiveSummary\\_2012January.pdf](http://klamathbird.org/lamna/LaMNA_DataArchiveSummary_2012January.pdf). We plan to update this report regularly.

Our most recent addition are an estimated 25,000 historical banding records we received in January that were collected by Dr. L. Richard Mewaldt (co-founder of Point Reyes Bird Observatory) and his crew on the Wool Ranch in Milpitas, California during the 1970s. These are original hard copy data forms as well as documentation for their project. We extend our thanks to the people at the San Francisco Bird Observatory who have been diligent in keeping these records for posterity.

Do you have data you would like to archive and have available over the internet? If so, please contact Linda Long (llong@fs.fed.us or 707-825-2947).

**Linda L. Long, USFS Redwood  
Sciences Laboratory**

**Interested in membership or learning more about LaMNA?** See our web page at <http://www.klamathbird.org/lamna/> for details and a membership application form.