



Migratory Shorebird Project: Annual Progress Report March 2013 – April 2014

General Developments:

- Developed bi-lingual capacity for the Migratory Shorebird Project webpage (www.migratoryshorebirdproject.org).
- Completed third full year of surveys (November 2013 – January 2014) in 11 countries including new surveys in Honduras and El Salvador.
- Coordinated the Migratory Shorebird Project Symposium at the WHSG meeting in Santa Marta, Colombia; September 2013.
- Produced project slide template and presentation slides about the project to communicate to partners.
- Developed the map-based data summary application to show spatial distribution of shorebirds based on project data.
- Received US Forest Service Wings Across the Americas Award for International Collaboration.

Country / Region Report: US and overall coordination

Also see www.prbo.org/pfss for more detail on the US contribution and the Pacific Flyway Shorebird Survey.

Personnel involved (organization/institution)

Matt Reiter, Catherine Hickey, Dave Shuford, and Khara Strum (Point Blue Conservation Science)

Field Surveys (United States)

- Surveys of 24 coastal estuaries and 64 routes of interior wetland habitat throughout California, Oregon and Washington, 15 Nov – 15 Dec 2013
- Data collected by >34 partners from federal and state agencies, universities and NGOs and >265 volunteers
- Counted >400,000 shorebirds.
- Initiated surveys at 4 new sites including: Willapa Bay, WA; Columbia River Estuary*; Coos Bay, OR; Dungeness National Wildlife Refuge, WA* = WHSRN site.
- Helped coordinate surveys across 11 countries.
- Established data entry portals in the California Avian Data Center (CADC) for all countries and projects.
- Translated components of the California Avian Data Center Project Leader application into Spanish to improve functionality for Latin American partners.
- Entered data into CADC.
- Trained Environment for the Americas interns in PFSS shorebird survey protocols for piloting of spring migration surveys.

Workshops & Presentations

- Presented “The Pacific Flyway Shorebird Survey” at the Western Field Ornithologists’ meeting in Olympia, WA, August 2013. And to the Pasadena Audubon Society, Pasadena, CA, November, 2013. Held partner meeting for the Pacific Flyway Shorebird Survey and Migratory Shorebird Project in Coos Bay, OR; participants included the South Slough National Estuarine Research Reserve, Cape Arago Audubon, Oregon Department of Fish and Wildlife, Klamath Bird Observatory.
- Developed online training video reviewing the survey protocol and datasheet (see Resources tab at www.prbo.org/pfss).
- Presented “The Migratory Shorebird Project: Connecting Communities of the Americas through Research for Conservation” at the WHSG meeting in Santa Marta, Colombia, September 2013.
- Presented “Connecting people, places and promoting shorebird conservation through informatics” at the WHSG meeting in Santa Marta, Colombia, September 2013.
- Coordinated four meetings of the project steering committee.

Science

- Piloted survey protocol and survey designs at new sites and currently evaluating results based on data analysis and feedback from partners.
- Continued to refine interactive data summary tools designed for the PFSS that can be applied to this project.
- Completed data query application that compiles survey data and spatial data for use in models of factors influencing shorebird distribution and abundance.
- Piloted spring migration surveys at 4 sites: Copper River Delta, AK, Yaquina Bay, OR, Elkhorn Slough, CA and Blanca Wetlands, CO.

Outreach / Education / Awareness

- Continued development of project webpage: www.migratoryshorebirdproject.org; particularly adding bi-lingual capacity.

Country Report: México January 2013 – February 2014

Personnel involved (organisation/institution)

- Eduardo Palacios (CICESE, and Grupo de Aves del Noroeste (GANO));
- Xico Vega (Subsecretaria de Medio Ambiente y Recursos Naturales de Sinaloa, GANO);
- Guillermo Fernández (UNAM, GANO)

Field Surveys

- Two Winter surveys (during Dec-Jan 2013 & Jan. 2014) conducted at 18 sites in NW Mexico as part of ongoing CRIMBI WESA/DUNL monitoring project; data compilation, data entry and review ongoing. 50+ volunteers engaged.
- Main species observed: Western Sandpiper, Dunlin, Marbled Godwit, Willet, Black-bellied Plover, Sanderling, Greater Yellowlegs, Dowitcher spp, Snowy Plover.
- As part of GANO, we formed the *Ostreros Group* (American Oystercatcher Working Group in Mexico). Partners monitored AMOY at 10 breeding sites with support from the Sonoran Joint Venture.

- As part of GANO, we continued the Snowy Plover Working Group in Mexico. Partners are working on four projects in four sites during breeding and Winter season.

Workshops & Presentations

- The Snowy Plover Working Group in Mexico organized a training workshop in San Quintín, B.C. on capture and monitoring Snowy Plovers in Winter (January 2014).
- Palacios, E., *et al.* 2013. The Migratory Shorebird Project in Northwest Mexico. V Meeting of the Western Hemisphere Shorebird Group, 17-21 septiembre 2013, Santa Marta, Colombia.
- Galindo-Espinosa, D., y E. Palacios. 2013. Ecología poblacional del Chorlo Nevado, *Charadrius nivosus*, en el noroeste de Baja California, México. V Meeting of the Western Hemisphere Shorebird Group, 17-21 septiembre 2013, Santa Marta, Colombia.
- Palacios, E. 2013. Pacific Flyway Shorebird Conservation Plan. XII Congreso para el Estudio y Conservación de las Aves de México (CECAM), 14-18 October 2013. San Cristobal de Las Casas, Chiapas, Mexico.

Science

- Palacios, E. 2013. Posible, que en un periodo corto se extingan varias especies de aves playeras. La Crónica de Hoy (6 de mayo, 2013). <http://www.cronica.com.mx/notas/2013/750296.html>
- Kupper, C., Galindo, D., and E. Palacios. 2014. Capturing and monitoring wintering Snowy Plovers in Mexico. Unpubl. Report to Tracy Aviary. Ensenada, B.C. 12 pp.
- Palacios, E., L. Alfaro, E. Amador, D. Galindo, S. González, and P. Rodríguez. 2013. Habitat Conservation and Bird Monitoring in Laguna Figueroa, Baja California. Unpubl. Report to Sonoran Joint Venture. La Paz, Baja California Sur. 18 pp.
- Graduate Student: Daniel Galindo Espinoza. Doctorado. Ecología reproductiva del chorlo nevado, *Charadrius nivosus* (Aves: Charadriidae), en el Complejo Lagunar San Quintín, Baja California, México. Programa: Doctorado en Ciencias Marinas. CICIMAR. Director: Eduardo Palacios Castro. En proceso.

Country / Region Report:

Panama and North of South America:
Panama, Colombia, Ecuador y Perú

Personnel involved (organization/institution)

Diana Eusse, Regional Coordinator-Asociación Calidris
Richard Johnston and Carlos Ruiz, Colombia team- Asociación Calidris
Rosabel Miro, Karl Kauffman and Michelle Caballero, Panama team,-Aubobon Panama
Ana Agreda, Ecuador team- Aves y Conservación
Frank Suarez Pingo, Manglares de San Pedro-Peru team- Naturales y Cultura
Stive Marthans and Patricia Saravia, Paracas Perú team- Paracas Natural Reserve

Regional Developments:

- Support translation of Migratory Shorebird Project webpage (www.migratoryshorebirdproject.org) and some CADC applications and protocols.

- Outreach strategy: Maurita the peep, a coloring book.
- Attend the Migratory Shorebird Project Symposium at the WHSG meeting in Santa Marta, Colombia; September 2013.
- Complete third year shorebird survey in four countries-ten sites, involving 35 persons between biologist and citizen scientific.
- Two sites made a festival using shorebirds as a main topic.
- Support Central America designs, surveys and CADC data entry process
- Prepared a proposal to NMBCA grants. The main goal of this proposal in to reduce human disturbance in MSP sites.

Field Surveys

- Surveys of 10 sites in four countries between January 12 and February 16
- Data collected by 35 persons (biologist, students, birdwatchers, protected areas crews, local people)
- We counted >100,000 shorebirds, 32,000 gulls and terns, 19 raptors (7 Peregrine Falcon), 3000 herons and egrets and 2000 waterfowls.
- We updated field desing of Manglares de San Pedro, Peru, and explored a new site in Jambeli estuary in Ecuador.

Workshops & Presentations

- Presented 2012-2013 results of each country in “The Migratory Shorebird Project: Connecting Communities of the Americas through Research for Conservation” symposium at the WHSG meeting in Santa Marta, Colombia, September 2013.
- Presented National Parks of Colombia Monitoring Program and MSP link in IV Congreso Colombiano de Ornitología, Cali November 2013
- Publications workshop with Sanquianga National Park staff. They are preparing a publication about the special distribution of 10 species recorded in 2012-2014 surveys.

Science

- Explore some data analysis to have results and write a paper or an outreach publication
- Partner a PhD tesis about predations risk for shorebirds in Colombia sites.

Outreach / Education / Awareness

- Maurita the peep coloring book. This book was spraed to many countries of the MSP project
- We conducted two festivals, in Salinas de Ecuasal and Bocana de Iscuande. They have an special guest: Maurita the peep, and the main topic was the importance of the sites for the conservation of shorebirds
- We are preparing special events to give WATA award to Sanquianga National Park staff and Concejo Comunitario Esfuerzo Pescador communitie.

Country / Region Report: Canada

Bird Studies Canada staff involved

- Rob Butler, Karen Barry, David Hope, Catherine Jardine, Eva Jenkins, Tara Crewe, Pete Davidson

Canadian Collaborators (organisation/institution)

- Mark Drever, Moira Lemon, Kathleen Moore (Environment Canada – Canadian Wildlife Service)
- Ron Ydenberg, Dov Lank, Holly Middleton (Simon Fraser University)
- Ivy Whitehorne (Ducks Unlimited/Pacific Coast Joint Venture)

Volunteer-based Field Surveys

- Monthly surveys (Sept-March) conducted at 192 pre-defined sites as part of ongoing *BC Coastal Waterbird Survey*; web-based data entry and review ongoing. 200+ volunteers participated, including 8 new volunteers recruited to replace retired surveyors and to survey 1 new site
- Main species captured: Dunlin, Black-bellied Plover, Sanderling, Greater Yellowlegs, rocky shore specialists (Black Turnstone, Black Oystercatcher, Surfbird)
- Recruited, trained and deployed >40 volunteers for a new autumn survey to capture the return fall migration of Western Sandpipers (see first point under Science, below)

Training Workshops & Presentations

- Delivered a training workshop to 10 volunteers for conducting fall migration surveys for Western Sandpipers, utilising the shorebird identification and flock estimation guides developed earlier in the project; further instruction was given remotely and one-on-one in the field to additional volunteer surveyors who signed up after the workshop
- Delivered at least five general presentations around coastal British Columbia, to the public and partner organisations/agencies/institutions, including promotion of the project, the field workshops and training resources
- Presented a talk at the August 2013 meeting of the Society of Canadian Ornithologists/Bird Studies Canada joint meeting in Winnipeg featuring Citizen Science surveys, including Migratory Shorebird Project winter and fall migration surveys.

Science

- David Hope continued his PhD with Simon Fraser University, with Bird Studies Canada as the NSERC industrial partner, developing and testing predictions for leading indicators of shorebird change, based on existing data and new data collected in BC during fall migration. BSC is closely involved in the scientific design and approach, including official supervision, and led the coordination of the volunteer network that collected the data, identification of survey sites, recruitment of volunteers and protocol training the 2013 field season (July-August), with >40 volunteers conducting 153 individual surveys at 35 survey sites in BC and 4 in Washington
- BSC GIS analysts worked with Environment Canada – Canadian Wildlife Service staff and a PhD volunteer (Holly Middleton) to generate models from the BC Coastal Waterbird Survey that depict mapped relative density of all shorebirds at surveyed locations around the Salish Sea for specific time periods (winter = Dec-Feb; individual months) based on 12 years of data collected to date (1999-2012; the example for Dunlin is pasted at the end of this document)
- Collaboration with Pacific Coast Joint Venture partners to develop a detailed bird-habitat association modeling protocol for Coastal Waterbird Survey data and the BC Shore-Zone habitat layer, created for conservation planning, oil spill response and other applications; this work included substantial revisions to the Coastal Waterbird Survey spatial layer. Updated PCJV Board and staff on MSP work and progress at May and December 2013 Board meetings, and Technical Committee meetings in between

- Completed a trend analysis on the 1999-2013 BC Coastal Waterbird Survey dataset; Dunlin trend over the 13-year period is -12.3%/year
- Drafted a manuscript now ready for submission to PLoS One (back-up submission journal is Avian Conservation and Ecology) on widespread biofilm consumption and variable diet composition of Western Sandpiper across the Fraser Delta – Boundary Bay system from stable isotope analyses of Western Sandpiper droppings, surface samples and invertebrates, including recommendations for further study and considerations for development scenarios

Data and Information-Sharing

- Developed data sharing agreements with PRBO for the project period, and worked with PRBO data managers to provide shorebird count data from the BC Coastal Waterbird Survey for specific survey periods, and from ten years of data collection prior to that

Outreach

- David Hope gave a talk on shorebirds as leading indicators of changes at the Western Hemisphere Shorebird Group meeting in Colombia, to the Canadian Wildlife Service seminar series in Delta and at Simon Fraser University
- Provided input to the Pacific Flyway Shorebird Business Plan being developed by BirdLife and North American partners, promoting the MSP as a central tenet of that plan
- Promoted the project and Western Sandpiper/Dunlin spring migration as part of the Vancouver Bird Agenda, which in 2014 comprises a week-long series of events including shorebird viewing, guided by a group of partners including City of Vancouver, Vancouver Parks Board, Tourism Vancouver, Stanley Park Ecology Society and Nature Vancouver to celebrate World Migratory Bird Day
- Ran public and media releases across Canada and the BirdLife network on the Migratory Shorebird Project's Wings Across the Americas Award for international cooperation
- Suggested that the project be included in the UN World Tourism Organisation's Destination Flyways project, which currently does not cover the Americas, but may expand there in 2015-16

Education

- We did not have the capacity to advance the shorebird education work this year, but hope to expand on it in 2014-15

Conservation

- Rob Butler provided guidance to the Port of Metro Vancouver on shorebird conservation issues and the science required to address those issues
- Provided support to IBA Caretaker NGO Tofino Mudflats Stewardship Group to continue their stewardship work at this very recently designated WHSRN site, including fund-raising support
- Supported Asociación Calidris in their application to the NMBCA Fund for conservation of key shorebird wintering sites in South America, including reducing disturbance
- Begun a project to develop a three to five year proposal to address recreational disturbance at key shorebird stopover sites in British Columbia, using a social marketing methodology, to change recreational disturbance behaviours and monitor the impacts, in collaboration with recreational user groups and local governments, and evaluate the hypothesis that human disturbance is a factor driving change in distribution and abundance of shorebirds; transferred the idea to partners on the Migratory Shorebird Project (including Asociación Calidris mentioned above)

New mapping product:

Fig: Mean winter (Dec-Feb) density of Dunlin in south-west British Columbia 1999-2012

