Migratory Shorebird Project:
Annual Progress Report
January 2012 – February 2013

General Developments:

- Named the project "The Migratory Shorebird Project: Connecting Communities of the Americas through Research for Conservation".
- Completed second full year of surveys (November 2012 – January 2013) in 10 countries.
- Diana Eusse of Calidris replaced Richard Johnston on the Steering Committee.
- Developed and launched the Migratory Shorebird Project webpage (www.migratoryshorebirdproject.org).
- Planning for Migratory Shorebird Project Symposium at the WHSG meeting in Santa Marta, Colombia.

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 (PRBO Conservation Science)

Field Surveys (United States)
- Surveys of 23 coastal estuaries and 53 routes of interior wetland habitat throughout California, Oregon and Washington, 15 Nov – 15 Dec 2012
- Data collected by >21 partners from federal and state agencies, universities and NGOs.
- Initiated surveys at 12 new sites including: Puget Sound*, WA (Ecostudies Institute); Grays Harbor*, WA; Yaquina Bay, OR; Bandon Marsh, OR; Suisun Marsh, CA; Salton Sea*, CA. * = WHSRN site.
- Engaged >250 volunteers and counted >350,000 shorebirds.
- Helped coordinate surveys across 10 countries.
- Established data entry portals in the California Avian Data Center (CADC) for all countries and projects.
- Translated the CADC Citizen Science data portal into Spanish to improve functionality for Latin American partners.
- All data were entered into CADC.
- Piloted new survey strategy in Panama Bay, Panama.

Workshops & Presentations
- Presented poster of the Pacific Flyway Shorebird Survey at The Wildlife Society National Meeting October 2012, Portland, OR.
- Presented "The Pacific Flyway Shorebird Survey" at the Oregon Shorebird Festival in Charleston, OR August 2012 and at the Western Field Ornithologists Meeting in Petaluma, CA September 2012.
- Held partner workshop for Pacific Flyway Shorebird Survey and Migratory Shorebird Project in Portland OR; 15 participants representing 11 different organizations/agencies.

- Conducted three, 6-hour Citizen Science training workshops on survey methodology and shorebird identification in California, Oregon and Washington and developed extensive training materials for volunteers (see Resources tab at www.prbo.org/pfss).
- Developed protocol for evaluating disturbance impacts during workshop in Ensenada, Mexico.
- Coordinated four meetings of the project steering committee.
- Presented the Migratory Shorebird Project to the Western Hemisphere Shorebird Reserve Network Hemispheric Council in April 2012 (Vancouver) and at the Cooper River International Migratory Bird Initiative meeting in November 2012 (San Diego).

Science

- Piloted survey protocol and survey designs at new sites and currently evaluating results based on data analysis and feedback from partners.
- Continued to develop hypothesis and project design matrix to guide project development. Refined this matrix during Ensenada workshop in October 2012.
- Developed initial set of habitat association models for San Francisco Bay and the Sacramento National Wildlife Refuge Complex and linked with iterative learning analytical framework as model for project.
- Continued to refine interactive data summary tools designed for the PFSS that can be applied to this project.

Outreach / Education / Awareness

- Developed 2-page Migratory Shorebird Project handout in both English and Spanish.
- Completed outreach needs survey for Migratory Shorebird Project and summarized findings.
- Continued development of project webpage: www.migratoryshorebirdproject.org

Country / Region Report: México 2012

Personnel involved (organisation/institution)

- Eduardo Palacios (CICESE, and Grupo de Aves del Noroeste (GANO); Xico Vega (Centro de Ciencias de Sinaloa, GANO); Guillermo Fernández (UNAM, GANO)

Field Surveys

- One Winter survey (during 1-15 December) conducted at 18 sites in NW Mexico; 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

Workshops & Presentations

- The III Annual Meeting of Grupo Aves del Noroeste (GANO) was held in Ensenada, Baja California, Mexico, in early October 2012. During this two-day meeting we worked on standardization of shorebird monitoring protocols, data compilation and monitoring needs.
- Palacios, E. 2012. Challenges and perspectives in shorebird research and conservation in Mexico. *Symposium: Tropical Challenges: Priorities in Mexican Ornithology*. 5th North American Ornithological Conference (NAOV V). 17 agosto, 2012. Vancouver, British Columbia, Canadá.

- Palacios, E. 2012. Shorebird research and conservation in northwestern Mexico. Seminario departamental Texas State University, San Marcos. 22 octubre, 2012. San Marcos, Texas, EEUU.
- Palacios, E. 2012. Shorebirds of the Western Hemisphere. Tofino Shorebird Festival. 4-6 mayo, 2012. Tofino, Vancouver Island, British Columbia, Canadá.

Science

- One workshop on "Hypotheses of shorebird population declines and data necessary to test them in Northwest Mexico".
- Palacios, E., L. Alfaro, E. Amador, D. Galindo, S. González, and P. Rodríguez. 2012. Shorebird surveys at two coastal wetlands in Baja California. Unpubl. Report to PRBO Conservation Science. La Paz, Baja California Sur. 23 pp.

Country / Region Report: South America (Panamá, Colombia, Ecuador y Perú)

Personnel involved (organisation/institution)

Diana Eusse, Carlos J. Ruiz, Richard Johnston (Asociación Calidris, Colombia); Ana Agreda (Aves y Conservación, Ecuador), Stive Marthans, Patricia Saravia (SERNANP RN Paracas, Perú); Rosabel Miró, Karl Kauffman (Audubon Society, Panamá), Álvaro García O., Cesar Chávez (CNEH Internacional, Perú).

Field Surveys

- Surveys conducted by January 31st at 9 sites (3 sites in Panamá, 2 sites in Colombia, 2 sites in Ecuador and 2 sites in Perú)
- Colombia and Panama surveys data entered into CADC: About 25 volunteers engaged in surveys of Panama, Colombia Peru and Ecuador. Most common and abundant species Western Sandpiper, Whimbrel, Willet, Spotted Sandpiper, Black-bellied Plover, Dowitcher spp., and Snowy Plover.
- PRBO and Calidris supported Panama surveys.

Workshops & Presentations

- Annual Western Hemisphere Shorebird Reserve Network meeting, Vancouver, Canada. May 1st - 6th.
- VII Regional Meeting of Americas Partners of BirdLife International. Caño Hondo, Dominican Republic. June 2nd - 8th.
- Meeting of the Council of the Americas Waterfowl. Washington D.C. October 2nd to 5th.
- CRIMBI Meeting, San Diego, California. November 14th - 16th.

Science

- A research on mudflats used by Whimbrel was carried out at the Sanquianga National Park (Colombia) in order to evaluate the conservation status of this shorebird that is considered a target species of this protected area. An assessment of the water quality in saltponds used by shorebirds in Ecuasal Ecuador
- A research on Western Sandpiper habitat requirements along the Colombian Pacific coast (Richard J. Master)
- Some CADC pages (Citizen Biologist and two protocols) were translated to Spanish.

Outreach

- Maurita The Peep: 6 stories about Maurita and her family. Two new Maurita characters were created, Chirly (a Semipalmated Sandpiper) and Falaropo (Wilson's phalarope).

- Falaropo is the Aves y Conservación´s pet and it met Maurita and Chirly when they arrived in Ecuador.
- A puppet play for kids was put on, its title in Spanish is: Viajeras intrépidas llegan a Ecuasal: reunión de Maurita y Falaropo! (Traveler fearless arrive at Ecuasal: Maurita and Falaropo meeting!)
- Poster Los Humedales de San Pedro de Virrila-Peru.

Country / Region Report: Canada

Bird Studies Canada staff involved

- Rob Butler, Pete Davidson, Karen Barry, David Hope, Catherine Jardine

Canadian Collaborators (organisation/institution)

- Mark Drever, Moira Lemon (Environment Canada – Canadian Wildlife Service); Ron Ydenberg, Dov Lank, Jenn Barrett (Simon Fraser University)

Steering Committee

- One or more BSC staff attended all but one Steering Committee meeting (in person at WHSRN meeting in Vancouver, May 2012, and CRIMBI meeting in San Diego, November 2012).

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 near-complete. 200+ volunteers participated, including 23 new volunteers recruited to replace retired surveyors and to survey 6 new sites
- Main species captured: Dunlin, Black-bellied Plover, Sanderling, Greater Yellowlegs, rocky shore specialists (Black Turnstone, Black Oystercatcher, Surfbird)
- Recruited ~30 volunteers for a new autumn survey to capture the return fall migration of Western Sandpipers (see Science, below)

Training Workshops & Presentations

- Ran three workshops on counting techniques and improving consistency of shorebird flock count estimates in Vancouver, Delta and on Vancouver Island in fall-winter 2012
- Planned a training workshop to be delivered in late April for volunteers conducting fall migration surveys for Western Sandpipers
- Developed a shorebird identification guide to complement the improving flock estimates guide, downloadable at: http://www.bsc-eoc.org/volunteer/bccws/Resources/ShorebirdIDGuide.pdf
- Delivered several general presentations around coastal British Columbia, to the public and partner organizations/agencies/institutions, including promotion of the project, the field workshops and training resources

Science

- David Hope began a PhD with Simon Fraser University in Jan 2013, with Bird Studies Canada as the NSERC industrial partner, to develop and test 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 is playing a major role in coordinating the volunteer network that will collect the data, identification of survey sites, recruitment of volunteers and protocol development for the 2013 field season to begin April 2013

- Our paper documenting the decadal declining trend in wintering Dunlin on the BC coast (along with trends in ~60 other species) was published in *British Columbia Birds* Volume 22 in June 2012. We also participated in progress being made in understanding the fluctuations in abundance of Pacific dunlins by Ron Ydenberg and his students at Simon Fraser University
- Collaborated on an analysis of shorebird data from the BC Coastal Waterbird Survey investigating the potential to generate habitat-based shorebird population estimates (with Drever, Barrett)
- Conducted a research study in April-May 2012 using stable isotope analysis of Western Sandpiper droppings, surface samples and invertebrates, to investigate the distribution of biofilm, a key food source for Western Sandpiper and Dunlin during the spring migration, in the Fraser Estuary and Boundary Bay; we collaborated with the global lead scientist in this field, Tomohiro Kuwae, and discovered that Western Sandpipers appear to consume biofilm throughout this estuarine ecosystem, but in highly variable proportions. We completed a final report on the work (Jardine, C., A. Bond, R.W. Butler, P. Davidson, E. Jenkins, T. Kuwae, S. Seneviratne. 2012. Biofilm and Western Sandpiper Distribution in the Fraser Estuary and Boundary Bay, British Columbia, April-May 2012. Final report to Coastal and Ocean Resources Ltd, posted on the BC Public Registry), and are now drafting a manuscript for a peer-reviewed journal on the findings

Outreach

- Presented a talk at the North American Ornithological Conference, Vancouver, August 2012, describing the principles and approach of the project, and engaged two new organizations as a result – the Caribbean Waterbird Census and Klamath Bird Observatory in Oregon
- Promoted the project with Alaska to northern California-based partners in the Pacific Coast Joint Venture
- Wrote an article on the project for Outpost Magazine (author: Rob Butler)
- Working with a group of partners including City of Vancouver, Vancouver Parks Board, Tourism Vancouver, NGO partners and others on a World Migratory Bird Day series of events that includes the Western Sandpiper migration, and a broader new “bird agenda” including conservation outreach to the public in Metro Vancouver relating to the Migratory Shorebird Project

Education

- Assisted in the development and delivery of WetlandsLIVE from Boundary Bay, including coordination of partners, drafting scripts, delivering presentations, and engaging local schools through the Delta School District, including Beach Grove Elementary School as the local partner
- Developed a Pacific Flyway wetlands ecosystem and shorebirds module for Grade 6-8 students and delivered it to one school (85 students present) in Delta; now planning for expansion to other schools, with endorsement from the Southpointe Academy Middle Years Program science lead.

Conservation

- Supported the nomination of the recent designation of the Fraser Estuary’s Roberts and Sturgeon Banks, and Boundary Bay, as a Ramsar site (Sturgeon Bank and Boundary Bay both designated, Roberts Bank still pending)
- Wrote letters to the Panamanian government recommending re-instatement of protection of Panama Bay wetlands, and sent funding (unrestricted BSC funds) for the Panama Audubon campaign, and publicized the issue and the recent positive conservation news in BSC’s bi-weekly Latest News circulated to ~55,000 people and through other conservation partners

- Assisted the nomination of the Tofino Mudflats as a Western Hemisphere Shorebird Reserve Network site of regional importance, and publicized the recent designation in BSC's bi-weekly Latest News circulated to ~55,000 people and through other conservation partners