The Legacy of Park Flight: The Value and Contributions of International Volunteers



Carol Beidleman October 2023

The Legacy of Park Flight: The Value and Contributions of International Volunteers

Carol Beidleman, former Park Flight Migratory Bird Program Coordinator, October 2023

We often hear about the importance of migratory bird programs that build capacity internationally for shared species conservation. But what exactly does that mean, and how does one measure the success of such efforts?

The Park Flight Migratory Bird Program was created with the vision of connecting U.S. national parks and their partners in the United States with protected areas and their partners in countries with shared migratory birds. Many of these species, which only use parks on a seasonal basis, have declining populations, so the efforts to protect them require engagement and cooperation on a hemispheric scale.

The goals of the Park Flight Migratory Bird Program were to: 1) promote positive attitudes toward migratory birds and their conservation; 2) increase technical expertise and knowledge about bird conservation issues; and 3) improve collaboration between protected areas and divisions, and encourage self-sustaining partnerships.

Park Flight integrated bird monitoring and education into three components: projects on the breeding and wintering grounds, south-to-north technical exchange through the National Park Service's (NPS) International Volunteers in Parks (IVIP) program, and north-to-south technical assistance. The IVIP program was coordinated through the NPS Office of International Affairs (OIA), which celebrated its 60th anniversary in 2022. OIA – and its dedicated staff – was the central and essential Park Flight partner, without which none of these international exchanges would have been possible.

Over a ten-year period starting in 2001, about 85 Park Flight IVIPs from 19 countries in the Western Hemisphere were involved in Park Flight international internships. So, what have these former Park Flight interns done since then in their home countries and beyond, and how did their Park Flight internship affect their careers and contributions? As part of the OIA's 60th celebration, we wanted to find out.

Carol Beidleman, the former Park Flight Migratory Bird Program Coordinator, enlisted the help of Marimar Gutiérrez Ramírez, a former Park Flight IVIP at Cuyahoga Valley National Park who later became Carol's Assistant for the Park Flight Program, to develop a questionnaire for the former Park Flight IVIPs. [Mariamar's career has come full circle; she is now a permanent NPS Biologist at Cuyahoga Valley National Park!] We were able to track down email addresses for 55 of these former IVIPs and received questionnaires from 28 of them. These completed questionnaires, as well as previous interviews of other IVIPs, personal interactions, and additional available information, are the source of this report featuring the accomplishments and contributions of former 36 Park Flight international volunteers since their Park Flight Migratory Bird Program internship, and how that internship helped shape their career. Of course, this report and its profiles are only a snapshot in time, as every day these amazing professionals build on their impressive accomplishments. Busy as these former Park Flight interns are now in their professional and personal lives, their responses to the questionnaire were very positive, even wistful, and full of gratitude. Typical comments on being asked to provide this information were as Natalia Corrales Gómez said, "It was very nice to remember this experience through the questionnaire," and from Dionisio (Nito) Paniagua Castro, "Thank you very much for having made me relive these beautiful moments." "I'm glad you are celebrating this wonderful program," Francisco Daniel Ruz Rosado said; "It was an honor to collaborate with you and the Park Flight Program. What an experience, what a privilege..."

Credit for the success of Park Flight goes to those who hosted, trained, mentored, and supported these international interns, and to the dedicated interns themselves who worked hard to achieve the program's goals in the U.S., then went back to their countries and region to make a lasting difference for migratory bird conservation. Park and partner staff developed the training plans that ensured the IVIP's experience met the goals of the NPS and Park Flight Migratory Bird Program, and they were integrally involved in implementing that plan and overseeing the IVIP internships. These great champions for Park Flight, migratory bird conservation, and their international volunteers included not only permanent and seasonal NPS staff but also many park partner staff.

For the Park Flight IVIP internships hosted by U.S. national park units, key staff from participating from NPS parks and park partners, with their affiliations at the time, included the following, although there were others. National Park Service (alphabetical by last name): Sarah Allen (PORE); Lisa Andrews (BICY); Daniel Barrera (FIIS); Charles Beall (NOCA); Phil Correll (NJ Coastal Heritage Trail Route); Stephen Fettig (BAND); Nikki Guldager (GAAR); Daphne Hatch (GOGA); Bob Kuntz (NOCA); Tim Manns (NOCA); Bill Merkle (GOGA); Rachel Mazur (SEKI); Lisa Petit (CUVA); Cathy Purchis (SEKI); Lindsay Ries (FIIS); Jordan Raphael (FIIS); John Roth (ORCA); Paul Super (GRSM); Fernando Villalba (FIIS). Park Partners (alphabetical by entity name): Environment for the Americas (Susan Bonfield); Hawks Aloft, Inc. (Gail Garber); Institute for Bird Populations (Rodney Siegel, Kerry Wilcox, Bob Wilkerson); Klamath Bird Observatory (John Alexander, Ashley Dayer, Robert Frey); New Jersey Audubon Society (Rene' Buccinna, Patti Hodgetts, David Mizrahi, Kim Peters, Dale Rosselet); Pajarito Environmental Education Center (Becky Shankland); PRBO Conservation Science (now Point Blue; Renée Cormier, Tom Gardali, Diana Humple, Melissa Pitkin, Sarah Warnock).

However, without the financial and/or administrative support of the major National Park Service partners, the Park Flight Migratory Bird Program and its activities, including the ability to host IVIPs, would not have existed. Over the years these program-level partners included: National Park Foundation, American Airlines, University of Arizona (Desert Southwest Cooperative Ecosystem Studies Unit), National Fish and Wildlife Foundation, USAID, and Rare.

We hope this exciting view into the effectiveness of programs such as Park Flight, which help build capacity, provide technical assistance, and foster international cooperation for the conservation of shared species, can be a model and encourage future support for similar programs and more opportunities for engaging international volunteers. It is particularly important to engage countries where potential IVIP candidates lack the personal resources to support their own participation. Park

Flight covered all IVIP expenses, from travel to in-park, which was a fundamental and critical feature of the program.

Lastly, a word from the writer of this report, Carol Beidleman, former Park Flight Migratory Bird Program Coordinator, who has been affectionately called "Mama Carol" or "Madrina Carolina" by her Park Flight IVIPs. "It was the greatest honor, privilege, and joy of my professional career to coordinate the Park Flight Migratory Bird Program," Carol said, "to work with these aspiring young ornithologists from across the Western Hemisphere, and to help build capacity for shared migratory bird species conservation. Thus, it is with great pride and pleasure that I'm able to highlight here their hard work and successes."

To those former IVIPs who were part of the official Park Flight Migratory Bird Program from 2001-2011 but whose profile is not featured here, either because we weren't able to reach you or didn't receive a completed questionnaire, please reach out to Carol at cbeidleman@environmentamericas.org, and we'll include you on this OIA website!

For more information on the NPS International Volunteers in Parks Program, see https://www.nps.gov/subjects/internationalcooperation/ivip.htm.

Park Flight Migratory Bird Program International Volunteers in Parks Profiles (by first last name)	Country	U.S. Park/Partner	Year
	Country		
Abrill Cáceres, César	Peru	NEJE/NJAS	2008
Acosta Antón, Alexander	Nicaragua	SEKI	2007
Andino Martínez, Leticia	El Salvador	GOGA/PORE/PRBO	2004
Batista Mojica, Chelina (see Berguido, Guido César)	Panama	NEJE/NJAS	2005
Berguido, Guido César (see Batista Mojica, Chelina)	Panama	GOGA/PORE/PRBO	2004
Cárdenas Posada, Ghislaine	Colombia	NEJE/NJAS	2010
Cerezo, Alexis (see Ramírez, Miguel)	Guatemala	SEKI	2002
Corrales Gómez, Natalia (see Soto Chavarría, Luis)	Costa Rica	BAND	2005
Elizondo Camacho, Pablo	Costa Rica	GRSM	2007
Enriquez Toledo, Hugo	Guatemala	SEKI	2004
Fredison, Idris	Suriname	NEJE/NJAS	2009
Galán Cantón, Victoria	El Salvador	GOGA/PORE/PRBO	2005
González Sánchez, Carlos	Mexico	NOCA	2011
Gutiérrez Ramírez, Mariamar	Nicaragua	CUVA	2004
Hernández Palma, Angélica (see Paredes Montesinos, Rafael)	Colombia	BAND	2009
Martínez Salinas, Alejandra	Nicaragua	NOCA	2002
Medina Castro, Juan Pablo	Mexico	NOCA	2009
Méndez Aranda, Daniel	Mexico	NOCA	2010
Morales, Salvadora	Nicaragua	SEKI	2001
Moreno Palacios, Miguel	Colombia	ORCA/KBO	2008
Moreno Salazar, Noemí	Colombia	FIIS	2010
Ocasio Ortiz, Sara	Puerto Rico	NEJE/NJAS	2011
Paniagua Castro, Dionisio	Costa Rica	NOCA	2008
Paredes Montesinos, Rafael (see Hernández Palma, Angélica)	Mexico	BAND	2009
Partida Lara, Ruth	Mexico	GRSM	2008
Peña Monroy, Andrés Felipe	Colombia	BAND	2010
Petracci, Pablo	Argentina	GAAR	2004
Ramírez, Miguel (see Cerezo, Alexis)	Guatemala	SEKI	2002
Rodríguez Vásquez, Fabiola	Honduras	BAND	2011
Ruz Rosado, Francisco Daniel	Mexico	BAND	2008
Soto Chavarría, Luis (see Corrales Gómez, Natalia)	Honduras	BAND	2005
Tavera Fernández, Eveling	Peru	BAND	2008
Tenez Rivas, Daniel	Guatemala	BAND	2007
Tórrez Gutiérrez, Marvin	Nicaragua	BAND	2006
Vega Durán, Iselda	El Salvador	GOGA/PORE/PRBO	2010
Yunes Jiménez, Laila	Mexico	BAND	2010
	Mexico		2010
U.S. National Park/Partner		Code	
Bandelier National Monument		BAND	
Cuyahoga Valley National Park		CUVA	
Fire Island National Seashore		FIIS	
Great Smoky Mountains National Park		GRSM	
Gates of the Arctic National Park and Preserve		GAAR	
New Jersey Coastal Heritage Trail Route/NJ Audubon Society		NEJE/NJAS	
North Cascades National Park		NOCA	
Sequoia/Kings Canyon National Parks		SEKI	
Oregon Caves National Monument/Klamath Bird Observatory Golden Gate NRA/Point Reyes NS/PRBO Conservation Science		ORCA/KBO GOGA/PORE/PRBO	

PROFILES OF PARK FLIGHT IVIPS (alphabetical by first last name):



PARK FLIGHT IVIP NAME: César Abrill Cáceres

HOME COUNTRY: Perú NPS UNIT: NEJE/NJAS YEAR: 2008

César participated as an IVIP in a Park Flight internship in New Jersey in 2008, which was a collaboration between the National Park Service's New Jersey Coastal Heritage Trail Route and the New Jersey Audubon Society in Cape May. There he "learned to work with migratory shorebirds and new capture, processing, and banding methods, especially the [colored] flags approach," and said of his experience, "I was lucky to witness the importance of stopover sites, i.e., Delaware Bay, where birds refuel."

He was fortunate to work with Dr. David Mizrahi, an eminent shorebird expert with New Jersey Audubon, and expressed, "I am very thankful to Dr. David Mizrahi and the great team at New Jersey Audubon. They gave me the opportunity to participate in all activities and to present my own initiatives, which further improved my confidence and increased my experience. My purpose was to train as many persons as possible to enrich bird conservation actions."

After returning to Perú, César developed proposals for a bird banding project and was able to raise support for bands, nets, and materials. "I was able to train several biologists and volunteers of my project and other projects regarding monitoring and processing and everything that I learned during the internship." He taught monitoring skills to students and volunteers, produced information and education materials about protected areas and birds, and proposed projects for the conservation of migratory birds and their habitats in Peru and the Dominican Republic. His work has focused on native, endemic, and migratory bird monitoring, and strengthening of Important Bird Areas conservation, and has participated in World Migratory Bird Day and Neotropical Migratory Bird Conservation Act projects.

César now directs the Office for Coordination REDD+ for the Directorate for Climate Change Adaptation and Mitigation for the Ministry of Environment and Natural Resources in the Dominican Republic. Per the United Nations, REDD+ is a framework created by the UNFCCC Conference of the Parties (COP) to guide activities in the forest sector in developing countries that reduce emissions and enhance sustainable management and forest carbon stocks. "Now I develop consultancies for the management of protected areas and biodiversity, mainly for endemic and migratory birds. I have also delved in the issue of forests and climate change and bird-friendly agroforestry."

He said his Park Flight internship was "a wonderful opportunity to learn more about bird monitoring, environmental education, and management of protected sites in a country that has adequate and updated information, equipment, and tools." César concluded, "Thanks for the opportunity I was given, it was an unforgettable experience."



PARK FLIGHT IVIP NAME: Alexander Acosta Antón

HOME COUNTRY: Nicaragua NPS UNIT: SEKI YEAR: 2007

Alexander (Alex) Acosta Antón from Nicaragua was selected as a Park Flight international volunteer in 2007 at Sequoia and Kings Canyon National Parks in California. The internship involved both the Divisions of Natural Resources and Interpretation.

For the biological monitoring component of the internship, Alex helped run two bird banding stations (MAPS; Monitoring Avian Productivity and Survivorship). These MAPS stations were at Lion Meadow in a mixed sequoia forest in Grant Grove and Zumwalt Meadow in Cedar Grove. To prepare for the MAPS

stations, Alex attended a three-day bird banding training in Kings Canyon by Kerry Wilcox with Audubon California. He helped operate 10 mist-nets between 8 to 9 hours, two days a week for each station, with capture rates of 15 to 40 individuals with approximately 20 species. Alex also went on backcountry patrol with a biological technician to survey Peregrine Falcons.

When Alex was not monitoring birds, he did the educational component of his internship. This involved his staffing the Kings Canyon Visitor Center desk, contacting visitors at "touch tables" there, presenting programs, roving informally, and conducting off-site programs and interviews. To prepare for this component, Alex participated in two weeks of intensive seasonal interpretive training. His park presentations were bilingual, as part of the park's Latino outreach program.

Alex's formal presentations in the park included Grant Tree Walks, beginner bird walks, and an evening or campfire program on bird migration. He titled this program Birds of America, focusing on migratory birds. "This was one of the most visited activities during the night with audiences between 60 to more than 100 people," Alex said, and it involved the Junior Rangers Program. Outside of the park boundaries, Alex attended the Fresno, California "Dia de la Familia", and presented a Spanish language talk about the Park Flight program. In addition, Alex gave a presentation, open to all park staff, on bird conservation efforts in his home country of Nicaragua. Through all these different venues, the number of visitors Alex contacted during his internship exceeded 11,300.

In addition to the requisite monitoring and educational components, all Park Flight internships encouraged incorporating cross-training, and at Sequoia and Kings Canyon this was bear management. Alex had the opportunity to educate the public on the importance of proper food storage and safe behavior around black bears, and assisted with capturing, marking, and releasing them. He said about this activity, "I enjoyed very much observing these interesting bears."

Prior to his Park Flight internship, he was an interpretive tourist bird watching guide and investigations assistant at Reserva Natural Volcán Mombacho, assisting with their bird banding station, doing interpretation for visitors, and was coordinator of their environmental education program. He was also a student in Business Administration at Universidad de Occidente Granada.

At the end of his time at Sequoia and Kings Canyon, Alex made this assessment, "First of all I am thankful for this opportunity and experience in one of the most important parks in the U.S., Sequoia and Kings Canyon. I think I've learned a lot from the activities developed here and surely this knowledge will be of great help for the programs developed in my country for bird conservation like the MoSI project, interpretation programs or any other activity related to the conservation of parks or natural areas, like ecotourism, bird watchers, research, etc."

The internship clearly made a positive impact on his achieving his own career goals. "Upon returning to my country, I got more involved in conservation programs and banding. I was more qualified and that made me more valuable to conservation organizations and their studies. At the regional level, I received more invitations to courses, workshops, etc. I was also more aware of the need to include environmental education and conservation in my activities."

When asked about the skills he learned, improved or practiced during his Park Flight internship, he mentioned improving his ability to identify new bird species and his banding techniques, and how to reach people through environmental education activities. He was shy because of his English but said chatting with colleagues helped improve his abilities and he had their full support. One of the 'soft skills' he learned was "to acquire a taste for punctuality, calendars, and responsibilities which led me to value my personal time and the dedication of people to meet goals." He felt the benefit of this internship to his country was "having a qualified person who knows about conservation and its study is a benefit, as well as the community profiting from more environmental education for the benefit of birds."

Alex is a now a business manager, working with ecotourism. He's a national guide in Nicaragua, specialized in bird tourism, but also participates in ecological assessments, field assistance, and technical support. He has also been involved with Monitoreo de Sobrevivencia Invernal bird banding stations (MoSI; Monitoring Neotropical Migrants in Winter), International/World Migratory Bird Day events, and bird festivals.

"Park Flight helped me develop knowledge and love for something that I had not yet considered a profession, because I delved in[to] management. To date I remain involved in the conservation of my country as a nature guide and field assistant. I can say that my greatest achievement was to preserve birds and the environment [through] implementing environmental education."



PARK FLIGHT IVIP NAME: Leticia Andino Martínez

HOME COUNTRY: El Salvador NPS UNIT: GOGA/PORE/PRBO YEAR: 2004 Leticia Andino Martínez from El Salvador was selected as a Park Flight international volunteer in 2004 at Point Reyes National Seashore and Golden Gate National Recreation Area in California, with their partner PRBO Conservation Science (now Point Blue).

Leticia was selected for as a Banding Intern for the Conservation of Neotropical Migratory Birds in Riparian Habitat project, based at PRBO Conservation Science's Palomarin Field Station, a mist-netting station founded in 1966, making it the longest running bird population study site west of the Mississippi. The project and internship objectives included: collecting life-history data, monitoring reproductive success and bird use of riparian areas during migration; estimating annual survival and numbers of breeding birds; providing management recommendations to enhance songbird breeding habitat and reproductive success; training field biologists; and educating the public. The monitoring methods used included nest monitoring, variable radius point counts, mist-netting, and territory mapping.

Prior to her Park Flight internship, Leticia completed her undergraduate degree in Biology from Universidad de El Salvador, and received training in the biology and conservation of diurnal raptors and in field methods for the study of birds in El Salvador. She had also participated in mist-netting birds at a Monitoreo de Sobrevivencia Invernal (MoSI) banding station in her country, worked with bird skins, participated in a Christmas Bird Count, and took an intensive course in English.

At Point Reyes, Leticia assisted with the standardized mist-netting, banding, and survey aspects of this project, and received training in running of mist-nets, the extraction, processing, and banding of passerines, conducting passerines area search censuses, and daily computer data entry and verification. She spent 402 hours during the internship mist-netting and banding, and 134 hours entering and proofing data.

"I learned about mist-net sampling techniques," Leticia said, "how to set the nets, how to take the birds off the net without hurting them. I learned that data entry must be done carefully to avoid mistakes because they will be used for future analysis. The different species in the site were new to me and I learned how to identify them, manipulate them, band, and calculate age and sex." She learned "the terms that have to do with banding and the names of the birds in English."

To a lesser extent, Leticia interacted with the public by interpreting the mist-netting and banding operations, working with another Latin American Park Flight international volunteer, Guido Cesár Berguido from Panama, who was selected as the Education Intern. "I remember greeting the public while we were banding and we were told how to manage groups and how to mingle, having a constant communication with the bander and the educator, because the birds' well-being is of utmost importance and so is to constantly check their health while doing the banding presentation for the public."

When Leticia returned from the internship, she coordinated a bird banding project in El Salvador for about seven years with the Programa de Ciencias de la Fundación Ecológica SalvaNATURA. "The

research work helped me collect information about bird population status, both resident and migratory, in El Salvador," she said. She also helped with the planning and on-site logistics, and participated in, a Park Flight Migratory Bird Program-sponsored technical assistance opportunity for SalvaNATURA in El Salvador in 2006, a Bird Monitoring Workshop taught by Dr. Peter Pyle with The Institute for Bird Populations.

"During these years I was able to get certification as a Bander," Leticia said, through a Training Workshop on Bird Banding Techniques and North American Banding Council Certification (NABC) Opportunity at El Imposible National Park in El Salvador in 2008, sponsored by Partners in Flight – Compañeros en Vuelo and Sociedad Mesoamericana para la Biología y la Conservación. Later, she was certified at the NABC Trainer level (Passerines and near Passerines). She worked as a bird banding station coordinator in El Salvador, and also as MoSI coordinator for Central America.

Leticia pursued her Master of Science in Management and Conservation of Tropical Forests and Biodiversity at Centro Agronómico Tropical de Investigación y Enseñanza (CATIE) in Costa Rica, and compled her degree in 2014.

Upon her return to El Salvador, Leticia worked as an independent consultant for several research projects and monitoring of birds and biodiversity, and she had the chance to work with government, non-government, local, and international organizations. She was one of the founders of MUNAT (Mujeres y Naturaleza), a citizen's initiative that strives to promote the conservation of biodiversity in El Salvador through research projects, educational activities and citizen science, motivating and promoting the involvement and leadership of women and girls in science and environmental issues. MUNAT carries out the Programa de Aves Urbanas (PAU; Urban Birds Program) with CONABIO from Mexico and the educational program of World Migratory Bird Day. Through MUNAT she is organizing and planning research projects for the monitoring of birds in El Salvador.

Fourteen years after her Park Flight internship, Leticia met up with one of her colleagues at Point Reyes, Guido Berguido from Panama, and "he introduced me to World Migratory Bird Day (WMBD)." She then got involved with environmental education actions carrying out WMBD activities, which "has opened opportunities for me." Since 2021, she has collaborated with Environment for the Americas as the WMBD campaign coordinator for Central America. "I think that through educational events I discovered my passions," she said, "among them to connect with people through bird conservation messages, to be creative in order to transmit educational messages to people of all ages."

Leticia felt the Park Flight internship had benefits to her country. "I learned about research sampling approaches using banding. Few persons in El Salvador are certified and have experience doing this. Manipulating birds and knowing what data to collect and how to do it requires a lot of precision and field work time."

She also realized personal benefits from her internship. "It was the first time I was away from my family," Leticia said. She had to be in a country "with a different culture than mine" and live with people

she met during the internship. "It proved to be an important experience to get to know myself better, learn about my abilities and shortcomings, which I transformed into challenges to improve, one of them being the language. This helped me grow as a person."

On the professional level, Leticia felt one of the positive impacts "was to gain knowledge about bird banding and to meet several professional women who are leaders in this job, in research, and bird conservation, which motivated me to keep developing this type of work for bird conservation in El Salvador."

But the biggest impact on Leticia's career goals was "to discover what I love to do and to do it to date: bird conservation."



PARK FLIGHT IVIP NAME: Guido César Berguido and Chelina Batista Mojica

HOME COUNTRY: Panamá NPS UNIT: GOGA/PORE and NEJE/NJAS YEAR: 2004 and 2005

In 2004, Guido Berguido from Panama received training at Point Reyes National Seashore in California through their partner PRBO Conservation Science (now Point Blue). He participated in field avian monitoring work, including mist-netting, banding and area search, and also helped with outreach and education, giving public programs and hosting school field trips. "The Park Flight Internship was indeed a life-changing experience," said Guido. "It opened up a whole new universe of opportunities in terms of the contacts and connections with experts in the field of ornithology, which allowed us to broaden our horizons and move forward with our careers."

Upon his return to Panama, he joined the Board of Directors of the Panama Audubon Society and assisted in the coordination of conservation efforts focusing on Important Bird Areas. In addition, he supported education initiatives ranging from birding workshops, giving programs at local schools, and organizing birding festivals.

He went on to start a family-owned ecotourism company which focused on birdwatching tours and academic tropical ecology programs for international schools and universities. "A few years later," Guido said, "upon witnessing the rampant destruction of our rainforests, we decided to use most of the funds from the ecotourism business to purchase land for conservation in what has turned out to be one of Panama's most important biodiversity hotspots."

Then, with another Park Flight alumnus, Chelina Batista Mojica (NEJE/NJAS 2005), Guido founded and became Executive Director of Adopt a Panama Rainforest Association (ADOPTA), which does bird monitoring of the more than 100 bird species which migrate through Panama during their travels between North and South America every year. "We have been promoting further conservation activities which has allowed us to double the size of our forest reserve from 700 acres to nearly 1500 acres," Guido said. "We promoted the discovery of nearly 35 new species of flora and fauna previously unknown to science," and he added, "We have been honored by getting two new species named after me..." Through ADOPTA, Guido was involved in the Neotropical Flyways Project with Cornell Lab of Ornithology and SELVA from Colombia to identify the most important stopover sites used by migratory birds in Panama.

Guido and Chelina also served as Regional Coordinators for Latin America for World Migratory Bird Day, an initiative of Environment for the Americas and the Convention on Migratory Species, to increase awareness of the plight of migratory birds around the world. They were both able to attend the 6th International Partners in Flight Conference in 2017 in Costa Rica, joining other former Park Flight international volunteers at the Partners in Flight Mesoamerica Working Group, Compañeros en Vuelo Mesoamérica (PIF MESO) meeting there. These PIF MESO meetings had been pivotal, since the beginning of Park Flight, to advertising for candidates for the Park Flight Migratory Bird Program international internships. PARK FLIGHT IVIP NAME: Ghislaine Cárdenas Posada



HOME COUNTRY: Colombia NPS UNIT: NEJE/NJAS YEAR: 2010

Ghislaine Cárdenas Posada from Colombia was a Park Flight IVIP in 2010 at the New Jersey Coastal Heritage Trail Route, working with NPS partner New Jersey Audubon Society (NJAS). Her internship was focused on contributing to the NJAS research project, "Mass Gain and Stopover Length in Sandpipers Staging in Delaware Bay During Spring Migration."

Delaware Bay is internationally recognized as one of the world's most important stopover and staging areas for migrating shorebirds, whose populations are declining, and this monitoring focused on understanding the energetic and nutritional requirements of migrating shorebirds and determining migration stopover length. The project targeted four focal shorebird species, Semipalmated Sandpiper, Least Sandpiper, Short-billed Dowitcher, and Dunlin. Working with the NJAS scientists, Ghislaine helped with capturing sandpipers using mist-nets and pull-nets; banding, weighing, and measuring them; marking individuals with leg flags; collecting blood samples to assess condition and feather samples to determine region of origin in South America; and daily surveys to resight individually marked birds. Additionally, she helped with data entry and simple statistical analysis.

This internship afforded her the opportunity to interact with a contingent of international researchers, including some from Latin America, that come to Delaware Bay to work on other migrating shorebird

species. Ghislaine was also able to work at a MAPS (Monitoring Avian Productivity and Survivorship) station operated by NJAS staff to monitor breeding songbird populations, with New Jersey Division of Fish and Wildlife staff to monitor breeding Osprey, and with songbird acoustic monitoring program staff on data analysis and equipment staging.

In addition, Ghislaine was engaged by the NJAS education staff to identify education opportunities she could implement at home and was provided with appropriate curriculum guides and other teaching materials. She also interacted with the public by interpreting project activities to school-aged children visiting the field sites and local NJAS center, and gave a presentation to staff and the public on bird conservation, environmental education and monitoring efforts in her home country of Colombia.

Ghislaine felt she gained many skills during her Park Flight internship. "I learnt to use novel capture techniques for shorebirds. I was able to handle hundreds of shorebirds and learn to collect blood samples and to band them." She thought working as part of a team "was a very enriching experience." She also really enjoyed participating "in some festivals and outreach activities with children." But she felt the biggest asset she gained was that "the internship allowed me to improve my communication skills tremendously."

Ghislaine applied these skills in her home country after her internship. "I was lucky to be able to come back to work for a nonprofit organization in Cali Colombia and there I was able to apply most of the knowledge that I learn during my internship. I was able to help with the shorebirds monitoring program, to assist field projects and to collaborate in educational activities that the organization had."

Prior to her Park Flight internship, Ghislaine had worked with Wildlife Conservation Society Colombia as a Field Assistant on a project on avian influence surveillance in aquatic birds in Colombia, and as a thesis student she assisted Asociación Calidris with research on the spatial distribution and ecological aspects of a subspecies of Cinnamon Teal endemic to Colombia. She completed her Biology degree with an emphasis in genetics from the Universidad del Valle in Cali, Colombia in 2009.

After Ghislaine returned to Colombia, she became a Lab Manager at the Institute Alexander von Humboldt in Cali, and a Teaching Assistant in Ecology, Vertebrate Zoology, and Evolution at Universidad de los Andes in Bogotá, where she received her Master of Science degree in 2013. She then became a Research Assistant, first with Asociación Calidris for a project on wintering ground focal area assessment for Golden-winged, Cerulean and Canada Warblers in Colombia, then with the Universidad de los Andes on a project delineating the Páramo ecosystem in Colombia, and with the Laboratory of Conservation Genetics at Alexander von Humboldt Institute in Bogotá.

"My goal had always been to pursue an academic career in evolutionary biology and ornithology, Ghislaine said. "After my internship I realized the U.S. was a magnificent place to study, work and do research and having this opportunity really opened many doors for me to be able to pursue my academic goals." She was awarded a Fulbright Scholarship to pursue a doctoral degree in the Department of Biology at Wake Forest University in North Carolina, and is a visiting researcher at Brown University's Department of Ecology, Evolution and Organismal Biology. Regarding the benefit of Park Flight to Colombia, Ghislaine said, "I think the benefit of this training program for Colombia has been huge, as many biologists have participated and have come back to run field stations, monitoring programs or conservation strategies. My specific participation in the program helped my country since I have been able to train students to continue monitoring programs for bird conservation."

"I am very thankful to have had this opportunity," Ghislaine reflected, "and wish that other Latin American individuals also have this opportunity in the future."



PARK FLIGHT IVIP NAME: Alexis Cerezo (and Miguel Ramírez)

HOME COUNTRY: Guatemala NPS UNIT: SEKI YEAR: 2002

Alexis Cerezo from Guatemala was selected as a Park Flight international volunteer at Sequoia and Kings Canyons National Parks in California in 2002.

The program goals for this internship were to further the protection of migratory birds and their habitat through long-term monitoring and species assessments, public education, and information sharing with the scientific community and partnerships. The more specific goals were to assess the status of

migratory bird populations and their habitat needs, develop a strong education and outreach program, and assist with the preservation of wintering grounds and stopover points for migratory birds by sharing knowledge, ideas, and training with our Central American partners.

The main activity Alexis was involved with was helping with a MAPS (Monitoring Avian Productivity and Survivorship) banding station, under the tutelage of NPS and The Institute for Bird Populations (IBP) staff. He attended the IBP bird banding training course with three interns from Yosemite National Park. "The most important contribution of the Park Flight Program was the training and experience I and my partner Miguel Ramírez [another Park Flight intern from Guatemala] acquired with respect to ageing and sexing birds by wing molts. Most importantly, we immediately started applying these techniques in Guatemala." In addition, Alexis was involved with training on monitoring Peregrine Falcon and Willow Flycatcher in the parks.

After his internship, Alexis began the Monitoreo de Sobrevivencia Invernal (MoSI) program in Guatemala, which monitors Neotropical migrants in winter, "starting a very fruitful collaboration with IBP that continues." Alexis became the Biological Research Director of the Foundation for Ecodevelopment and Conservation (FUNDAECO), and Miguel the Coordinator of FUNDAECO's Resident and Migratory Bird Monitoring Program of Caribbean Guatemala.



PARK FLIGHT IVIP NAME: Luis Soto Chavarría

HOME COUNTRY: Honduras NPS UNIT: BAND YEAR: 2005

PARK FLIGHT IVIP NAME: Natalia Corrales Gómez



HOME COUNTRY: Costa Rica NPS UNIT: BAND YEAR: 2005

Luis Soto Chavarría from Honduras was selected as a Park Flight international volunteer at Bandelier National Monument in New Mexico in 2005, along with Natalia Corrales Gómez from Costa Rica. Both Luis and Natalia were the first from their respective countries to participate as a Park Flight IVIP.

Stephen Fettig, Bandelier's Wildlife Biologist, designed these international internships to involve two IVIPs working together, and felt hosting one with advanced English skills and one with beginning English skills worked well. "Such a pairing," he said, "helped rapidly build the skills of the beginning English speaker. Building English language skills within the community of ornithologists is important. In Honduras, for example, very few ornithologists speak English." Fettig's approach to building capacity for language skills turned out to be very effective. "It helped me a great deal with understanding the English language and communicating in that language," Luis said. "Before the internship, I hardly understood English. Three months into the internship, I was able to understand and speak English."

Luis and Natalia were selected to spend 13 weeks participating in mist-netting Neotropical migrant songbirds, and providing bird-oriented interpretive programs for both students and adults. Both were young biologists and had banded birds. "In our first day of fieldwork with mist-nets [at Bandelier], Natalia recalls, "Luis and I had the surprise to find more than 10 birds in one net, something that we have never seen before." Luis added, "We work for a project [in Honduras] called MoSI (monitoring bird survivorship in the winter), but we have never caught as many birds as we caught at Bandelier this fall; there were two days when we caught more than fifty birds each day." Given their bird background and internship experience, it was fitting that Luis and Natalia were able to attend the dedication ceremony that September for Bandelier becoming a National Audubon Society Important Bird Area, part of a global initiative which aims at identifying and conserving the most important places for bird populations.

Each international volunteer also spent two weeks working with Hawks Aloft, Inc., a key partner for Bandelier, learning more about bird monitoring and education programs. They took the lead in providing educational programs during student field trips to the park's primary banding site as well as giving in-classroom programs. They talked with students and visitors about the mist-netting project, the problems faced by the many birds which breed in the U.S. and winter in countries to the south, the bird conservation work being done in their home countries in Central America, and about bird and habitat conservation programs in general. Natalia and Luis also helped lead bird field trips to Bandelier for Spanish-speaking residents of Los Alamos County and nearby areas. After a field trip to the banding station, one 5th grade student wrote a thank you to both interns for "sharing birds with us," adding, "Since you know so much about birds can you tell me if a parakeet's beak is sharper than a Bluebird?" Another student wrote, "I hope that some day I will know that much about birds."

Natalia's assessment at the end of her internship was that the complementary activities "enrich the experience for the intern," such as bird banding at Rio Grande Nature Center, camping at the Hawkwatch in the Manzano Mountains, and working with Hawks Aloft, as well as being exposed to different management and research projects in the park. As the primary banding site was at an elevation of 8,900 feet, Natalia also provided feedback to "continue to provide warm coats or adequate clothes for the cold fall weather," which neither of these interns from the Neotropics were used to.

Luis felt the banding program in the park during migration was "a great opportunity for volunteers from Central America to work with birds that they will later work with in their home countries," and believed "it is an important social task to go to schools and teach students about birds. It seems to be that students enjoy learning about birds, and that they learn and enjoy more when they visit the banding station and see live birds." He appreciated the local volunteers who worked at the banding station. "From my point of view," Luis said, "it is very important to include in the work people from the community. All the community volunteers love birds and helped make the program the success it has been." Fettig agreed, "Local volunteers provide the ability to handle and process more birds than otherwise possible, thus supporting the scientific objectives of the project," adding they are "also providing valuable social experiences for the international volunteers. In 2005 local volunteers provided meals and trips to Santa Fe and Taos for the international volunteers, as well as friendship and a real flavor of life in Northern New Mexico." Luis concurred with Natalia that the other "complementary" activities were very important. Regarding the Manzano Hawkwatch, he reflected, "It is impressive to be able to observe raptors and be able to participate in the counts. It is also important to be part of the banding process of these beautiful birds. The experience is simply spectacular." He felt the Rio Grande Nature Center opportunity, part of a 20-year songbird banding project, was "extremely valuable to observe species of birds not seen at Bandelier and to see other ways of doing bird banding work." And he appreciated that "the people at Hawks Aloft shared the value of teaching in all of the many different places they visit with their educational raptors," which were often for underserved communities.

After returning to Costa Rica, Natalia finished her Bachelor's degree in Natural Resources Management from Universidad Nacional, on the use of habitat and prey by Limpkin (*Aramus guarauna*) in the Mata Redonda lagoon in Guanacaste. She took a biologist position in the aquarium and rescue center of the Parque Marino del Pacífico in Puntarenas, working on marine species rehabilitation. She was also Manager of the Rainsong Sanctuary and Wildlife Rescue Center in Cabuya, at the edge of Reserva Natural Absoluta Cabo Blanco, Costa Rica's first nature reserve (1963) and a refuge for seabirds.

Natalia went on to get her Master of Science degree from Universidad Nacional on marine rescue centers as a strategic component for the management of costal marine resources. Since 2015, she has been the Executive Director of Parque Marino del Pacífico, under the Ministerio de Ambiente y Energía de Costa Rica, working with marine coastal education, tourism, conservation, and aquaculture. "We have a great rapport with coastal communities," Natalia said; "we foster capabilities and promote marine educational events." She is also the Government Focal Point for the Ramsar Convention Program on Communication, Education, Awareness and Participation (CECoP), a Deputy member of the Cocos Marine Conservation Regional Council, and an academic at the Escuela de Ciencias Biológicas in the National University.

In assessing the value of the Park Flight internship for her career, Natalia said it represented a very important professional and personal experience. Her time spent with Hawks Aloft "has been quite useful because I work with an animal rescue center where occasionally we receive birds with some injuries; we also promote environmental education activities and events." Of her time at the banding station in Bandelier, she said, "The internship enabled me to acquire the finesse to manipulate birds of all types. I especially and fondly remember woodpeckers because many a time they would tangle their tongues around the nets or they would make big balls of net with their feet. Their strong bills really hit hard when we manipulated them."

Regarding her environmental education experiences, Natalia said, "it was very motivating, and we had a lot of fun. Working with children is always something that really pleases me. Normally, children never had an inkling of where our countries of origin were located, so we were always happy to see their faces when we showed them maps. They were even more surprised when we told them that some of the birds living in North America traveled to our countries in Central America, flying many kilometers looking for better food and shelter."

"My Park Flight internship makes me proud and brings back beautiful memories and images," Natalia reflected. "It recalls very many incredible persons that I met and very many wonderful places that I had the privilege of visiting: Bandelier and all of the places we visited are really magical, as well as all of the natives who preserve their traditions and customs. It was a very enriching cultural exchange of which I keep several mementos that today ornate my house. Living and working in a country far from your own really grants you important experiences that enable you to better prepare for your professional future life."

"My kinship with birds is everlasting," she added, "and I have been able to promote the celebration of the World Migratory Bird Day and the abilities to manipulate birds." "It was a fabulous experience for me to have been a part of all this, I grew a lot, and I have very fond memories that I will always treasure. Many times, I tell these stories when sharing experiences."

On Luis's return to Honduras after his Park Flight internship, Luis assisted Ph.D. candidate David Anderson in his thesis work with canopy birds in the lowland rainforest of Pico Bonito National Park, the largest national park in Honduras. He became Project Biologist at Spanish Cooperation, San Lorenzo, in the Department of Valle, coordinating with groups of fishermen "to know the state of conservation of the fishing resources" in the Gulf of Fonseca.

Luis also continued to participate in MoSI (Monitoreo de Sobrevivencia Invernal bird banding stations; Monitoring Neotropical Migrants in Winter) bird banding stations in Honduras. He built on his foundation from Bandelier by taking additional bird banding trainings, including a Training Workshop on Bird Banding Techniques and North American Banding Council Certification Opportunity in El Imposible National Park in El Salvador in 2008 by Partners in Flight/Compañeros en Vuelo and Sociedad Mesoamericana para la Biología y la Conservacíon. He also completed an Advanced Bird Banding Techniques and the MoSI Program training by Belize Foundation for Research and Environmental Education (BFREE) in Belize, and a Bird Banding and Advanced Techniques of Ornithology by North American Banding Council workshop at Powdermill Avian Research Center in Pennsylvania.

Luis obtained his Master of Science degree in forest and biodiversity management from the Tropical Agricultural Research and Higher Education Center at CATIE in Costa Rica. Since 2017, he has been a Teacher/Researcher at National Autonomous University of Honduras in the Sula Valley (UNAH-VS), in San Pedro Sula, teaching environmental education classes for students of all careers and as the person in charge of the ornithology team of the Biology department. In addition, he manages bird monitoring stations and bird studies in the region, and collaborates with government and private institutions in the management of Honduran bird fauna.

Luis felt his Park Flight experience "helped me a great deal because I have been able to practice what I learned, especially concerning bird management and manipulation." He also said that his Park Flight internship "helped my public speaking capabilities with the general public and school-aged children."

"During my career," Luis said, "I have worked as a researcher especially in the subject of birds...I am passionate about research and my previous experience has led me to coordinate groups of people, as

well as collaborating with bird monitoring stations to determine the population health status of migratory and resident birds, as part of national and international efforts for its study and preservation."

Overall, Luis said this about the impact of his Park Flight internship personally and on his professional goals: "It was an enriching experience, from being immersed in the American culture and the kindness of the people who welcomed us with open arms and without prejudice, to the bird monitoring experience which I still work with."



PARK FLIGHT IVIP NAME: Pablo Elizondo Camacho

HOME COUNTRY: Costa Rica NPS UNIT: GRSM YEAR: 2007

Pablo Elizondo from Costa Rica, known as Chespi by his friends, was a Park Flight intern at Great Smoky Mountains National Park in 2007. The park, which covers over 2,000 square kilometers at the southern end of the Appalachian Mountains, protects some 240 bird species of which 126 are breeding birds and 52 are Neotropical migrants.

Prior to his Park Flight internship, Pablo was the Director of Communications for the Asociación Ornitológica de Costa Rica (AOCR, Costa Rican Association of Ornithology). He had been consulting for the government of Costa Rica since 2003 on projects related to bird studies, including avian monitoring projects in San Vito and Tapanti National Parks and coordination for bird monitoring stations at Rancho Naturalista and CATIE. He had also conducted species-specific research on Black-faced Solitaire and Yellow-bellied Siskin.

Pablo's Park Flight internship was focused on several activities. He participated in a study of the effects of acid and mercury deposition on songbird reproduction in high elevations of the park, assisting with mist-netting Neotropical migrant songbirds and with inventories of birds and bird parasites. The main study species for the depositional study was the Dark-eyed Junco, for which he collected blood and feather samples, located and monitored nests, and collected food items (especially land snails). Pablo also assisted with two MAPS (Monitoring Avian Productivity and Survivorship) bird banding stations, one at low elevation in Tennessee and the other at high elevation in North Carolina. The primary target species for the mercury study at the lower elevation site was the Louisiana Waterthrush, a species shared with Costa Rica.

Pablo was also involved in providing bird-oriented interpretive programs for adults and the general park visitor. He assisted with educational programs for International Migratory Bird Day and gave presentations to park staff and local groups such as the Tennessee Ornithological Club and Gatlinburg Rotary. Of Pablo's skills as a public speaker, almost bilingual, his internship supervisor, Biologist Paul Super said: "Pablo is an excellent speaker and a bit of a stand-up comedian. The crowd loved it! We should find money to put him on the lecture circuit for Mesoamerican bird conservation concerns. He could more than pay for himself, I think, and generate a lot of sponsors for work south of our border. He puts a human face on a conservation concern and that is often all it takes for someone to become donors."

Pablo said of Paul, he "did EVERYTHING to help me achieve my expectations. Working with a strong commitment not only professional but personal, Paul has taken his job seriously in order to promote this internship, the conservation of the park, the research initiatives and the bird conservation in the Americas."

Pablo also worked with a researcher and co-supervisor, Becky, now the Science Coordinator for the Appalachian Mountains Joint Venture with the American Bird Conservancy, who at the time was studying the effects of atmospheric pollution on high-elevation birds and snails in the Southern Appalachians. "Try hard is Becky's way to work," Pablo said, "waking up early and going to bed late, helping me achieve my knowledge and personal goals...and something very important: getting lifers."

He thought both Becky and Paul "have understood that bird conservation is not only in their hands, it depends on every country hosting the migratory birds, and that their efforts are useless if other countries and researchers don't commit with conservation."

Pablo brought some auxiliary skills to his internship. "Pablo's skill with the camera," Paul said, "proved helpful not just for documenting his work and experiences, but also for documenting some park education programs. We came to depend on his camera for taking pictures of him at work in the park!"

At the end of Pablo's internship, he summarized it this way: "After 603.5 hours, 14 weeks, 5 presentations, over 35 junco nests, 12 snail plots, over 70 lifers, 7 interviews with the media, and many many good friends and good memories, my time to go home has come."

After returning to Costa Rica, Pablo continued in his capacity as the National Coordinator for Partners in Flight Costa Rica, as part of the Partners in Flight Mesoamerica Working Group, for which he won a 2007 Partners in Flight Group Leadership Award, along with the other Partners in Flight Mesoamerica National Coordinators.

In 2008, he was selected as a candidate for a Training Workshop on Bird Banding Techniques and North American Banding Council (NABC) Certification Opportunity in El Imposible National Park in El Salvador, sponsored by Partners in Flight in collaboration with the Society for Mesoamerican Biology and Conservation (PIF-SMBC). Prior to that, he had banded some 1,500 birds and operated around 8,000 net/hours in various sites in Costa Rica and in Tennessee/North Carolina. At this El Salvador workshop, Pablo achieved NABC certification at the Bander level, and was later certified at the Trainer level. In 2009, he was a trainer for another PIF-SMBC sponsored workshop in Belize on Statistical Analysis and Scientific Writing.

Pablo partnered with the U.S. Forest Service Wings Across the Americas, Klamath Bird Observatory, and National Institute of Biodiversity to coordinate bird monitoring efforts country-wide, and became the national coordinator for the Tortuguero Integrated Bird Monitoring Program. He established and became Executive Director of the Costa Rica Bird Observatories and the Costa Rica Bird Banding Network. He was Co-Chair of the Alianza Alas Doradas, and later became the Chair of the Western Hemisphere Bird Banding Network. He also took on the immense task of organizing the 6th International Partners in Flight Conference in 2017 in Costa Rica, the first to be held outside the U.S., which was a great success, and joined other former Park Flight international volunteers at the Partners in Flight Mesoamerica Working Group, Compañeros en Vuelo Mesoamérica meeting there.

In 2018, Chespi announced the first payment in the Americas for ecosystem services for migratory birds, specifically for the Golden-winged Warbler which is one of the highest priority Partners in Flight species. He was featured in 2021 in the National Geographic sponsored short film on the Bird Genoscape Project called "Feathers in Flight" (https://www.youtube.com/watch?v=_p43ksRgllk) by Day's Edge Productions, which is "revolutionizing bird conservation by connecting migratory birds – and the people who care about them – across the Americas."

Reflecting on his Park Flight experience, Pablo said, "The Park Flight internship is an amazing way to protect the migratory birds across the Americas, working as a training and cooperation platform. I felt my knowledge and experience greatly benefited by the program; I learned things that otherwise were not possible." At the beginning, he said, "I had expectations about my internship, and I have to recognize they were not what I thought; they were a lot more, beyond my expectations."

"Thanks a lot for your endless and constant support," he added.

PARK FLIGHT IVIP NAME: Hugo Enrique Toledo



HOME COUNTRY: Guatemala NPS UNIT: SEKI YEAR: 2004

There is such a wrenching gut punch and shock when learning that a rising star has been lost, far away, especially given this was unknown to most of those who worked with him through Park Flight. Searching for a current email address for Hugo Enrique Toledo from Guatemala, who did a Park Flight IVIP internship at Sequoia and Kings Canyon National Parks in 2004, we discovered a grim story that Hugo had tragically been killed in an automobile accident.

Hugo's name was put forward for consideration for a Park Flight IVIP position by Alexis Cerezo, a fellow Guatemalan who had been a Park Flight IVIP at Sequoia and Kings Canyon National Parks in 2002. At the time, Hugo was a student and a research technician with Fundación para el Ecodesarrollo y la Conservación (FUNDAECO), where Alexis was a biological researcher. FUNDAECO, which was established in 1990, "is one of the main conservation organizations of Guatemala, working to conserve biodiversity and promote sustainable community development through the participatory establishment and management of Protected Areas." He had been working for FUNDAECO at bird banding stations in the tropical rainforest of Cerro San Gil, a protected area in northeastern Guatemala, and had previously been a FUNDAECO fieldwork volunteer from 1996 to 2003.

Given his experience with bird banding, Hugo was an excellent candidate and was selected for a Park Flight IVIP position at Sequoia and Kings Canyon National Parks in the summer of 2004. He was involved in a number of activities there, but the main purpose of the internship was to learn and to perfect the banding skills for the Monitoring Avian Productivity and Survivorship Project (MAPS), with banding stations at two natural meadows. Hugo summarized that by the end of the banding effort, there were a "total number of 99 new banded juveniles, 224 new adults and 38 different species trapped in the nets." He also helped with monitoring Peregrine Falcon nests at two different locations and conducted a North American Breeding Bird Survey. As a special contribution, he made a bilingual poster, with some of the pictures taken at the banding stations, about the birds that breed in Sequoia and Kings Canyon National Parks and winter in Guatemala, with general information on their wintering range and habitat.

Reflecting on his Park Flight internship, Hugo wrote: "This was a whole new experience for me, since the first day I came to the U.S., until the last day. Those first days were of constant training at Starr Ranch Sanctuary, Orange County, California, where I, together with three more birders, were learning more about banding techniques and other details. That was wonderful before going into the mountains. I liked that." He credited the NPS park staff for their approach to this training: "A good idea from the Park, was to choose a specialist from The Institute for Bird Populations for leading the project and having the necessary experience. I learned a lot from that Biologist [Kerry Wilcox] whose experience on banding and birding techniques are notable. I also liked that." In fact, after every task Hugo wrote about in his final internship report, he added at the end, "I liked that."

Of his experience at the parks, he said: "I improved my skills in banding techniques as well as in aging and sexing birds in the hand." In conclusion, Hugo said: "And for all the new birds and ways of studying them that I learned on this internship program was the most important for me, as I chose this internship specially for the birds, so then I can apply all that new experience...to banding local and migrant birds...in my home country Guatemala."

We can't know all that Hugo did after returning to Guatemala, but it surely involved more work with FUNDAECO and, apparently, also as an exceptional bird guide for visiting birders. The source for the sad news about Hugo's passing was a person we don't know and can't track down, a "Mike" who write "Requiem for a Bird Guide" in his "10,000 Birds" post on December 3, 2014. We're sharing this heartbreaking piece to honor his memory. Mike wrote the following, which is quoted verbatim:

"Any birdwatcher who has traveled widely knows that the success of a birding expedition depends far more on who is charge of finding birds than on the birds themselves. Where an average guide makes you feel like you have front row seats to a special show, a truly great birding guide pulls back the curtain and takes you backstage to hobnob with the stars. I'm sorry to say we've lost a truly great bird guide.

Hugo Haroldo Enriquez Toledo has died, apparently as a result of injuries suffered in an automobile accident. Anyone fortunate enough to visit Guatemala within the last decade or so may have had the privilege to see many, many excellent birds because of Hugo's skill and savvy. I certainly did while participating in International Birding Encounters in 2008 and 2009. From Antigua to Atitlan to the Peten, Hugo helped reveal some of the best birds and birding bonhomie Guatemala has to offer.

Sharon, who was part of our grand expedition in 2009, remembers Hugo well:

Besides being a phenomenal bird guide, he was a warm and wonderful human being. And quite the therapist for those of us who were about to lose it when we embarked on the Horned Guan Death March up the volcano on Lake Atitlan.

I also recall that trip as Hugo's finest hour, as I wrote at the time:

As with so many steep trails, the descent can be more perilous than the ascent. Birding took a backseat to staying alive and upright. I'll never forget, though, how ebullient the mood was and how dark it might have been. I'll also always remember how amazing our guide was. Hugo Haroldo Enriquez Toledo has shown me a lot of amazing areas and avifauna over the last two years. His skills are unparalleled, his enthusiasm infectious. In fact, when many of my traveling companions were too exhausted to fit in that extra hour of birding before or after a trip, Hugo always grabbed his bins in search of more. And yet San Pedro was his finest hour. That we found our target wasn't a shock since, in sixteen attempts, Hugo had only gone guanless once. No, I had complete confidence that if anyone could get us on the guan, he could. What was amazing was that he made it at all. Hugo, lugging a scope, bins, and the other accouterments of the bird biologist trade, was in the lead most of the trek. Often, I followed him and noted that as we progressed, he was steadily wheezing and coughing. It turned out that he was in the grip of a rough respiratory bug. Yet despite his evident pain, he not only made the trip but stoically set the pace that dragged the rest of us laggards up the slope.

Truly great birding guides deserve the kinds of tributes we afford to those who make this world a better place."

PARK FLIGHT IVIP NAME: Idris Fredison HOME COUNTRY: Suriname NPS UNIT: NEJE/NJAS YEAR: 2009

Idris Fredison from the Republic of Suriname was selected as a Park Flight international volunteer in 2009, along with Thomas Pagnon from French Guiana, just east of Suriname, for the NPS New Jersey Coastal Heritage Trail Route/Pinelands with partners New Jersey Audubon Society (NJAS) and Cape May Bird Observatory.

Idris has the distinction of being the only Park Flight IVIP from this small country on the northeastern coast of South America. Although most of Suriname is tropical rain forest, the coastal region, where most of its cities have been built, is covered with mudflats, which is important habitat for migratory shorebirds including the Semipalmated Sandpiper (*Calidris pusilla*). This species, which has seen a sharp population decline over the last several decades, breeds in the Arctic and stops over to rest and refuel in Delaware Bay, migrating some 3,000 miles to winter in Suriname and French Guiana.

Despite significant conservation efforts in Delaware Bay, which is internationally recognized as one of the world's most important stopover and staging areas for migrating shorebirds, the population declines of this and other shorebird species spurred the engagement of international interns from, and later field visits to, the species' wintering grounds to learn about the threats there such as illegal hunting.

The goal of the New Jersey Audubon Society's project which Idris and Thomas helped with was to develop comprehensive conservation and management plans that address the needs of sandpipers that forage in tidal marshes during spring migration stopovers in Delaware Bay. The efficacy of these plans is

dependent upon understanding energy accumulation dynamics, and relationships between mass gain and residence time in sandpipers before they depart from the Bay for Arctic and sub-Arctic breeding areas. Focal species for this project included the Semipalmated Sandpiper, but also the Least Sandpiper, Short-billed Dowitcher, and Dunlin.

The shorebird research and monitoring components of this internship included assisting with the standardized netting, banding, and survey aspects of this project, with training on use of mist- and pullnets, extracting sandpipers from nets, processing and banding of shorebirds, collecting blood and feather samples, surveying for marked sandpipers, and computer data entry and analysis. While doing this work, the IVIPs had the opportunity to interact with a contingent of international researchers, including some from Latin America, that come to Delaware Bay to work on other migrating shorebird species, as well as to learn from Dr. David Mizrahi, New Jersey Audubon's eminent shorebird expert.

They also had the opportunity to participate in education and outreach activities that they could implement in their home countries and were provided with appropriate supplemental materials including curriculum guides and other teaching materials. Additionally, these interns were able to interact with the public by interpreting project activities to school-aged children visiting the field sites and a local NJAS education center. The IVIPs also gave presentations to staff and the public on bird conservation, environmental education, and monitoring efforts in their home countries.

For Idris, the skills he gained while in this New Jersey Park Flight internship were invaluable. "I improved in recognizing the different shorebirds," he said. "I was trained in taking biometric data from birds. We measured the weights, fat and the length of beak. We also took feather and blood samples." He broadened his abilities through involvement with the project's education and outreach. "For the first time I did outreach activities and public speaking in English [the official language of Suriname is Dutch] for school children that came for a field visit to the sites where we were working."

Idris learned about the way the New Jersey Audubon Society was doing their conservation program. "I saw that they were very proactive and creative in engaging children and the public in their conservation. The way they invited students to the sites for example and the way more people are involved in the different birdwatching related activities."

On his return to Suriname, Idris worked for the Foundation for Nature Preservation (STINASU) and World Wildlife Fund, in their marine turtle monitoring program. He also collected, classified, described, and labelled plant material in Brokopondo Lake along the Suriname River, for further identification by herbaria. He applied his experience with field techniques to assisting with a shorebird monitoring and conservation program in Suriname, capturing, tagging, measuring, and collecting tissue samples from shorebird species. "Over two years I tagged 300+ birds," he added. Idris also participated in small plane aerial shorebird surveys along the coast.

Idris went on to obtain Secondary School Teacher Certificates in Biology at the Advanced Teachers Training College in Paramaribo, Suriname, then taught secondary and high school students. He has been a secondary school teacher for over eight years, training, advising, and coaching students in class and field situations, and an "enthusiastic nature educator," initiating and executing nature educational school programs for 300+ students. Idris is a Teaching Instructor at LBO Scholen School in Paramaribo, instructing over 100 students per year in biology, history, and geography, including field visits. He has also volunteered as a Community Educator on climate change in indigenous villages.

Reflecting on how he used the skills learned through his Park Flight internship in New Jersey, Idris made this assessment: "After this program I became a more professional and skilled educator." "When I started teaching in public school," he explained, "I was able to do more outdoor education activities with the students. I also organized different community-based education programs." The field techniques he learned for monitoring shorebirds in the U.S. also allowed him "to work in a shorebird conservation program in my country of Suriname." These shorebirds are shared between these distant geographies, which are dependent upon bird conservation efforts, and bird conservationists like Dr. Mizrahi and Idris, in both countries.

PARK FLIGHT IVIP NAME: Victoria Galán Cantón



HOME COUNTRY: El Salvador NPS UNIT: GOGA/PORE/PRBO YEAR: 2005

Victoria Galán Cantón from El Salvador was selected as a Park Flight international volunteer in 2005 at Point Reyes National Seashore and Golden Gate National Recreation Area in California, with their partner PRBO Conservation Science (now Point Blue).

Vicky was selected as a Banding Intern for the Conservation of Neotropical Migratory Birds in Riparian Habitat project based at PRBO Conservation Science's Palomarin Field Station, a mist-netting station founded in 1966. The project and internship objectives included: monitoring reproductive success and bird use of riparian areas during migration; estimating annual survival and numbers of breeding birds; providing management recommendations to enhance songbird breeding habitat and reproductive success; training field biologists; and educating the public. The monitoring methods used included nest monitoring, variable radius point counts, mist-netting, and territory mapping.

Prior to applying for this Park Flight internship, Vicky was a biology student at the National University of El Salvador. She had applicable skills from volunteering for 10 months in a migratory bird monitoring project in El Salvador, at SalvaNATURA's MoSI stations, capturing and removing birds from mist-nets, banding and taking vital statistics in the field. This experience was complemented by her Bachelor's thesis study on the nesting success of three species of Passeriformes which were residents of the cloud forest. She had even taken an intensive English course to improve her language skills in anticipation of applying for this internship. Vicky stated as her desire to participate in Park Flight, "I wish to apply this knowledge and experience upon returning to my native El Salvador by further involving myself in the conservation of the flora and fauna. My professional goals include coordinating a permanent monitoring station for birds and applying for a master's degree program."

At Point Reyes, Vicky assisted with the standardized mist-netting, banding, and survey aspects of this project, and received training in running of mist-nets, the extraction, processing, and banding of passerines, conducting passerines area search censuses, and daily computer data entry and verification. She spent a total of 431 hours during the internship mist-netting and banding, and 109 hours entering and proofing data. "I honed my bird banding and capture skills," she said, "which I used in my job as banding station coordinator in El Salvador...these I fine-tuned afterwards while banding in my country." She felt the data gathered "helped decision-making processes and to prioritize conservation actions."

Vicky also interacted with the public by interpreting the mist-netting and banding operations, and worked with another Latin American Park Flight international volunteer, Paola López Nepote from Mexico, who was selected as the Education Intern. "I explained the extraction, banding, and data collection processes to visitors," Vicky said. This skill helped her back home in working with MoSI bird monitoring stations, carrying out banding workshops for students and volunteers, and also in developing environmental education activities with birds. A "soft skill" she acquired was teamwork and leadership improvement for the benefit of the stations, and technical team support for field data.

After her internship, Vicky benefitted from a Park Flight Migratory Bird Program-sponsored technical assistance opportunity for SalvaNATURA in El Salvador in 2006, a Bird Monitoring Workshop taught by Dr. Peter Pyle with The Institute for Bird Populations. Dr. Pyle is the author of the Identification Guide to North American Birds Part I, better known as the "bander's bible." She was also selected as a candidate for a Training Workshop on Bird Banding Techniques and North American Banding Council Certification (NABC) Opportunity at El Imposible National Park in El Salvador in 2008, sponsored by Partners in Flight – Compañeros en Vuelo and Sociedad Mesoamericana para la Biología y la Conservación. Her selection as an NABC candidate was based on having worked in 22 field stations in El Salvador where she had the opportunity to train volunteers and staff in bird monitoring techniques, as well as having processed an astounding 2,200 birds and operated 45,960 net/hours in El Salvador and Point Reyes, California. At this El Salvador workshop, Vicky achieved NABC certification at the Bander

level, and she was certified at the NABC Trainer level (for Passerines and near Passerines) in Costa Rica in 2010.

Back in El Salvador, Vicky continued her bird monitoring. She felt she was able to get a formal position as coordinator of banding stations and data collector as a result of collaborations resulting from Park Flight. She was the coordinator for the bird monitoring stations in El Salvador from 2006 to 2011, and this was her paying job from 2019 to 2020. She was also the country coordinator of other bird initiatives led by SalvaNATURA, beginning in 2006. She has been involved with coordinating the Central American Waterfowl Census since 2012 and as country coordinator of the Migratory Shorebird Project for the shorebird census, since 2015. She was also a professor of Biology and Natural Sciences. Through SalvaNATURA, Vicky was Public Use Coordinator for Environmental Education and Biodiversity at a natural protected area, Espino-Bosque los Pericos-Parque del Bicentenario, also Coordinator of the Communities and Biodiversity Project, and a Rainforest Alliance certification assessor.

At the Universidad de El Salvador, she received a diploma in 2011 in Educational Formation for Professionals from Departamentos de Ciencias de La Educación, and her Master's degree in 2015 from the Facultad de Ciencias Agronómicas in Integral Management of Water.

Vicky helped Carol Beidleman and Edwin Juarez facilitate the Partners in Flight Mesoamerica Working Group, Compañeros en Vuelo Mesoamérica meeting at the 6th International Partners in Flight Conference in 2017 in Costa Rica.

She reflected on the biggest impact of the Park Flight internship on her career. "The most important aspect for my professional life has been to have the chance to work with birds. It has been very satisfactory to work banding landbirds...my purpose is to keep banding landbirds and, if possible, shorebirds." "The Park Flight internship opened doors and I met bird professionals," she said. "I was able to forge relationships and participate in workshops and other activities related to banding and birds in general."

She felt her country "benefitted from having a well-trained and experienced banding professional and data collector. These skills I learned during my internship with Park Flight."

PARK FLIGHT IVIP NAME: Carlos González Sánchez HOME COUNTRY: Mexico NPS UNIT: NOCA YEAR: 2011

Carlos González Sánchez from Sonora, Mexico was selected as a Park Flight international volunteer in 2011 at North Cascades National Park in Washington.

Early in his internship, Carlos continued work on a grant project "Engaging Latino Audiences in Informal Science Education" funded by the National Science Foundation. Park Flight IVIP Daniel Méndez Aranda had initiated this project in North Cascades the previous spring, surveying the Latino communities

surrounding the park as well as Latinos participating in the Leavenworth Spring Bird Fest (learning that only 9.8% of participants were Latino).

Carlos then implemented the second year of this project, using the results of Daniel's surveys to adapt the Bird Fest programs to meet the needs of Latino audiences, such as offering programs that show youth future opportunities, were for the entire family, and were led by another Latino and in Spanish. This effort increased attendance by Latinos at the Fest and at other such events across six study sites, from an average of 7% to 20.5%. Reflecting on the Bird Fest, Carlos said it "was a great experience," but he added, "the only thing I was unprepared for was the weather."

After the Bird Fest was over, Carlos developed and presented bird walks and evening campground programs in English and Spanish for park visitors related to the Neotropical migratory bird populations shared among the Americas, and presented a program about bird conservation in his home country for the park and partner staff. He also did school programs and staffed the front desk of the park's visitor center. For the neighboring Latino community groups, he developed and presented Spanish-language outreach programs and park field trips, and discussed the park and Neotropical migratory bird issues for local Spanish-language radio stations and newspapers.

"Being part of a team of environmental educators was very important for my training," Carlos reflected. "I learned to work with groups, not only in Spanish, but also in English. I also became familiar with new approaches from persons with a vast knowledge of the issue." His experience with the Bird Fest inspired him after his return to Mexico. "I started the Hermosillo Bird Festival with support from Ornithology, University of Sonora."

Regarding public speaking, he acknowledged that his "confidence and techniques improved by presenting and speaking in front of very diverse publics." He said, "One of the most important aspects was being able to work in English as a second language. Because of it, my present job as a birdwatching guide for tourists in Mexico has improved a lot."

Carlos also had biological monitoring duties during his internship. Prior to Park Flight, he had done surveys of Ferruginous Pygmy-Owls in northern Sonora, which provided appropriate background for helping with the park's Spotted and Barred Owl surveys. "Having monitored owls in the past," Carlos said, "the opportunity of training and monitoring the Spotted Owl helped fill out my profile as an ornithologist." He said his North Cascades bird "experience and future ones allowed me to become one of the voluntary reviewers for aVerAves (eBird) in the state of Sonora, Mexico" (a collaborative project between the Cornell Lab of Ornithology and CONABIO, Comisión Nacional para el Conocimiento y Uso de la Biodiversidad). Carlos also had the opportunity through cross-training to assist with aquatic surveys in the park.

After Carlos completed his Park Flight internship, he became a Biological Consultant in Zacatecas, conducting surveys of flora and fauna in desert scrubland. He then took on a series of Biological Field Technician and Field Biologist positions. He worked with the University of Montana and Sky Island

Alliance across the Sky Islands of Mexico and the adjacent Sierra Madre; did Ferruginous Pygmy-Owl and Elf Owl surveys in Sonora for the University of Arizona; Yellow-billed Cuckoo surveys in Sonora for the Southern Sierra Research Station; flora and fauna surveys and species rescue and management for Visión Ambiental Sonora S.C. Environmental Consultant. "Upon my return to Mexico," Carlos said, "I was able to get involved in different projects where I used the abilities learned. The most important issues were training people to carry out monitoring of species such as *Toxostoma curvirostre* and *Coccyzus americanus.*"

Since 2016, Carlos has worked with Great Basin Bird Observatory, initially doing surveys, nest monitoring, trapping, and radio telemetry tracking of Elf Owls and Pinyon Jays, and riparian bird surveys. His current position as Crew Leader for the Great Basin Bird Observatory is thanks to funding provided by the Sonoran Joint Venture, focused on conducting surveys for Bendire's and LeConte's Thrashers in northwest Mexico, a research priority for the Desert Thrasher Working Group. These species have experienced steep population declines since 1970 and are on a trajectory to lose another 50% of their population in the next 50 years. Surveys have been conducted across their ranges in the southwest U.S., however little was known about their status in Mexico where a large part of their populations reside. When not engaged in this effort, Carlos is a birdwatching guide in Mexico. He has also participated in the annual Christmas Bird Count in Hermosillo, and is Coordinator for the Ornithology Club at the Universidad de Sonora.

Reflecting on the benefits of his Park Flight internship, Carlos said, "As a person and as a pupil, it was a very rewarding experience. I had the chance to live with other persons, use a different language, get to know other cultures, and meet people passionate for things that I also value. This experience was life changing." The positive impacts on his career goals were far-reaching. "Having this experience and improving my English knowledge impacted my professional life. I was able to get jobs in Mexico and other countries and to forge the necessary contacts to bring projects to Mexico."



PARK FLIGHT IVIP NAME: Mariamar Gutiérrez Ramírez

HOME COUNTRY: Nicaragua NPS UNIT: CUVA YEAR: 2004

Mariamar Gutiérrez Ramiréz from Nicaragua was selected as a Park Flight international volunteer at Cuyahoga Valley National Park in Ohio in 2004. What began as a summer professional experience outside her home country turned into a life forever changed, gaining her citizenship and completing graduate degrees in the U.S., then coming full circle back to Cuyahoga Valley as a permanent Biologist.

Mariamar's twelve-week internship at Cuyahoga Valley involved several field projects including "Managing park forests for viable songbird populations" and "Assessing quality of grassland and shrubland habitats for birds." She participated in a survey of breeding grassland and shrub-dependent birds and their habitat requirements, a mist-netting study examining use of electric utility corridors by young birds during the post-fledgling period, a mark-recapture study of turtles, and a telemetry study of fledgling Brown-headed Cowbirds. "These projects made me realize how important it is to collect field data and to communicate clearly with the work team," Mariamar said. She was also struck by the geographic connections: "Having the experience of watching the nesting sites of the migratory bird species that I used to monitor in my country during the non-nesting season was a pivotal moment of my formation."

In May, the park sponsored a workshop, along with Audubon Ohio, in which Mariamar participated, "Crafting the future of bird monitoring in Cuyahoga Valley National Park." She helped demonstrate bird monitoring methods in the field, including mist-netting, point counts, and identifying songs and calls. She also gave a presentation on "Bird monitoring and conservation in Nicaragua," and there was an overview of the park's bird projects and volunteer opportunities. This workshop helped prompt an official dedication of the park as an Important Bird Area in October of that year and, although Mariamar was already back in Nicaragua by then, this event was attended by the National Park Service Director, a Congressional Representative, and leadership of Parks Canada and Point Pelee National Park across Lake Erie in Ontario, which shares many migratory bird species with Cuyahoga.

In addition to the bird monitoring aspect of her internship, Mariamar gave public programs for park visitors and presentations to NPS staff and Audubon groups about bird conservation in Nicaragua. "During this internship," she said, "I had the first opportunity to present before the public and to effectively communicate to them how important the habitats of my country of origin and the rest of Central America are for the lives of migratory birds and how these birds link the countries of North America with the Caribbean and Central and South America."

Prior to her Park Flight internship, Mariamar was a biology student at Universidad Nacional Autónoma de Nicaragua, and a bird banding assistant for Fundación Cocibolca at a MoSI station (Monitoreo de Sobrevivencia Invernal; Monitoring Neotropical Migrants in Winter) in Mombacho Volcano Natural Area in Nicaragua, monitoring birds in the cloud forest. She was also Assistant Editor and translator for La Tangara, the bilingual ornithological newsletter of the International Working Group of Partners in Flight, an initiative which focuses on landbird conservation across the hemisphere.

Mariamar continued both efforts after returning to Nicaragua, finishing her Bachelor of Science degree in Biology on the avifauna of Mombacho. She became the regional coordinator for MoSI in Central America through SalvaNATURA for The Institute of Bird Populations, and co-authored the chapter on Áreas Importantes para la Conservación de las Aves (AICAs; Important Bird Areas) in Nicaragua.

As an outcome of attending the North American Ornithological Conference in Veracruz, Mexico, Mariamar was brought on in 2007 by Carol Beidleman as Program Assistant for the Park Flight Migratory Bird Program, to help vet, select and place other international interns to assist with U.S. national park migratory bird monitoring and education efforts and to build capacity for Neotropical migratory bird conservation in countries which share these species.

She continued to engage with the Partners in Flight Mesoamerica Working Group, Compañeros en Vuelo Mesoamérica, and the Sociedad Mesoamericana para la Biología y Conservación, where she organized and was a North American Banding Council Certified Trainer for technical assistance workshops for young Central American ornithologists, including for a Training Workshop on Bird Banding Techniques and North American Banding Council Certification Opportunity in El Salvador in 2008.

Mariamar was selected in 2009 as the Intern Liaison for a National Science Foundation grant project involving the Park Flight program and Environment for the Americas, spanning the U.S. to reduce barriers and increase engagement of Latinos in informal science education focusing on Neotropical migratory birds. She was a recipient of the U.S. Forest Service Wings Across the Americas International Cooperation Award in 2010 for her work in Nicaragua with the International Institute of Tropical Forestry.

After gaining U.S. citizenship in 2011, Mariamar pursued her graduate education, first her Master of Science degree at Delaware State University, focused on the stopover ecology of Neotropical migratory birds, and then her Ph.D., completed in 2022, from the University of Massachusetts Amherst, on "Drivers and direct impacts of lean mass dynamics on the stopover ecology and migratory pace of Nearctic-Neotropical songbirds in spring." During her graduate studies, she held a Directorate Resource Assistants Program Wildlife Fellow position in the U.S. Fish and Wildlife Service Division of Migratory Birds Northeast Regional Office, to complete a revision of a Partners in Flight Conservation Business Plan for Neotropical migratory songbirds wintering in the Central and South American Highlands.

Today, Mariamar is a permanent Biologist for the National Park Service at Cuyahoga Valley National Park in Ohio, where she started almost twenty years ago as an International Volunteers in Parks for Park Flight. "One of the highlights" of her current position, she said, "has been the opportunity to work with young professionals through the NPS Youth program." Mariamar said she was so lucky to directly supervise two Environment for the Americas (EFTA) interns with the Mosaics in Science Diversity and Latino Heritage Internship Programs. She was able to work with a third intern through the EFTA Fish & Feathers program, at a banding station in the park. "I had the amazing experience of working with her at the banding station. She was a natural and it was so cool to provide an opportunity for her to learn about bird banding." Mariamar also worked with a Scientist in Parks intern on birds of conservation concern. "It was great to help guide someone that wants to pursue a career in ornithology." Reflecting on her Park Flight internship, Mariamar said, "It gave me a lot of confidence and finesse as a conservation professional...to pursue a migratory bird conservation/research and habitats career. It opened the chance to see opportunities I could take, which I formerly did not know about."



PARK FLIGHT IVIP NAME: Alejandra Martínez Salinas

HOME COUNTRY: Nicaragua NPS UNIT: NOCA YEAR: 2002

Alejandra Martínez Salinas from Nicaragua was one of three Park Flight interns at North Cascades National Park in 2002, joined by Roberto Rivera Muñoz from El Salvador and Edgar Castañeda Mendoza from Nicaragua. During their internship, they learned about the resident and migratory birds of the North Cascades and bird surveying techniques of local researchers, gave a presentation about Central American migratory birds to a group of Spanish-speaking residents of Skagit County, and learned about birding survey and habitat restoration projects with the U.S. Forest Service and Methow Conservancy.

The presence of these Central American biologists at North Cascades attracted the interest of a reporter from The Bellingham Herald. Alejandra was being interviewed in the field when she heard a Black-throated Gray Warbler singing. "They don't sing like that in our country," she said. "They say 'chip, chip, chip.'" Alejandra reflected that warbler may be the same one she heard in her country a few months ago.

Early on, back in Nicaragua, Alejandra worked on surveying bird habitats through Fundación Cocibolca, a nonprofit conservation group. In 2015, Alejandra was featured prominently, along with Pete Marra, in the documentary film by Su Rynard and SongbirdSOS Productions in Canada, "The Messenger: Imagine a World without Birdsong" [https://songbirdsos.com/], about the plight of declining migratory songbirds.

She received her Ph.D. in Costa Rica through the CATIE-University of Idaho Joint Tropical Research Doctoral Program in 2017.

Alejandra has worked since for CATIE (Tropical Agricultural Research and Higher Education Center), based in Costa Rica but working in the Latin American and Caribbean region, as lead ornithologist for their long-term Bird Monitoring Program (Proyecto Monitoreo de Aves), including giving environmental educational programs (La Vida en Vuelo), and as Especialista en manejo y conservación de biodiversidad (Specialist in Management and Conservation of Biodiversity) under their Livestock and Environmental Management Unit (Unidad de Ganadería y Manejo del Ambiente, GAMMA) and Division of Research for Inclusive Green Development.

Alejandra's focus has been on how migratory birds provide ecosystem services of pest control in agricultural land uses like coffee and cacao plantations, for CATIE's project "Conservando Aves Migratorias Neotropicales a través del Manejo de Servicios Ecosistémicos en Fincas de Café." She has produced a series of educational posters on protection of migratory birds in agricultural areas, including "Birds, Bees and Coffee Cultivation" in 2020 and "Birds and the control of the coffee borer" in 2021.

PARK FLIGHT IVIP NAME: Juan Pablo (J.P.) Medina Castro HOME COUNTRY: México NPS UNIT: NOCA YEAR: 2009

Juan Pablo (J.P.) Medina Castro from Mexico was selected in 2009 as a Park Flight IVIP for North Cascades National Park in Washington. His internship started with attending an intensive two-week Landbird Inventory Protocol training session in partnership with The Institute for Bird Populations (IBP), to learn all area birds by sight and sound. After completing this challenging IBP course, Juan Pablo, with help from the Bird Crew, "a group of awesome people who helped me learning from the bird names to their songs, with their knowledge, experience and mainly with their friendship and patience," said "I am so proud to say that now I recognize almost every bird song in the North Cascades, an invaluable knowledge that I will use in Mexico."

Having gained this knowledge, he then participated in point count surveys of migratory birds at the park. Juan Pablo also helped with a Northern Spotted Owl survey in the Ross Lake and Newhalem area of the park, explaining the methodology this way: "hike during the day off trail into the deep woods, hike during the night on trail, hike a lot, hoot the best you can, and cross your fingers..."

In addition, Juan Pablo provided interpretive programs and helped lead field trips to the park for Spanish-speaking residents of Skagit County (most originally from Mexico), talking about his project at North Cascades, the problems faced by the many birds which breed in the United States and winter in countries to the south, his work at home in Mexico, and about conservation work in general. He said, "For me, these projects were spatially hard and demanding, but in the end also extremely rewarding." He gave a program in a community "where 90 percent of their members are Latinos living in small apartments, especially the children, and have rough times at their home... An opportunity to see beyond their problems, to experience the National Park and to meet people really care about them, is just amazing, it's an opportunity for hope in their life!!!" He understood the importance of the park's interpretive programs: "I love being in the woods working with birds, but at some point if you don't integrate that knowledge for educational purposes you will be alone in your conserving birds quest..." Juan Pablo was also a keynote speaker at the Leavenworth Spring Bird Festival in Leavenworth, Washington, leading a bird walk about "The Migratory Birds and How They Connect Mexico and the United States."

This Festival was a component of the internship's "Engaging Latino Audiences in Informal Science Education" project, funded by the National Science Foundation, for which Juan Pablo did over 150 surveys of the local Latino community to determine barriers against participating in such free educational events. He shared many of the responses. One person said, "I suppose everybody is interested somehow in nature, all kids love to play in a green field and learn about animals, but...we need some help to be reminded of that, so we can make some time for that." Another said, "I have two sometimes three jobs...I work almost all the time...for me is almost impossible to attend...but if there is something for my kids I will take a fourth job for them."

In the review at the end of his Park Flight internship, Juan Pablo said, "I find myself in a new path, a new direction of my life, I proved myself in some of the hardest conditions I've ever been, and enjoyed some of the nicest ones. Going far away in myself through white mountains, full light midnights and dark days, I realize that, in fact, the National Parks are the America's Best Idea."

After returning to his home state of Mexico (in Mexico), Juan Pablo established two MoSI stations (Monitoreo de Sobrevivencia Invernal, Monitoring Neotropical Migrants in Winter), gave hundreds of interpretative talks, and developed interpretive trails and management plans for rural and indigenous communities in Mexico. He became Co-Founder and President of iBIRDS (ibirds.org), a non-profit organization, from 2015-2021, and volunteered for nine years for Environment for the Americas as the representative for International/World Migratory Bird Day in Mexico.

His work with owls at North Cascades likely inspired his Master's degree on owl biology, and he has published scientific journal articles on the Northern Saw-whet Owl (as well as other landbirds), which is found in Mexico, the U.S., and Canada (Journal of Raptor Research, 2018; Systematic Parasitology, 2019; and in preparation for the Wilson Bulletin, 2022). He implemented Barn Owl salvages from house properties in Toluca Municipality into close farmlands, developing a nest box program as pest control. He also did owl surveys in Toluca Volcano National Park in Mexico from 2014 to 2018, and in 2022 initiated a "Winter owl and bat habitat assessment in a fire prevention thinning forest in Victoria Island, British Columbia."

Juan Pablo is a Ph.D. Candidate at the University of Manitoba Natural Resources Institute in Canada, while being engaged with Thunder Sky Raptor Banding in Manitoba and working as a wildlife biologist consultant for AAE Tech Services Inc. Canada, doing field assignments related to terrestrial vertebrates and environmental impact.

Juan Pablo said the biggest impact of the Park Flight internship on his career goals was that it helped him find a path in wildlife conservation, "It opened my eyes to the possibilities of wildlife management and conservation."

Two years after his internship, Juan Pablo wrote, "Lives can, and actually do change in just a second. Imagine a life after 24 amazing weeks experiencing birds, nature, solitude, wilderness, knowledge, laughter, fun, dedication, passion...and then maybe you will understand the Park Flight experience."

PARK FLIGHT IVIP NAME: Daniel Méndez Aranda HOME COUNTRY: Mexico NPS UNIT: NOCA YEAR: 2010

Daniel Méndez Aranda from Mexico City was selected as a Park Flight international volunteer in 2010 at North Cascades National Park in Washington, participating in a variety of programs from April through August.

Daniel's immediate duty was to assist with a National Science Foundation funded grant project "Engaging Latino Audiences in Informal Science Education." He became involved with the Leavenworth Spring Bird Fest, helping organizers develop, promote and present bird-focused event activities for the Latino communities near the park. Daniel first did surveys of the Latino community surrounding the park, to gather demographic information and responses to statements about potential barriers to participation in informal science education events at natural areas, as well as inform them about the Bird Fest. He then did participation surveys of Latinos attending the Bird Fest, to gather information about race/ethnicity, distance traveled to the event, prior visitation to the site, and how respondents learned about this event.

Because the Bird Fest occurred early in Daniel's internship, he was provided in advance with the North Cascades bird checklist and a bird CD to help identify species by sight and sound to facilitate his preparation and develop his confidence about taking park visitors and local Latino residents on bird walks, and he was encouraged to supplement his study with readily available references like the Sibley and National Geographic bird guides. Although Mexico and Washington share migratory bird species, these migrants don't sing on the wintering grounds and the resident species were new to him.

Daniel's surveys of Latino communities around North Cascades determined that 96% listed Mexico as their country of origin, with 70% of those being the first generation in the U.S. This made for a personal connection with Daniel and shared migratory birds, an intended goal of the Park Flight program. But his efforts to encourage local Latino community members to participate in the Bird Fest events were challenging. "I knew it would be hard to get the Latinos to the project," he admitted, as he had heard that Latinos living around the park were "mostly orchard workers and hard workers in general, with not so much spare time to go to activities." Despite being disappointed in the poor participation from these Latino communities in the Bird Fest, he said, "the best part was getting to know the migrant workers...and hearing how their lives were. Also, I was really excited when someone showed interest in

what I was doing, as well as impressing and inciting people to study things related to biology and birds." Part of his outreach was to do radio interviews and other public talks in English and Spanish, which he thought "would be a little scarier."

Daniel also had other internship duties. He participated in a survey of the Northern Spotted Owl, a threatened species found in old-growth forests of the Pacific Northwest. Daniel provided interpretive bird programs to visitors and staff of North Cascades, talking about his project work there, the problems faced by the many migratory birds which breed in the United States and winter in countries to the south, and his bird conservation and monitoring efforts in his home country. He helped develop a Spanish/English migratory bird activity for children for inclusion in the Junior Ranger program and helped lead field trips to and within the park for Spanish-speaking residents of Skagit County and for other youth programs.

Some aspects of his internship experience were unexpected. "I obtained a lot of experience talking with people outside academia, how to talk with them, what they think about birds." He was "surprised by the great extent of scientific projects developed at and with the help of the National Park Service." What he really enjoyed, he said, "was the integration of the scientific community and the local wildlife conservation strategies, which were in general very appreciated and supported by the local community."

After returning to Mexico, Daniel sought to apply the skills he had learned during his Park Flight internship. "I participated in a few bird festivals around the country in Mexico, where I tried to incorporate the teachings from the program. Especially, the outreach to the local communities which are generally ignored in the programs in Mexico, but are determinant in the success of conservation measures and programs."

In 2012, Daniel completed his Bachelor of Science degree in Biology from the Universidad Nacional Autónoma de México (UNAM), on the assessment of the conservation status of endemic birds of the West of Mexico. He became Project Coordinator for part of the Golondrinas de las Americas (swallows) project of Cornell University, with a grant from the National Science Foundation, doing fieldwork, sample collection, natural history observations, and data presentation. He was also a Research Assistant at Museo de Zoología at UNAM, working on ecological niche models, GIS, databases, collection assistance and fieldwork, then a Collaborator on the "Distribution maps for native Mesoamerican terrestrial birds" project for CONABIO (Comisión Nacional para el Conocimiento y Uso de la Biodiversidad).

Daniel went on to complete two Master of Science degrees in Evolutionary Biology at the Ludwig Maximilian University of Munich, and in 2022 he completed his Ph.D. in Organismal Biology from the University of Konstanz, conducted at the Max Planck Institute for Ornithology, on "Convergent evolution in nectarivores: digestive enzymes and other adaptations to sweet diets." Today he is continuing his research in evolutionary biology as a postdoctoral scientist.

Reflecting on his Park Flight internship Daniel said, "I think this program is a very valuable collaboration and has kickstarted several conservation and outreach projects in Mexico. A very valuable lesson for

me, and other interns with whom I connected, is the importance of the coordination and communication of the different players in conservation: the local community (sometimes the owners of the land), the governmental administrations, the scientific community and the NGOs." "For me," he said, "this internship helped in learning about a different country's conservation programs and how applicable they are to my home country."



PARK FLIGHT IVIP NAME: Salvadora Morales

HOME COUNTRY: Nicaragua NPS UNIT: SEKI YEAR: 2002

Salvadora Morales from Nicaragua will always have the distinction of being the first International Volunteer of the Park Flight Migratory Program, at Sequoia and Kings Canyon National Parks in 2002. As such, we learned a lot about how to hone our internship logistics and improve the experience for all subsequent Park Flight IVIPs. Salvadora also became the smiling face of early publicity on Park Flight, which helped us promote the important work IVIPs were doing in the parks and also advertise opportunities for future IVIPs from Latin America. Thanks to her propitious internship, the Park Flight program expanded to involve interns from 19 countries, mostly Central America and Mexico but also South America, Canada, and the Caribbean.

Salvadora's Park Flight internship at Sequoia and Kings Canyon had two different components. She was teamed up with a biological technician to run two Monitoring Avian Productivity and Survivorship (MAPS) bird banding stations. She also led bird walks and gave interpretive programs. "It was one of the first times that I guided a group," she said. "My English was poor, but I spoke the bird language." Salvadora was also required to give a presentation, open to all park staff, on bird conservation efforts in her home country.

Through Salvadora's experience, we quickly learned how powerful—and magical—international exchanges were, for learning, sharing, and connecting. She became an instant celebrity in the park, with

staff from all divisions, from natural resources and interpretation to law enforcement and maintenance, vying for an opportunity to attend her presentations about her bird work in Nicaragua and drop by her apartment for Spanish lessons. She had the same effect on visitors; tagging along on her bird walk, I watched a blond-haired girl angling to stay as close to Salvadora as possible, even holding her hand as the group moved through the fern-covered understory beneath the tall trees. There was no more compelling metaphor for the biology of migratory birds than to have a Nicaraguan ornithologist talking to park visitors from across the U.S. All of a sudden, a Neotropical migrant sighted along the trail on its breeding grounds in Sequoia, like the beautiful Western Tanager, was linked in people's minds to its wintering grounds in Central America. It became obvious that to protect and conserve these migratory birds, we needed to work together across the Western Hemisphere.

"Park Flight was my first international experience," Salvadora summarized, "the first time that I got to know migratory birds. I have kept working in bird monitoring since I came back and during several international conservation processes."

After her internship and upon her return to Nicaragua, Salvadora worked with Alliance for Wild Areas and the Institute for Bird Populations, coordinating the first MoSI station (Monitoreo de Sobrevivencia Invernal, Monitoring Neotropical Migrants in Winter) for Central America and doing training workshops. "I understand better the concepts of a MAPs station in the reproduction area and the development of MoSI stations in wintering areas. I participated in MoSI as an indirect result, and this expanded my knowledge." She also co-authored the chapter on Áreas Importantes para la Conservación de las Aves (AICAs; Important Bird Areas) in Nicaragua and has collaborated with World Migratory Bird Day events there.

Salvadora received training in Texas on the identification and management of the endangered Goldencheeked Warbler which she applied to their wintering habitat, then became an editor of the "Conservation Plan for the Central American Pine-Oak Forest Ecoregion and the Golden-cheeked Warbler." She was also a member of the Non-Breeding Season Committee (Alianza Alas Doradas) of the Golden-winged Warbler Working Group and participated in the development of the 2016 Goldenwinged Warbler Non-breeding Season Conservation Plan.

As Coordinator of projects for Fauna and Flora International, Salvadora led the UNESCO process for the designation of the Isla de Ometepe [Ometepe Island] Biosphere Reserve. Part of the work carried out was scientific research, environmental education, governance, and climate change. She became Community Program Officer, Territorios y Clima, for ICCO-Cooperation, working with local stakeholders from Mexico to Panama facilitating capacity-strengthening projects for the conservation and management of indigenous towns and communities. She was founder and president of Quetzalli Nicaragua S.A., which provides biodiversity research and monitoring services with a staff of biologists and ecologists.

Salvadora was a Shrimp and Shorebird Conservation specialist for Manomet and the Western Hemisphere Shorebird Reserve Network. Recently, she participated as one of the instructors for Manomet's Ornithology Careers Institute (OCI), a free field skills training institute for college students who identify as BIPOC and/or Latinx and are interested in careers in ornithology. "I accompanied eight young persons of the first OCI generation. Twenty years after being the first [Park Flight] intern, I feel that in some way I am giving back to the new generation of bird conservationists."

Salvadora felt the impact of her internship was significant. "I came from a low-income family, and I was a recently graduated young college student working at the Mombacho Volcano Natural Reserve. This first trip to the USA was a personal accomplishment and what I learned was a bigger success. Upon arrival, I spoke no English [there were Spanish-speaking NPS staff] and part of the three months in the park were spent learning the language. I ended up teaching Spanish and learning English." Regarding her professional objectives, she added, "It was the beginning of my work with migratory birds and getting to know their wintering habitats."

Salvadora also felt the Park Flight internship had great benefit to Nicaragua. "This experience has been with me after I participated as an intern. It defined my standing as a professional specialized in migratory birds. I am now one of my country's leaders in the realm of bird fauna and habitat conservation."

"At the personal level," Salvadora said, "I am still sowing the tangible results of having forged a relationship with the staff of Sequioa and Kings Canyon." In 2019, her supervisor and the wildlife biologist at the parks, Rachel Mazur, wrote a children's book about birds, "The Nature Club, Taking Flight," part of her award-winning middle-grade series. Rachel dedicated it to Natalie and Shanti in Nicaragua, who are Salvadora's children. It was a heartfelt connection that spanned the decades and a vast geography.



PARK FLIGHT IVIP NAME: Miguel Moreno Palacios

HOME COUNTRY: Colombia NPS UNIT: ORCA/KBO YEAR: 2008

Miguel Moreno Palacios from Colombia was selected as a Park Flight international volunteer in 2008 at Oregon Caves National Monument and Preserve in southwest Oregon, with partner Klamath Bird Observatory (KBO). Better known for its below ground cave system, the park's old-growth forest above ground supports an estimated 130 bird species.

This internship was focused on developing landbird monitoring skills, primarily bird banding, as part of a long-term regional monitoring program. Miguel received training by KBO staff involving operation of mist-nets including the extraction, processing, and banding of landbirds following guidelines of the North American Banding Council (NABC), in particular advanced ageing and sexing techniques of passerines. He also was trained in conducting area search surveys and aquatic bird surveys, and computer data entry.

Miguel worked with KBO's outreach specialists to develop other opportunities. He provided banding interpretation for public and school groups at KBO's banding station in the park, gave bird conservation programs to visitors, worked with Lava Beds National Monument at the Tule Lake International Migratory Bird Day Celebration, and presented information to NPS and partner staff about bird conservation and monitoring in his home country of Colombia.

A unique and valuable capacity-building aspect of this internship, because of the involvement of skilled KBO scientists, was the opportunity for an intern to train for and obtain a NABC banding certification, a much-coveted qualification for higher level ornithological career paths. Miguel was able to achieve this during his internship, becoming a NABC Certified Bird Bander and Trainer (Passerines). This certification indicated he was not only capable of safely, ethically, efficiently, and reliably running a banding station, but was also a certified bander of exceptional competence and experience who possessed additional skills in teaching and evaluating other banders.

Since only trainers may evaluate candidates for NABC certification, having this status allowed Miguel to later train and certify others in his home country and elsewhere. "I have participated as trainer of bird banding techniques in several places of Latin America and the Caribbean," Miguel said. He assessed that "achieving certification as a bander and passeriform banding trainer" was the greatest benefit to his country of his Park Flight internship. "This certification has opened for me several work opportunities associated with research." Applying the skills he had learned, Miguel "kept doing research on birds, using the monitoring approaches learned during the internship. These skills helped me assess persons and institutions regarding the necessary international standards to guarantee the bird's wellbeing and the marking of individuals."

"The internship gave me the chance to continue my professional formation," Miguel said. "Upon my return to Colombia, I pursued a Master's degree and later a Ph.D. All of this is the direct result of relationships with colleagues and friends and activities carried out during the internship." Miguel's Master of Science in Biology was focused on molt patterns of the Blue-black Grassquit and Gray Seedeater in Colombia's tropical dry forest. During his studies he was a field ornithology researcher for the Zoology Research Laboratory at the Universidad del Tolima, and after completing his Master's he became Adjunct Professor for the Faculty of Science there. He was also Adjunct Professor for the Faculty of Natural Sciences and Mathematics at the Universidad de Ibagué, and proceeded to become a Full-time Professor, then Director of Environmental Biology and Environmental Administration programs at that university. Miguel is completing his Ph.D. in Biological Science at Universidad de Los Andes in Colombia, with his dissertation on "Climatic asynchrony and speciation: the evolution of breeding cycles and its role on population differentiation in neotropical birds."

Miguel is also the current President of the Colombian Ornithological Association, a member and international trainer of the North American Banding Council's Passerine working group, and is on the Board of Directors of the Colombian Birding National Network.

Reflecting on the positive impact of his Park Flight internship on his career goals, Miguel assessed it "has been the foundation of several professional successes." "At the personal level," he said, "the opportunity to participate in a cultural exchange in the USA that opened a professional landscape and let me know how my career as a biologist can be used in other countries. I forged friendships and consolidated important relationships as a person and as a professional, and I improved my English proficiency."

Overall, Miguel said "the training I received 10 years ago still establishes a difference for my country." His Park Flight experience "has allowed me to participate in different studies, monitoring, and environmental education programs. These activities involve supporting the design of the national strategy for the conservation of Colombian birds, participating in several bird festivals in Colombia, and helping organize symposia and census of national birds."



PARK FLIGHT IVIP NAME: Noemí Moreno Salazar

HOME COUNTRY: Colombia NPS UNIT: FIIS YEAR: 2010

Noemí Moreno Salazar from Colombia was a Park Flight IVIP at Fire Island National Seashore in New York in 2010. Fire Island National Seashore occupies 21 miles of Barrier Island that include residential communities, a diverse array of flora and fauna, and a seven-mile stretch where the majority of the shorebird activity takes place. Sections of the Seashore provide suitable breeding habitat for a number of federal and state-listed threatened and endangered migratory shorebird and waterbird species, including the Piping Plover (*Charadrius melodus*). Since this species was listed as federally threatened, Fire Island has worked extensively toward the Piping Plover recovery and monitoring effort.

The focus of this Fire Island Park Flight international internship was to participate in monitoring breeding and nesting activity for threatened and endangered avian species, as well as assisting the park's wildlife biologist with conducting colonial waterbird surveys. The IVIP had opportunities to talk with students, visitors, and members of the local Latino community concerning the park's threatened and endangered species monitoring effort, the problems faced by the many birds which breed in the U.S. and winter in countries to the south, the bird conservation work being done in their home country, and about bird and habitat conservation programs in general. The international volunteer also worked on related park research and monitoring programs, learning about the various issues related to managing a national park in a densely populated area of the United States.

From May through August, Noemí participated in daily monitoring and data entry, conducting surveys throughout stretches of shoreline. She recorded observational data upon encountering Piping Plover or tern species, including courtship behaviors and territorial activity. Upon the discovery of a Piping Plover nest site, the intern contacted the wildlife biologist to estimate when the nest would reach a full clutch size of four eggs. If a full clutch was discovered, NPS field staff and Noemí assembled nesting enclosure materials and enclosed the nest site as well as recorded its GPS coordinates. Upon hatching, monitoring took place seven days a week. Monitoring focused on nesting activity between late May and early July, and on brood activity during July and August.

Noemí felt Park Flight provided a great opportunity to improve her skills. "The internship helped me learned more about migratory birds, ecology, and the ecosystems where they live in the North," she said, adding and "about their behavior, especially regarding reproduction." She was also able to "get to know and identify environmental education tools thus enabling me to implement them in my country. Working with schools and adults regarding the importance of bird conservation and practical improvements was very important to apply and share them with organizations with which I have worked with in my country." She has organized migratory bird festivals and has developed different activities such as workshops and discussions during World Migratory Bird Day.

She also spoke about the language benefit from her Park Flight experience: "When I started the internship, it was hard and a very big challenge to try to understand and communicate in English, but I am quite thankful to the team, because they were very patient and supported my blossoming. To communicate and acquire knowledge in the English language was a very important milestone during my internship and opened several doors for me to work with other international organizations."

After her Park Flight internship and return to Colombia, Noemí became: a Field Ornithology Biologist for the "Ordenamiento Territorial Reservas de la Amazonía - Araracuara Caquetá" Project; a Technical Coordinator of the Asociación Bogotana de Ornitología; wrote the bird chapter for the Regional Action

Plan for northern Colombian Amazonia (for Asociación Calidris, Instituto de Investigación en Recursos Biológicos Alexander von Humboldt and World Wildlife Fund); and participated in the Neotropical Waterbird Census and environmental education as a field ornithologist for Asociación Calidris.

Noemí credited Park Flight for being able to get valuable positions later. "The internship helped me work with other international organizations such as Manomet," she said, "where I began translating shorebird conservation plans from English to Spanish and was later the bird banding assistant."

Noemí acknowledged, "I have been able to work as a researcher and to share the knowledge acquired during the internship in discussions with ornithological organizations...The internship introduced me to new research approaches and concepts, which I have been able to share during lectures, courses, and workshops." She continued work with Asociación Calidris as a research biologist on estimating the population size of the extremely range-restricted Bogota Rail (*Rallus semiplumbeus*) in Parque Nacional Natural Chingaza. She was a biologist and did bird monitoring at the Jaboque Wetlands for Fundación Natura, and a support professional for José Celestino Mutis Botanical Gardens. "The knowledge acquired during the internship," said Noemí, "allowed me to prepare new research, especially regarding the shorebirds of Colombia. I have looked for opportunities to monitor them in the areas where I work. I developed this study: https://www.waderstudygroup.org/article/15779/ with the Killdeer species."

In 2017, Noemí did the coordination, research and compilation for the publication, *Guía de Buenas Prácticas para la Actividad de Aviturismo en Colombia*, Good Practices for Bird Tourism in Colombia, made for the Ministerio de Comercio, Industria y Turismo in Colombia through a contract with Asociación Bogotana de Ornitología. She was also the lead for direction and compilation and one of the researchers for the 2019 publication, *Aves de Bogotá, Guía de Aviturismo, the Bogota Birdwatching Guide*, made for the Office of the Mayor of Bogota through the Bogota Tourism Office.

Noemí started working with National Audubon Society in 2020, first on the Coordination of the Colombian Southwest Bird Tourism Route Project. "I finished my master's course of study and at present I'm part of the Colombian National Audubon Society team," helping develop the National Strategy for the Conservation of Colombian Birds (ENCA). "I am part of a non-profit NGO," she said, "with which I keep supporting monitoring and observation of migratory and native bird species."

Regarding the impact of the Park Flight internship on her professional goals, Noemí said, "This internship highly impacted my personal and professional life. I had to leave my country and face another language, culture, and people. This was a very important learning opportunity for me, both academic as well as testing my strength in the face of hard times. It opened the opportunity to work for other international organizations, made me a more committed and responsible person in work endeavors."

PARK FLIGHT IVIP NAME: Sara Ocasio Ortiz



HOME COUNTRY: Puerto Rico NPS UNIT: NEJE/NJAS YEAR: 2011

Sara Ocasio Ortiz from Puerto Rico was selected as a Park Flight international volunteer in 2011 for the NPS New Jersey Coastal Heritage Trail Route/Pinelands with partners New Jersey Audubon Society (NJAS) and Cape May Bird Observatory. While Puerto Rico is a U.S. territory, applications were accepted for IVIPs from Puerto Rico as an island strongly affiliated with Caribbean nations, and her selection was intentional as surveys of local Latino communities showed that 38% identified their "country of origin" as Puerto Rico...strengthening her connections for community outreach during her internship.

Cape May is located at the southern tip of the state of New Jersey and is an internationally known bird migration site. During the spring season, millions of shorebirds and songbirds use Cape May's habitats as migratory stopovers, and thousands of people come to see them. NJAS is a statewide organization whose mission of conservation, research and education is evident in Cape May. There are several staffed centers that focus on adult, family, and children's education, offering classes, workshops and presentations on a variety of natural history topics and environmental issues. This organization was a key partner for the implementation of Park Flight's project with Environment for the Americas, funded by a National Science Foundation grant, to engage Latino audiences in informal science education.

Sara's internship was designed to help increase the visibility of NJAS natural history programming to, and engage members from, the Latino community; to conduct outreach to engage Latino audiences in attending HarborFest, their signature public event; to engage children/families in ongoing programming at Nature Center of Cape May; and to educate staff and the public about bird conservation and challenges of bird conservation in the Neotropics. She worked mostly with communication and science education. "I prepared workshops for several audiences, which involved getting acquainted, set a date, preparation of materials, and finally, to present the workshop. This helped me hone my organization and leadership skills. It also helped me become aware of the population with which I would be working. Additionally, I did all of this in the English language, a very different language to the one I use every day."

Right after the internship, Sara pursued her Master of Science degree with the Max Plank Institute for Ornithology in Germany, focusing her thesis on bird behavior. She credited the opportunities she had in New Jersey for learning more about fieldwork with birds, which she said helped her a great deal with her graduate work. "It also helped me develop abilities to present before different groups," she said, "and this made me prefer informal education."

On her return to Puerto Rico, Sara became a Science Center Docent for Centro Criollo de Ciencia y Tecnología del Caribe, leading educational tours and interpretive programs directed towards K-12 students and the public. She was also a Biologist for the Aviary of La Marquesa Forest Park, and a Scientific Educator for the San Juan Bay Estuary Program. Since 2018, Sara has held the position of Research and Outreach Specialist with the Universidad Ana G. Méndez, working on a STEM project, "Competency Development Approaches: Increasing STEM Awareness and Retention to Narrow the Achievement Gap of Hispanic Students," and in addition she teaches General Biology there. She is pursuing a Ph.D. in Curricula and Science Education at the University of Puerto Rico, Rio Piedras. Sara was able to present her research, "Surveys Reveal Barriers to Diversity" at the 2022 Ornithological Conference joint meeting of the American Ornithological Society and BirdsCaribbean in Puerto Rico, and she has engaged with The Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS).

Participating in the Park Flight international internship had a big impact on Sara's career. "It made me want to continue with science academics both in and outside the classroom," she said, with birds as her focal theme. "It was a very enriching experience that helped many aspects of my personal, academic, and professional endeavors."

PARK FLIGHT IVIP NAME: Dionisio Paniagua Castro



HOME COUNTRY: Costa Rica NPS UNIT: NOCA YEAR: 2008

Dionisio Paniagua Castro from Costa Rica, better known to his friends as "Nito," was selected as a Park Flight international volunteer in 2008 at North Cascades National Park in Washington. Nito's internship included participating in an intensive 3-week Landbird Monitoring Protocol training session at North Cascades and Olympic National Parks, in partnership with The Institute for Bird Populations (IBP), and an endangered species survey of Northern Spotted Owls being conducted at NOCA. "Something I will never forget," Nito reminisced, "is feeding the owl with my hand."

The IBP training was difficult as it required recognizing by sight and sound all the breeding bird species found in Pacific Northwest national parks. As Neotropical migrants don't sing on the wintering grounds, Nito was amazed. "For the first time," he said, "I heard the different songs of the Wilson's Warbler, Yellow Warbler, Western Tanager, Gray Catbird and Western Wood-Pewee. Although I had seen some of these birds in Costa Rica, I had never had the opportunity to hear them sing." In fact, warblers are called "Chipes" in Central America, because they only "chip" during the nonbreeding season.

Prior to his Park Flight internship, Nito had been employed as a nature guide at the Lapa Rios Lodge at the edge of Parque Nacional Corcovado on the Osa Peninsula in southwestern Costa Rica, a region with about 375 bird species including the Scarlet Macaw. Lapa Rios was, at the time, a small 16-room ecolodge nestled within 1,000 acres of a private, tropical rainforest reserve.

When he first received the news of his selection, Nito admitted, "I was very excited and at the same time very nervous and afraid. I had no idea what to expect and what it would be like to study and live

with others that spoke a different language and furthermore that did not eat rice and beans three times a day like I do."

Another major component of his Park Flight internship was to provide interpretive programs and help lead field trips to North Cascades for Spanish-speaking and other residents of Skagit County about his work in the park, in Costa Rica, and the problems facing Neotropical migratory bird species which breed in the United States and winter in countries to the south.

Nito's formal interpretive programs at North Cascades reached about 200 people, including presentations at visitor centers and campgrounds, guided bird walks, walks for youth and elders from a Seattle housing alliance, Latino family camping programs and community groups, North Cascades Institute, and as a keynote speaker at the Leavenworth Spring Bird Fest. He also did informal programs, roving with a spotting scope and greeting visitors at park facilities, which reached an estimated 500 people. "I felt very privileged to share my knowledge on birds and the danger they face while migrating," Nito said. "It felt nice to know that people who knew nothing about birds were now very interested in learning more." He said one of his best experiences was taking a Mexican family to watch birds. "The family even though they lived here had no idea about birds. One lady was so impressed with what I was sharing with them, that she told me she was going to continue to put her bird feeder out and not allow her husband to cut down a tree they had plans on cutting down. This way the birds still had a home." At the end of the internship, his supervisor at North Cascades said "Nito is a natural born interpreter. His skills as a nature guide in Lapa Rios served him well during this volunteer internship."

Among the many capacity-building benefits of his Park Flight internship, Nito said he had greater selfesteem, knowledge of migratory birds, and confidence when expressing himself in public. This was reflected in his inspiration, upon returning to Costa Rica, to start a family nature tour business with his younger sisters, as the founding owner of Surcos Tours. Since then, he has hosted birding groups from Wisconsin and elsewhere, and works with Tropical Wings, with direct benefit to his community. "With the groups of birders we support small farms who work with shade-grown coffee, honeybees, and organic farms, and we also have a group of children who work on environmental education issues." Tropical Wings is a Friends Group of the Sister Parks Agreement, developed with the help of a grant from Rotary International, between the National Park Service in the upper Midwest and the National System of Conservation Areas (SINAC; administrator for Costa Rica's national parks) on the Osa Peninsula, which is focused on education and conservation for Neotropical migratory birds shared between these distant regions.

As a result of his improved level of English after his Park Flight internship, Nito said: "I can express myself better to contact government agencies in the USA to get help for our protected area. Such is the case of a donation that I managed to get with the Midwest National Park Service for the Osa Conservation Area." He added, "As a tourist guide it is easier for me to talk about conservation with my American clients who do not know much about migratory birds." He felt another benefit was "learning about the importance of protecting the habitats of migratory birds in our countries so that they can get

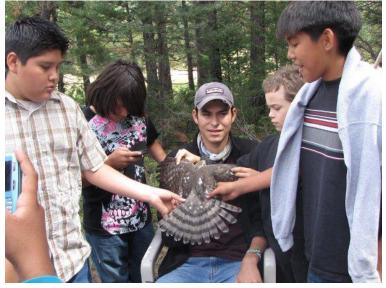
the necessary food they need to return to their breeding sites. Now I share that in every opportunity I have with local people about how to have sustainable farms and gardens."

Nito also contributes to bird conservation in his region in other ways. "I have been supporting the Osa Peninsula bird count, countrywide counts, world shorebird counts," he said. "I also participate in educational activities with nonprofits in my localities like Osa Conservation, Tortugas Preciosas de Osa, and La Cotinga Research Station."

Reflecting on his Park Flight experience and its influence, Nito said, "I know there is my part that I can do and now feel like I can be part of the solution. I don't have the money to purchase land and have it protected, but I at least have the knowledge where I can teach about conservation and the environment to local schools. We need to protect our forest and environment and voice our views to the government. In protecting our wildlife, we are protecting ourselves."

Overall, Nito felt that his Park Flight internship "made me a better professional with a broader vision of interregional conservation issues." But beyond his knowledge and skills, Nito's disposition had a big impact on the park. "Nito is very personable and was a joy to work with during all facets of his internship," Bob Kuntz said. "He worked well with all staff and was greatly enjoyed by park visitors." The sign his coworkers held up at the end of his internship before his departure said it all, "Don't go, Nito!"

PARK FLIGHT IVIP NAME: Rafael Paredes Montesinos



HOME COUNTRY: México NPS UNIT: BAND YEAR: 2009

PARK FLIGHT IVIP NAME: Angélica Hernández Palma



HOME COUNTRY: Colombia NPS UNIT: BAND YEAR: 2009

Rafael Paredes Montesinos from Chiapas, Mexico was selected as a Park Flight international volunteer at Bandelier National Monument in New Mexico in 2009, along with Angélica Hernández Palma from Colombia. Bandelier includes 33,000 acres of canyons and mesas along the southeastern flank of the Jemez Caldera, stretching from an elevation of 5,000 feet along the Rio Grande to over 10,000 feet on Cerro Grande. Since the internship extended from the heat of July until late November, to cover the fall migration season, both Rafael and Angélica welcomed the warm jackets provided to them, something not needed in their home countries in the Neotropics.

Both Rafael and Angélica were selected to take the lead in providing educational programs during student field trips to the park's primary banding site at an elevation of 8,900 feet, as well as providing a 50-minute program to each of the 20 classrooms planned to be involved in the field trips. The international interns also talked with students and visitors about the mist-netting project, the problems faced by the many birds which breed in the U.S. and winter in countries to the south, the bird conservation work being done in their home countries of Mexico and Colombia, and about bird-and-habitat-conservation programs in general. In addition, they participated in the "Engaging Latino Audiences in Informal Science Education" project, funded by the National Science Foundation, to identify and reduce the barriers to Latino participation in informal science education, spending time communicating with Latino community leaders and members, conducting interviews, and inputting survey data.

This project to engage more Latinos in park programs from communities around Bandelier was an important part of the internship, and doing the surveys was an interesting learning experience. Angélica discovered that, "Many people are interested in these kinds of activities and they think it is something important and valuable in their lives, especially for their children. Nevertheless, they never find out

where or when these activities are happening." As to why there are barriers, she reflected "When you are part of a society that you love and are familiar with, and you feel part of it, it is more probable that you will participate in activities."

For Angélica, "the Park Flight internship was a marvelous life experience. It was the first time I traveled outside of my country, and I encountered a different culture and language. Technically speaking, our host Stephen Fettig provided very valuable teachings about birds. I had a bit of previous experience with molting and bird plumage, but Steve taught us many more things. The environmental education experience was also invaluable. We were able to reach very many persons of the local population (adults, children, Native Americans, Latinos). Some of these persons had never been informed about birds and how important they are for the environment, so it was satisfying, and I learned to "translate" the message for each specific audience."

Shortly after Angélica completed the Park Flight internship, she had the chance to apply for another internship with the U.S. Forest Service in Oregon, using and building on skills she had gained in her Park Flight position. "Both experiences helped me get a Young Researcher scholarship from the Colombian government" the following year, she said. "During that time, I used the knowledge I had acquired to study Colombian birds and their conservation." Her Young Researcher position at the Universidad del Valle - Colciencias in Cali was focused on molt patterns, and age and sex criteria for selected highland Colombian resident land birds. The complex study of ageing and sexing techniques, including molt patterns, was something Fettig, the Wildlife Biologist at Bandelier, had intensely invested in training his Park Flight international interns on, both for the benefit of the park's bird monitoring efforts and the interns' careers.

Following that experience, Angelica became a Graduate Research Assistant and Fulbright Scholar at Louisiana State University, studying the condition of birds in Brazilian Amazonian forest fragments and second growth forests. She completed her Ph.D. in Renewable Natural Resources there in 2017, centered on this research.

Returning to Colombia that year, she took a position as Postdoctoral Researcher at the Instituto de Investigación de Recursos Biológicos Alexander von Humboldt in Bogotá. Angélica is still working there as an Associate Researcher, and, also having a 5-month-old boy, she says that doesn't leave her much free time beyond that.

"All of this proves how I invested the knowledge acquired with the Park Flight internship," Angelica said. "This was the foundation of my professional career with Neotropical birds."

For Rafael, the Park Flight internship represented an opportunity to become familiar with plumage molting and learn about bird behavior, to present to children of schools close to the New Mexico host park and hold discussions with them, and to improve his English skills. As a result of his public speaking duties there, he said "I lost stage fright in English while presenting or chatting."

After his Park Flight internship, Rafael continued working at bird banding stations in Chiapas and for CONANP, Comisión Nacional de Áreas Naturales Protegidas, the Mexican federal counterpart to the

National Park Service in the U.S. He was Coordinator of Biological Monitoring at Reserva de la Biosfera La Encrucijada, doing biological monitoring of priority species including bird banding of passerines. He said his Park Flight experience had "strengthened bird monitoring and conservation actions in coastal basins of the national protected area where I worked." He then became Operational Coordinator of Santuario Playa de Puerto Arista, another protected area in Chiapas, coordinating projects for the conservation of priority species, including restoration of wetlands and environmental education. He joined the staff of Pronatura Sur, A.C. in San Cristobal de las Casas, as Coordinator of Environmental Restoration, training community groups in ecological restoration of mangroves.

Along the way, Rafael became an instructor for bird monitoring and in birdwatching for certification of Nature Interpretation Guides, including training for community groups, as part of CONANP's Sustainable Tourism Advisors program. He also participated in Christmas Bird Counts, Global Big Day bird counts, and bird festivals in the coastal communities of Chiapas.

Rafael then shifted his professional and academic career to Baja California. He worked for CONANP as Operational Coordinator for the Ensenada Zone at the Reserva de la Biosfera Islas del Pacífico de la Península de Baja California, and completed his Master of Science degree in arid lands ecosystem management at Universidad Autónoma de Baja California. He is now the Wildland Manager for WILDCOAST/COSTASALVAJE, implementing management and conservation strategies for the protection of coastal desert ecosystems, dunes, estuaries, sand beaches, and wildland biodiversity in Baja California.

Reflecting on the benefits and biggest impact on his career goals of his Park Flight internship, Rafael said "On a personal level it was a life experience to know the work of researchers with migratory birds, and it helped me strengthen capacities for management and operation of migratory bird banding stations." An added plus, he said, was that "it improved my ability to relate through language with other people."

In a newsletter article that fall for the Pajarito Environmental Education Center (PEEC), a key local partner for the Bandelier international internship positions, Rafael and Angélica co-wrote this: "Each year thousands of warblers, vireos and thrushes of less than one ounce of weight immerse themselves in a wonderful adventure: flying in the seeming infinity of the night to arrive at an unknown place located thousands of miles away from where they saw the world for the first time." They went on to explain the many threats facing these migrants along their journey, which affect both birds and humans, and concluded: "We must establish ourselves as stewards of the planet, so that our legacy will be more than the Silent Spring that Rachel Carson wrote about in the 1960s, making reference to woods and fields without the songs of birds."

PARK FLIGHT IVIP NAME: Ruth Partida Lara



HOME COUNTRY: México NPS UNIT: GRSM YEAR: 2008

Ruth Partida Lara from Mexico was selected as a Park Flight international volunteer at Great Smoky Mountains National Park in 2008. The park protects some 240 bird species of which 126 are breeding birds and 52 are Neotropical migrants. The focus of this internship was to study the effects of acid and mercury deposition on songbird reproduction in high elevations of the park, assisting with mist-netting Neotropical migrant songbirds, and assisting with inventories of birds and bird parasites, as well as providing bird-oriented interpretive programs for the general park visitor.

Ruth assisted with a MAPS (Monitoring Avian Productivity and Survivorship) bird banding station in the park, and learned how to observe and assess osprey nests using a spotting scope. A major focus of her internship was participating in a study about the effects of acid deposition on the reproduction of the Dark-eyed Junco. "This issue was completely new to me. I learned to analyze the effects of bioaccumulation of mercury in birds." To diversify her internship, she was given the chance to assist in a demographic study of the Hellbender Salamander. "We looked for individuals in a river, where we used neoprene suits and a breathing tube. We placed a radio transmitter the size of a grain of rice on the individuals to follow their movements."

Beyond the species monitoring, Ruth assisted with educational programs for park visitors for International Migratory Bird Day. She also presented her work in Mexico to park visitors, park managers, and birdwatchers, and at the Society for Conservation Biology meeting in Chattanooga, Tennessee, an important professional opportunity her park supervisor, Paul Super, facilitated. She said Paul "gave me the chance to learn from different projects that were done in the park during my internship, and this was incredibly enriching." A side benefit was practicing her English: "During the three months I was at the Smokies, my understanding and conversation skills in English grew exponentially."

After her internship at Great Smokies, Ruth has had the chance to participate in environmental education activities in Mexico such as the World Migratory Bird Day, bird festivals and science programs for children and teens. She worked at the Secretaria de Medio Ambiente e Historial Natural in the state of Chiapas, where she helped organize Owl Week. "This event was done with the purpose of eliminating negative myths people associate with these birds." Just last December, she organized the first bird workshop in a small city of Chiapas along with some colleagues. "In the city there have hardly been any environmental workshops. Children, teens, and adults were very interested, and it was a very satisfying experience. I love to carry out events that raise awareness about the importance and conservation of birds."

On her return to Mexico Ruth also began her Master's and Ph.D. studies at El Colegio de la Frontera Sur, and she is now doing her second year of post-doc studies. "I am supplementing the research that I began in the Smokies. I am developing a historical and spatial study of the effects of heavy metals on birds of the south of Mexico. The purpose of this project is to be able to set a baseline and find out trends of pollution by heavy metals. I also aim to participate in public policies and develop a mechanism for the control of toxic substances for the benefit of bird conservation."

In summing up the influence of her Park Flight experience, Ruth said "participating in the internship was the best thing that ever happened in my life. Thank you and everyone involved for the opportunity that was given to me to participate in this internship. Thank you very much for generating this type of experience for the people of Latin America and the Caribbean."



PARK FLIGHT IVIP NAME: Andrés Felipe Peña Monroy

HOME COUNTRY: Colombia NPS UNIT: BAND YEAR: 2010

Andrés Felipe Peña Monroy from Colombia was selected as a Park Flight international volunteer at Bandelier National Monument in New Mexico in 2010, along with Laila Yunes Jiménez from México, who Andrés said was "an excellent colleague." "At the beginning," Andrés admitted, "I was a little bit nervous and I didn't believe that I was going to have one of the best experiences in my life, I was dreaming!"

As with Laila, Andrés participated in mist-netting Neotropical migrant songbirds, learning techniques for banding and aging birds at the park, as well as at the Manzano Mountains hawk watch station. "I learned to band birds and estimate the age of the birds looking at their feathers," Andrés said. "I was also able to identify species from North America." He learned about raptor banding in the Manzanos, and "learned about the kinds of nets that are used for the species, and the tools necessary for measuring and banding." "We were able to work with some raptors and liberate them after collecting data and banding," Andrés added.

Andrés also provided bird-oriented interpretive programs for both students and adults, spending time with Hawks Aloft, Inc. and Pajarito Environmental Education Center, key partners for Bandelier, learning more about bird education. "Laila and myself were able to teach public-school students how important it is to care for the birds because they migrate to other areas during the winter." Children "visited us at the capture sites and we taught them how to measure the birds and band them."

Andrés "also successfully involved Latino communities with bird conservation actions," participating in the National Science Foundation project with Park Flight and Environment for the Americas. This project, "Engaging Latino Audiences in Informal Science Education," involved doing community surveys to determine the barriers to Latino participation in educational programs offered by the park. He thanked the community organizations from Española who helped with this project and will be a part of future internships at Bandelier to engage Latinos to visit the park. "Now I feel nostalgic," Andrés said at the conclusion of his internship, "to leave all these beautiful people that sacrifice their time to work so hard for their communities that I don't have words to describe it."

As part of this project, he identified issues these Latino communities had, such as with their language, "because sometimes Anglo people don't understand it, since it's a combination between English and Spanish that people often call Spanglish." Andrés credited the Park Flight internship with improving his own English pronunciation. "I became a better communicator," he acknowledged, "especially with public-school children. The internship was very important for me to develop skills using a second language, so I am very thankful for participating in this important internship."

After completing his Bachelor's degree in Biology from Universidad de Antioquia, and prior to Park Flight, Andrés had worked in Colombia as a Research Assistant and Wildlife Biologist for the GAIA Research Group on Environmental Management and Modeling, participating in wildlife-related field work including identifying birds, using mist-nets and taking bird data. He was also a Wildlife Biologist for Integral S.A., Environmental and Geographic Services, and Universidad Católica de Oriente, doing similar work. When Andrés returned home following his internship, he "was able to use the capacities learned to find a job as a bilingual Biology teacher at a learning institution. There, I taught how important it is to care for birds in their natural environment." He also worked with students to celebrate International [now World] Migratory Bird Day, where they watched birds and made bird masks. After that teaching experience, he moved to Chile. There, he said, "we were able to develop a project with public-school children, which we called 'little ornithowizards.' The project taught them everything related to birds, and we cleaned up the Arauco wetlands with the help of the children's parents." He became engaged with the Chilean birdwatchers' network, and a Laboratory Technician then Head Field Coordinator of the Wildlife Laboratory at the Universidad de Concepción, participating in research on the Gray Gull. Andrés is a now Ph.D. candidate in Natural Sciences at Universidad del Bío-Bío.

When asked about the benefit of his Park Flight internship to where he lived, Andrés said his "students received the most benefits. They have worked hard for the conservation of wild fauna." Of the impact of Park Flight on his career, he reflected, "It was a wonderful experience to be able to live inside a national park in the United States and to see many bird species and wild animals. Being able to band and estimate the age of the birds was also of utmost importance. The full experience has made me a better professional...and has allowed me to teach others about the importance of birds."

"First and foremost," Andrés added, "I would like to thank the persons who made this possible and that supported it."



PARK FLIGHT IVIP NAME: Pablo Petracci

HOME COUNTRY: Argentina NPS UNIT: GAAR YEAR: 2004

Pablo Petracci from Argentina was selected in 2004 as a Park Flight IVIP for Gates of the Arctic National Park and Preserve in Alaska. Of all the Park Flight IVIPs, there was no better simile of a migratory bird's long-distance journey than Pablo's 8,500-mile trip from where he was monitoring shorebirds at Estuario de la Bahía Blanca in Buenos Aires Province to his internship at Gates of the Arctic!

The focus of Pablo's IVIP experience was to participate with park staff in the NPS Inventory and Monitoring program's landbird and shorebird inventories. The 8.2 million acres of Gates of the Arctic were largely unsurveyed, a landscape with important nesting habitat for numerous migratory bird species many of which are declining. These species face widespread loss of habitat in critical feeding and staging areas along migration routes and in wintering areas, and impacts of these threats may be detected first through changes in bird abundance and distribution on breeding grounds. The goal of the inventories was to assess avian species diversity, density, and habitat within the park and to develop a monitoring plan.

Pablo came to this internship with ornithological knowledge already, but said this experience proved useful to him "not only to learn more about ecology and migratory bird conservation but also to learn about innovative monitoring and fieldwork approaches." In the days prior to and after fieldwork at the park, he also had the chance to get to know some environmental educators who taught him about environmental education related to birds and Arctic environments. "The days spent at the Arctic Interagency Visitor Center/Dalton Highway gave me the opportunity to learn about environmental education techniques." Regarding his public speaking, he said: "My English language abilities improved, especially regarding communications and writing, which became fluid. I was able to implement activities that required me to use the English language upon my return to Argentina." Beyond honing his bird monitoring skills, he learned many new skills including technological equipment management, plant sampling, first aid, Leave No Trace, security and survival, oaring techniques, white water security, and collaborative work.

After Pablo's return to Argentina, he got involved in activities for the improvement of conservation of migratory birds and their habitats in his local community and country, and said his participation with the Park Flight program was "quite beneficial to my community." He wrote two field guides for the identification of migratory shorebird and waterfowl, participated in conferences and discussions about the conservation of coastal birds, and supported World Migratory Bird Day festivities.

Pablo went on to coordinate the Migratory Bird Conservation Program of Fundación Vida Silvestre Argentina and was the scientific advisor for the Wildlife Directory of Argentina's Environment and Sustainable Development Ministry, including for the management of the national strategy for migratory *Cauquenes* (sheldgeese) in Argentina. He proposed the Bahía Blanca estuary as a new site for the Western Hemisphere Shorebird Reserve Network (WHSRN/RHRAP; he's quoted at <u>https://whsrn.org/whsrn_sites/estuario-de-la-bahia-blanca/</u>), and created new coastal-marine protected areas within the Buenos Aires Province. He monitors migratory birds by air and water each year, and is promoting the creation of two Bird Observatories, one of which is already operating, "as places to involve the community with the coast."

"I was able to be the leader in the resolution of local environmental issues, which has been very positive because I fostered protection and social actions in coastal environments in the face of the threat of extractive activities." Pablo continued, "I have implemented communication bridges and positive interaction with the local port, the most important development project generator in the coast, among many other sites that are working with wetlands and their birds and are aware of how vulnerable they are." He said his books and field guides "are still used by schools to visit and get to know different migratory bird species of our region."

Pablo is a specialist researcher for the Gekko group, part of the Biology, Biochemistry and Pharmacy Department of the Universidad Nacional del Sur in Bahía Blanca, a university which specializes in studies, management, and conservation of biodiversity. He is also an advisor for the WHSRN/RHRAP reserves within the Argentinian Council, and the Director of the Guillermo "Indio" Fidalgo Marine Wildlife Rescue Station (ERFAM), where he lives. In 2022, Pablo published the first guide to evaluate environmental impacts on migratory shorebirds, which is available for use by "all kinds of people, developers, consultants, etc." Beyond just birds, he's been the expedition leader since 2014 for ecotourism trips to Antarctica for Antarpply Expeditions.

Reflecting on the impact of his Park Flight experience at Gates of the Arctic on him personally and professionally, Pablo said "From a personal perspective, my experience in Alaska thanks to Park Flight was life changing." I was able to learn a lot from a technical standpoint and got to know incredible remote places. I was forced to overcome many things, and feel I was able to improve myself both regarding the language as well as physically and mentally. All of this made it an unforgettable experience that was further improved by the marvelous people I met and who shared with me their knowledge and gave me hospitality. I consider I lived a magnificent adventure."

"I will always remember with fondness and emotion the experience I had in Alaska thanks to the international internship program of Park Flight," Pablo said. "I will never forget and will always be grateful."



PARK FLIGHT IVIP NAME: Fabiola Rodríguez Vásquez

HOME COUNTRY: Honduras NPS UNIT: BAND YEAR: 2011

Fabiola Rodríguez Vásquez from Honduras was selected as a Park Flight international volunteer at Bandelier National Monument in New Mexico in 2011.

When Fabiola applied for this internship, she was a Biology student at Universidad Nacional Autónoma de Honduras, where she obtained her Bachelor's degree in 2012, and had assisted with bird monitoring efforts including for the endangered Golden-cheeked Warbler in its pine-oak wintering grounds in Honduras. In her application, she said, "This opportunity would enrich the experience I have gained in the past couple of years with banding and other bird conservation projects as well as carrying out my undergrad dissertation with a bird topic this year successfully...There are few people working in these projects [in Honduras] because they are not fully prepared to participate entirely or to manage these programs and I would learn and be able to support this in my country." Fabiola said afterwards, "Before my Park Flight internship I had experience in research as an assistant and trainee, but it was until my Park Flight internship when I was given more responsibility of data collection, planning and decision making."

Fabiola's position at Bandelier was as the Bird Banding intern, playing a leading role in banding birds following the Monitoring Avian Productivity and Survivorship (MAPS) protocol at six locations from May to July. Not only was Fabiola able to work at Bandelier's banding stations, but also those at Mesa Verde National Park in southern Colorado. The long-term focus of these MAPS stations was to gather demographic information, which required spending a large amount of time studying molts and plumages of birds to correctly determine the ages of all birds banded. She was assisted in this learning process through the expertise and guidance of Stephen Fettig, Wildlife Biologist at the park. "Steve was an amazing mentor," Fabiola said. "I am very grateful to him for teaching me with so much rigor and patience, for making us experience New Mexico and bird monitoring in diverse ways."

Fabiola also played a leading role in implementing a fall migration mist-netting project for Neotropical migrant songbirds from August to October, to determine what migratory bird species were using high elevation areas of Bandelier and their relative abundances. The long-term focus of this effort was to identify movement patterns, and to determine summering and wintering areas for migrating birds that use Bandelier National Monument in the fall. Just through the end of September that year, Fabiola put in over 400 hours of bird banding at ten monitoring stations in Bandelier National Monument and Mesa Verde National Park.

"During my Park Flight internship I cemented the skills of managing a bird monitoring station," Fabiola said. "I gained experience in the determination of age and sex of birds in the hand and continued to learn how to operate stations with bird safety in mind. I was privileged to have great mentors in two MoSI stations in Honduras who had been Park Flight interns too and I felt that their teachings gave me the foundation to be able to make the most of my internship." She had opportunities through this internship to be involved with bird banding at the Rio Grande Nature Center in Albuquerque, and had a weekend camping trip to the Hawk Watch observation and raptor-trapping site in the Manzano Mountains.

Beyond the bird monitoring, Fabiola gave educational programs during student field trips to the park's primary banding site, presented a program about the bird work she had done in her home country of Honduras, and participated in bird-focused activities for a public science-education nature event, the Fall Nature Fest. This experience also benefitted her back in Honduras. "I had the opportunity to organize World Migratory Bird Day (WMBD) events for one year and that was a new experience for me," she said. "My first experience of outreach with young students (K-12) was in Bandelier National Monument and while it was only a couple of days, I appreciated it because I had not been exposed to how to conduct outreach before. However, the events I helped organize for WMBD were varied and revolved around art or storytelling, not bird banding."

The greatest challenge of Fabiola's internship was the unfortunate timing. She arrived at Bandelier in early May, settled in and started her duties. But on June 26, 2011, the Las Conchas Fire began just west of the park and grew to over 156,000 acres. All the major watersheds within Bandelier were heavily impacted by the fire and subsequent flooding, including Frijoles Canyon, where the visitor center and main visited archeological sites were located. Her park housing was evacuated, and had it not been for the incredible generosity of one of Fettig's faithful bird banding volunteers, Joe Fitzgibbon, and his wife Sally, who took Fabiola, and another intern, into their Los Alamos house, her internship would have been in jeopardy. Staying with them, she said, "gave us a different experience as interns. We had the opportunity to do research but also live in a family environment enjoying dinners and TV shows, learning from the day to day of our hosts too. I am extremely grateful for Sally and Joe's support."

Just as Fabiola's Park Flight internship was coming to an end, she received details about an opportunity to assist a graduate student from the University of Massachusetts studying migratory songbirds [focused on Wood Thrush] in a coffee producing region of Honduras. "I was very excited," she said, "because I felt like I had a good chance of getting this opportunity. I also felt like I could do a great job after the training I had received."

After assisting with that study, Fabiola contributed to research within her home country. During the overwintering period (January - April 2012) that followed her return to Honduras, she participated in a research project on how working landscapes, like those that produce coffee, sustain migratory songbirds over the wintering period. "My responsibilities included everything that I had learned during my time in Bandelier and Mesa Verde: setting up mist-nets, collecting data in an organized and rigorous way, and adequately handling birds. I thoroughly enjoyed my time in Yoro, Honduras collecting data on the migratory birds that I had learned so much about during the breeding season." Little did she know that she was going to return to this place almost eight years later to complete a Ph.D. in the ecology of migratory songbirds.

Since her time in Bandelier, Fabiola has participated mostly in independent research efforts. "The Park Flight program has boosted the confidence in me to become a researcher," she said, "but also allowed me to pass along knowledge to others in hope that they too can continue passing along this knowledge." She felt this was a benefit to her country. "Honduras needs more researchers to tackle the environmental issues of today and the nuanced thinking that researchers that live or have grown up in the region bring to ornithology and conservation is unique and valuable. At the time of my Park Flight internship, Honduras did not have a graduate studies program in Natural Resources or Biodiversity nor was it easy to participate in opportunities of field research."

Fabiola continued participating in field work opportunities that involved bird banding, from developing a mist-netting protocol for a cloud forest in Honduras to participating as an intern with Costa Rica Bird Observatories. She started a Master's program at Indiana University of Pennsylvania, where she studied the ecology of the endangered Honduran Emerald hummingbird. She had the opportunity to work with the Institute for Bird Populations to explore bird banding data sets from MoSI stations, participated in the Golden-winged Warbler Working Group, received a Graduate Student Fellowship to facilitate the Road to Recovery effort, and engaged with Aves Honduras. For all these efforts, Fabiola said, "I have loved to contribute ideas and my time to propel avian conservation and science."

In 2015, alongside two of Fabiola's colleagues from Aves Honduras, Roselvy Juárez (a Salvadoran Park Flight intern at Point Reyes in 2007) and John van Dort, they planned a mist-netting workshop for Central American participants. "We had the support from the Missouri Department of Conservation [Brad Jacobs] and several Honduran institutions. The workshop to me was a special effort and 10 people from five Central American countries participated (<u>https://www.aveshonduras.org/wp-</u> <u>content/uploads/2021/10/Informe-de-resultados_Taller-anillamiento-de-aves-2015..pdf</u>)."

Fabiola was able to attend the 6th International Partners in Flight Conference in 2017 in Costa Rica, joining other former Park Flight international volunteers at, and taking notes for, the Partners in Flight Mesoamerica Working Group, Compañeros en Vuelo Mesoamérica meeting there.

Fabiola was a co-author on the Lista Oficial de Las Aves de Honduras, published in May 2023, for Aves Honduras, Asociación Honduraño de Ornitología. In August 2023, she completed her Ph.D. from Tulane University in Ecology and Evolutionary Ecology, with her dissertation on "Overwintering Ecology of Nearctic-Neotropical Migratory Songbirds: An Evaluation of Knowledge Gaps." Fabiola said her Park Flight skills were still relevant to her Ph.D. research. "I found myself transmitting everything I had learned to my colleagues in the field. I passed along all the details that I considered important from the ethics of why we are bird banding all the way to the ageing and sexing tips."

She has since started a post-doc at the Cornell Lab of Ornithology's Center for Avian Population Studies, working on a project using eBird data to learn how bird communities get supported in agricultural landscapes in Costa Rica and Colombia. "I'm going to be doing a lot of data analysis," Fabiola said, "and it is exciting to be able to merge knowledge on birds, and new skills and keep this connection with conservation and the Neotropics."

Fabiola said the biggest impact from her time as a Park Flight intern "was the confidence I gained that motivated me to go back to Honduras and pursue research within Honduras and applying to graduate school." "When I got the Park Flight internship it was the second time I was applying," she said. "I knew that it was a competitive opportunity for Latin Americans to learn in different locations (with different

types of monitoring goals and avifauna). I was determined to apply again because I felt that an opportunity where I would get to dedicate my time to learning about research was going to be rewarding personally and professionally. I was not wrong; that experience shaped many aspects of my career where I continue to work with birds." "In retrospect," she added, "I think I can attribute the Park Flight internship as an important milestone to where I am today."

"When I think of my time as an intern, nothing but joyful memories come to mind," Fabiola reflected. "This [questionnaire] was an opportunity for me to look back at how important the Park Flight internship was for me. Thank you for all you have done for this magnificent effort!"



PARK FLIGHT IVIP NAME: Francisco Daniel Ruz Rosado

Francisco Daniel (Daniel) Ruz Rosado from Mexico was a Park Flight IVIP at Bandelier National Monument in New Mexico in 2008, along with Eveling Tavera Fernández from Perú.

Daniel spent 13 weeks at Bandelier participating in mist-netting Neotropical migrant songbirds and providing bird-oriented interpretive programs for both students and adults. He played a leading role in implementing the mist-netting program, working with National Park Service staff and community volunteers in the field. In addition, he provided educational programs during student field trips to the park's primary banding site as well as a 50-minute program to the classrooms involved in the field trips. Daniel talked with visitors, staff and park partners about the mist-netting project, the problems faced by the many birds which breed in the U.S. and winter in countries to the south, and the bird conservation work being done in his home country of Mexico.

Prior to coming to Bandelier, Daniel has completed his Bachelor's degree in Biology from Universidad Veracruzana, and had worked with a birds and bats monitoring program for La Venta Wind Farms in Oaxaca.

HOME COUNTRY: México NPS UNIT: BAND YEAR: 2008

About the skills he learned in his Park Flight internship, Daniel said: "I had the privilege to observe a lot of new species, but I think the most important thing was to learn more about the juvenile and breeding plumage of many migratory bird species that I never had the opportunity to see...in my country." The educational component of the Park Flight internship was also valuable: "Being part of such a great project of environmental education about birds was one of the most exciting practices of my life. The opportunity to link a new generation of children with nature and bird banding was an overwhelming idea that surely I wanted to replicate in México."

Daniel reflected on his speaking experience at the Bandelier banding station. "Being the lead speaking biologist at the station and also being a bird bander was extraordinary. Finding the equilibrium between being a strict and professional teacher (to protect the birds in the mist-net) and being patient to show the kids how to handle and release a bird with no harm was quite challenging." He said he had to build a completely different skill to speak to the public while doing bird banding. "Linking people and birds is not only an important ecofriendly work but also to learn how to be a storyteller and teaching people that science is cool and in everybody's life."

Daniel's exposure to conservation efforts in U.S. national parks had a big impact on him: "Volunteering in a national park conservation project was one of the highlights of my life!! Having the privilege to observe how this system works and how the parks manage their resources to achieve their objectives is truly amazing. In Latin American countries many times we have limited resources and many challenging scenarios that unfortunately affect the results of the projects. Witnessing how projects are carried out in an ideal economic situation is not only inspiring but also allows biologists to realize which resources are a priority to achieve the objectives of conservation projects." He also developed soft skills through his internship. "Working far from home and with only English speakers made me developed an incredible patience and discipline."

After returning from his Park Flight internship, Daniel had a range of bird and conservation related positions in Mexico. "I've been privileged to work with Pronatura Veracruz at their MoSI [Monitoreo de Sobrevivencia Invernal, Monitoring Neotropical Migrants in Winter] stations," he said, and had the opportunity to do bird banding in many national parks in the states of Veracruz, Puebla, Chiapas, Yucatan and Oaxaca. Having banded approximately 2,000 birds himself, "I've been teaching a new generation of biologists and birdwatchers how to band birds and about the management of a MoSI station." He also did biological monitoring of avifauna for conservation purposes on islands in the Gulf of California and the Mexican Caribbean. As an ornithologist, he's been a consultant in environmental impact assessments of development projects for windfarms, highways, electricity infrastructure, and airports. He also teaches a course of methods and techniques for wildlife monitoring and management in many national parks in Mexico.

Daniel was an Ornithologist/Bird Bander for Pronatura Sur A.C. in Chiapas, working on the monitoring program for the endangered Golden-cheeked Warbler which breeds only in central Texas and winters in southern Mexico and northern Central America. He has led birdwatching tours for European and American birdwatchers in the states of Veracruz and Puebla, and had the opportunity to make a photographic guide of the birds of Veracruz, as editor and photographer, "joining forces with several

colleagues from my generation of ornithologists and writing different chapters which explain the importance of the biodiversity that our state holds to encourage conservation projects." He currently works as a protected species observer in vessels watching and monitoring birds, marine mammals and turtles.

"After my experience with the [Park Flight] program I've been encouraging new generations of biologists to take the leap to join to this kind of internship," Daniel said. "I know at least two other participants who worked for Bandelier National Monument after me and I gave them advice to work successfully."

Daniel felt his internship had a big benefit to his home country. "Sharing knowledge between nations and exchanging human capital should be one of the priority strategies to approach the environmental challenges of the future. An opportunity like this to any young Mexican biologist is an investment in the future of the management of the natural resources in our country." When he returned from this internship, "my level of satisfaction was enormous and it made me feel and believe that I can conquer the world (biologically speaking) and achieve any goal I wanted...Taking a leap out of your comfort zone should be a must in everybody's life."

PARK FLIGHT IVIP NAME: Eveling Tavera Fernández



HOME COUNTRY: Perú NPS UNIT: BAND YEAR: 2008

Eveling Tavera Fernández from Peru was a Park Flight IVIP at Bandelier National Monument in New Mexico in 2008, along with Francisco Daniel Ruz Rosado from Mexico.

Eveling spent 13 weeks at Bandelier participating in mist-netting Neotropical migrant songbirds and providing bird-oriented interpretive programs for both students and adults. She played a leading role in implementing the mist-netting program, working with National Park Service staff and community volunteers in the field. In addition, she provided educational programs during student field trips to the park's primary banding site as well as a 50-minute program to the classrooms involved in the field trips. Eveling talked with visitors, staff and park partners about the mist-netting project, the problems faced by the many birds which breed in the U.S. and winter in countries to the south, and the bird conservation work being done in her home country of Peru.

Prior to her selection for this internship, Eveling was a recent graduate with a Bachelor's degree in Biology from the Peruvian University Cayetano Heredia in Lima. She expressed that this internship "would be very important in my professional way and to be involved in this kind of study would also give me the opportunity to keep learning about the techniques and methods to monitor birds, that are essential and of much necessity for any biologist that wanted to be dedicated to ornithology, as in my case." She had just completed an internship at Humboldt Bird Bay Observatory under the tutelage of Dr. C. John Ralph with the Forest Service Redwood Sciences Laboratory in California, during which she received her "Assistant Certification (Passerines and near Passerines)" from the North American Banding Council.

"The Park Flight internship helped me to develop my skills with bird banding but also helped me to realize the importance of a banding program for a country. Perú didn't have anything like that yet. So one year later, in 2009, I brought the idea to the Center of Ornithology and Biodiversity (CORBIDI) and now we have established since 2010 the first bird banding program for the country, with seven banding stations across different habitats in Peru ranging from coastal desert in Ica to the Peruvian rainforest in Iquitos. We currently have over 5,000 people getting trained not only in passerines but in shorebird identification, capture and banding techniques."

Eveling became Director of the Peruvian Bird Banding Program led by CORBIDI and helped develop the first Shorebird Conservation Plan for Perú. In 2019, she was invited to lead the shorebird identification and monitoring training for Environment for the Americas Celebrate Birds/Celebra las Aves, Latinos in Avian Conservation Internship Program training in San Diego, California, prior to the trainees' internships at U.S. Fish and Wildlife Service, Bureau of Land Management, and USDA Forest Service units.

Eveling finished her Ph.D., on the survivorship and life history strategies in relation to migration distance in Western and Semipalmated sandpipers in Perú, at Simon Fraser University in Canada in 2020. She is working for the University of Saskatchewan as an Associate Postdoctoral Researcher, and is the Chair of the Western Hemisphere Shorebird Group and on the Executive Committee of the Wader Study Group.

PARK FLIGHT IVIP NAME: Daniel Tenez Rivas



HOME COUNTRY: Guatemala NPS UNIT: BAND YEAR: 2007

Daniel Tenez Rivas from Guatemala was selected as a Park Flight international volunteer at Bandelier National Monument in New Mexico in 2007, along with Isella Díaz Uribe from Panama.

Daniel played a lead role in implementing a mist-netting program for Neotropical migrant songbirds, working with National Park Service staff and community volunteers in the field. The primary scientific objective of the program was monitoring migratory birds to determine which species were using an upper elevation site at Bandelier, at 8,900 feet, and their relative abundances. A secondary scientific objective, with a long-term focus, was research to identify movement patterns, and to determine summering and wintering areas for migrating birds that use Bandelier National Monument in the fall.

In addition to gathering data, Daniel also provided educational programs during student field trips to this primary banding site, as well as providing a 50-minute program to each of the classrooms involved in the field trips, including involvement of Native American and Hispanic students. The objective was to teach students about animal-habitat relationships, geography of North America, and problem-solving techniques through bird-related field trips and classroom presentations. This effort was in coordination with the Pajarito Environmental Education Center in Los Alamos, a key partner for Bandelier. Daniel's presentations to students and visitors included talking to about the mist-netting project, the problems faced by the many birds which breed in the U.S. and winter in countries to the south, the bird conservation work being done in his home country of Guatemala, and about bird and habitat conservation programs in general. "I had the chance to present in Spanish about Guatemalan birds and culture to Spanish students at the University of New Mexico." He also participated with Bandelier's partner, Hawks Aloft, in a program for children at schools and adults in workshops and fairs. "This was a new activity for me," he said. "I learned to handle captive raptors."

Prior to his Park Flight internship, Daniel had been working on his Bachelor of Science degree in Biology at the Universidad de San Carlos de Guatemala, with bird experience including raptor monitoring. He had participated in a bird monitoring techniques training workshop in Tortuguero with Jim Zook, one of Costa Rica's most prominent ornithologists, and had the good fortune earlier to attend a bird monitoring techniques course, in association with FUNDAECO, taught by Dr. Chandler Robbins, U.S. Fish and Wildlife Service, who founded the North American Breeding Bird Survey.

Daniel had participated in many projects in different habitats and protected areas in Guatemala, including in the Cerro San Gil Protected Area which had the longest bird monitoring program in Central America. He had worked for the Guatemalan National Protected Areas Council, describing the ornithological importance of forests through studies to help create new protected areas. His thesis investigation was to compare forest birds between habitats and seasons in the Sierra del Lancandón National Park in the Reserva de la Biosfera Maya (Maya Biosphere Reserve).

Daniel became the National Coordinator in Guatemala for Partners in Flight, a landbird conservation initiative active across the Western Hemisphere, for which he received a Partners in Flight Group Leadership Award in 2007, along with the other Partners in Flight Mesoamerica National Coordinators. He implemented a bird project in a last refuge montane forest for the Francisco Marroquin University in Guatemala City.

On returning to Guatemala, Daniel said, "The internship drove me to keep working with Mesoamerican bird conservation...I was able to complete my B.A. as a biologist, especially regarding the bird fauna of an important Guatemalan national park." He participated in monitoring for the endangered Goldencheeked Warbler, a Neotropical migrant, with Alianza para la Conservación de los Bosques de Pino-Encino en Mesoamérica (Pine-Oak Alliance), and in congresses of the Sociedad Mesoamericana para la Biología y la Conservación. Daniel was invited to attend the 4th International Partners in Flight Conference in Texas in 2009, presenting on nocturnal hunting activity by Peregrine Falcon in Guatemala City. He has been an environmental assessor for the Ministry of Environment and Natural Resources, and for the Ministry of Culture and Sports within the Cultural and Natural Heritage area, where he had the chance to represent Guatemala before UNESCO. He's a member of the Board of Directors of Sociedad Guatemalteca de Ornitología (Guatemalan Ornithological Society).

Overall, Daniel felt that his country benefitted from his Park Flight internship. "Guatemala profited from having trained technical professionals in migratory bird issues." It impacted him positively from a personal and academic standpoint: "The internship, besides being an extraordinary and motivating experience at the professional level, also helped me discover if I was able to live in a different country and culture...and it enabled me to pursue a master's degree outside of Guatemala." He completed this degree in Conservation Sciences and Wildlife Management from Universidad Nacional in Costa Rica in 2016, with his thesis based on the sounds of nature, among them the vocalization of birds.

Daniel was able to attend the 6th International Partners in Flight Conference in 2017 in Costa Rica,

joining other former Park Flight international volunteers at the Partners in Flight Mesoamerica Working Group, Compañeros en Vuelo Mesoamérica meeting there.

After his internship, Daniel expressed, "With so much appreciation and gratitude for this great experience. This opportunity will let me work more with birds and conservation."



PARK FLIGHT IVIP NAME: Marvin Tórrez Gutiérrez

HOME COUNTRY: Nicaragua NPS UNIT: BAND YEAR: 2006

Marvin Tórrez Gutiérrez from Nicaragua was selected as a Park Flight international volunteer at Bandelier National Monument in New Mexico in 2006, along with Pablo Herrera Urrutia from Guatemala.

Prior to this internship, Marvin was a Nicaraguan biologist who had been working with birds since 2002. When Marvin applied for this internship, his said his main reason was to have a better knowledge of the techniques of sexing and ageing in passerines and to improve his English. He also wanted to contribute his banding experience in the Neotropics and represent Nicaraguan culture and people.

The scientific objective for Bandelier of hosting this autumn internship was the monitoring of migratory birds at the park to determine which species were using an upper elevation site and to identify movement patterns. The park's education objective was not only to train biologists and teachers from Central America, but to teach local Native American and Hispanic students about animal-habitat relationships through bird-related field trips and classroom presentations, working with partner Hawks Aloft. Marvin also gave presentations on the birds of Nicaragua and his bird work there.

Marvin contributed over 550 hours during his internship between the banding and educational programs. A highlight for him was being able to attend the annual meeting of the Western Bird Banding Association, which happened to be held in New Mexico that fall, as well as visiting the Manzano Mountains to learn about hawk migration counts. "A memory I will hold for years," he said, "is the day we captured two birds of prey, a Sharp-shinned Hawk and a Cooper's Hawk." Other moments he won't forget were when he had to hold birds for photos. "One strong Hairy Woodpecker was the most memorable for its vigorous and tireless pecking of my fingers. I admired that bird's diligence. Its actions were symbolic of a deep desire and determination to keep itself alive."

Upon completing his internship, Marvin summarized the benefits of his internship, "I think that the most valuable was to increase my bird banding capacities, and I was even able to write scientific articles about the issue. The internship gave me the drive and helped me consolidate my capacities to educate children."

After his return to Nicaragua, Marvin became lead bander for three MoSI (Monitoreo de Sobrevivencia Invernal, Monitoring Neotropical Migrants in Winter) bird banding stations in his country, where he trained numerous volunteers and staff. In 2008, he was selected as a candidate for a Training Workshop on Bird Banding Techniques and North American Banding Council (NABC) Certification Opportunity in El Imposible National Park in El Salvador, sponsored by Partners in Flight in collaboration with the Society for Mesoamerican Biology and Conservation. His selection as an NABC candidate was based on his having banded over 1,000 birds in Nicaragua, Costa Rica and New Mexico, and been a field instructor for multiple bird banding workshops. At this El Salvador workshop, Marvin achieved NABC certification at the Assistant level.

Marvin also worked with the USDA Forest Service International Institute of Tropical Forestry (IITF) and Paso Pacifico as Biodiversity Coordinator and Coordinator of Ecological Monitoring for the Conservation and Sustainable Tourism in Critical Watersheds Project, where he continued to be involved with banding and training. In 2010, Marvin was a recipient of the U.S. Forest Service Wings Across the Americas International Cooperation Award for his work in Nicaragua with the IITF. During this time, Marvin co-authored the chapter on Áreas Importantes para la Conservación de las Aves (AICAs; Important Bird Areas) in his country.

After completing his Master of Science degree related to climate change at Universidad Centroamericana de Managua, he continued as a researcher and environmental and biodiversity advisor. He became a university professor at Universidad Centroamericana and Director of its Estación Biológica Juan Roberto Zarruk. He was part of a team monitoring the endangered Golden-cheeked Warbler and helped develop the Golden-winged Warbler nonbreeding season conservation plan. He has also been a specialized bilingual tourist birdwatching guide for the country. Marvin continues to be the Coordinator for the International Union for Conservation of Nature Red List of Threatened Species for Nicaragua, and a reviewer of eBird for Nicaragua. Marvin was able to attend the 6th International Partners in Flight Conference in 2017 in Costa Rica, joining other former Park Flight international volunteers at the Partners in Flight Mesoamerica Working Group, Compañeros en Vuelo Mesoamérica meeting there.

In 2019, Marvin was selected to receive an Individual Leadership Award from Partners in Flight, a Western Hemisphere landbird conservation initiative, for his twenty years of dedication to the conservation of wild birds, as a leader and catalyst in promoting ornithology, ecology, and the conservation of biota and natural resources in Nicaragua and throughout Central America. After receiving this award, Marvin said "Many good things have happened to me since my trip to New Mexico in 2006... I am starting to understand the full magnitude and importance of internships such as Park Flight."

Marvin said his internship showed him "quality work, professionalism, commitment, and clear objectives." It had "a lot of impact," Marvin reflected, "because it opened for me a way to see that the professional world is much wider and varied. I was able to set objectives using first-world quality standards. It made me work outside of my comfort zone, in new landscapes with new persons, which in some way granted me independence."

PARK FLIGHT IVIP NAME: Iselda Vega Durán



HOME COUNTRY: El Salvador NPS UNIT: GOGA/PORE/PRBO YEAR: 2010

Iselda Vega Durán from El Salvador was selected in 2010 as a Park Flight international volunteer at Point Reyes National Seashore and Golden Gate National Recreation Area in California, with their partner PRBO Conservation Science (now Point Blue). When Iselda applied for this Park Flight internship opportunity, she thought it "would be very important to my professional and personal development, because I want to improve in this field. I wish to dedicate all my effort to contribute with the bird conservation in my country." She had the requisite experience to be successful in this internship: she had banded and processed around 2,000 birds in El Salvador, with close to 20,000 net hours, and had worked in 21 field stations in her country training volunteers and staff in bird monitoring techniques. At the time, she was a field coordinator of a study "Dispersing Forest Birds and Migratory Birds in El Salvador's Apaneca Biological Corridor" with SalvaNATURA, a non-profit organization dedicated to the restoration and conservation of the environment and natural resources to achieve sustainable development and raise the quality of life in El Salvador.

Iselda had also benefitted from a Park Flight Migratory Bird Program-sponsored technical assistance opportunity for SalvaNATURA in El Salvador in 2006, a Bird Monitoring Workshop taught by Dr. Peter Pyle with The Institute for Bird Populations. Dr. Pyle is the author of the Identification Guide to North American Birds Part I, better known as the "bander's bible." She also participated in a Training Workshop on Bird Banding Techniques at El Imposible National Park in El Salvador in 2008, sponsored by Partners in Flight – Compañeros en Vuelo and Sociedad Mesoamericana para la Biología y la Conservación.

For this Park Flight internship, Iselda was fortunate to be based at PRBO Conservation Science's Palomarin Field Station, a mist-netting station founded in 1966, making it the longest running bird population study site west of the Mississippi. Her main task was helping to collect data for this longterm mist-netting study at Palomarin and other banding sites; she contributed over 400 volunteer hours doing mist-netting, bird banding, and entering and proofing data. "Most birds were new for me, since I had never seen them in my life," Iselda said. "One of my favorite experiences was when I saw a Swainson's Thrush in its first day born with its very first plumage, called "Plumón" in Spanish, as well as the opportunity to band hummingbirds."

Her supervisor, Renée Cormier, said Iselda, "arrived with a solid background in bird handling and banding techniques, and quickly learned our methods and technical codes. She was also exposed to advanced ageing and sexing techniques for passerines in-the-hand and attended a presentation from one of the world's leading molt experts, Steve N.G. Howell." "In our program," Renée said, "it is essential to have intern biologists who are dedicated to collecting accurate and thorough data. Iselda was very careful to collect accurate data and ask questions when it was necessary. She was very focused on learning as much as possible to take back to El Salvador." Indeed, Iselda felt that one of the most valuable things she learned was bird identification approaches and age estimation using plumage.

In addition to bird banding, Iselda also participated in public and K-12 outreach and education when visitors came to the banding station, and joined the education staff for an after-school bird club program working with children from under-served communities who spoke Spanish and were from El Salvador, Guatemala, Mexico and Nicaragua. She also gave a presentation to PRBO staff about conservation in El Salvador and, specifically, her work with SalvaNATURA. This experience, Iselda said later, gave her "the opportunity to interact with the public and share the importance of bird monitoring. I also learned

some environmental interpretation methods, which I implemented upon my return to my home country."

Having to speak English in her internship was beneficial to her career. "I was able to improve my English language skills," she said, which upon her return to El Salvador "enabled me to become a birdwatching guide with international observers from the USA, Japan, and the UK." The process of having to speak before the public using a different language "granted me confidence and improved my communication skills regarding the transmission of scientific information to different audiences."

The prize from this internship was the opportunity to complete the North American Banding Council Bander Certification process, which Iselda did successfully. This included a written test, study skins test, and in-field banding evaluation by certified banding trainers. "This is a rigorous exam administered in English that is challenging for all of our interns," Renée acknowledged, "and allowed Iselda to demonstrate her skills as a competent bander."

After returning to El Salvador, Iselda kept supporting the Monitoreo de Sobrevivencia Invernal bird banding stations (MoSI; Monitoring Neotropical Migrants in Winter) monitoring stations in El Salvador, and carried out bird monitoring training workshops with SALVANATURA and the Environment Ministry. She became a Field Coordinator for a bird monitoring and banding program in Costa Rica, with INBio, Klamath Bird Observatory, and U.S. Forest Service Wings Across the Americas. She was certified as a teacher through El Salvador's Ministry of Education National Teaching Plan, and was employed by the Universidad de El Salvador as a Biology instructor for the Programa Jóvenes Talentos, a General Biology Lab Professor, and a long-distance mentor in Science Teaching. She was also a Specialized Wildlife Technician for SalvaNATURA, for "Programa de Capacitación Comunidades y Biodiversidad" y "Monitoreo de aves playeras en Área de Importancia para las Aves y Sitio Jiquiliscos-Jaltepeque y Golfo de Fonseca." Iselda then became a Resilience Technician for Fundación Ayuda en Acción in the Suchitlán area, and the academic coordinator of the national plan for Biology teaching.

Beyond these positions, Iselda has participated in the Programa de Aves Urbanas (PAU; Urban Birds Program), collaborated in the coastal bird census with Manomet and in the waterfowl census, and has organized World Migratory Bird Day activities in El Salvador.

Iselda completed a Master of Science degree in Curriculum, Teaching and Capability Assessment in 2021, following a Master of Science degree in Water Management in 2016. Since 2019, Iselda has been working as a Specialized Technician with the Ministry of Education for the High School Teaching Pathway, and a professor at the Pedagogy school of the Universidad de El Salvador. She is also the Founder and Vice President of "Mujeres y Naturaleza" (MUNAT; Women and Nature). MUNAT's purpose is to promote wildlife conservation through environmental education programs, sensibilization, scientific research, conservation of species and their habitats, and to promote, plan, and design sustainable community development to raise awareness about environment-friendly actions to diminish the negative impact on natural resources and facilitate adaptation to climate change.

Regarding the impact of her Park Flight internship as an individual and for capacity building, Iselda reflected, "The internship changed my way of seeing life. It was an excellent experience that made me keep working for the benefit of bird conservation in my country. This experience was one of the best of my professional career."



PARK FLIGHT IVIP NAME: Laila Yunes Jiménez

HOME COUNTRY: México NPS UNIT: BAND YEAR: 2010

Laila Yunes Jiménez from México was a Park Flight IVIP at Bandelier National Monument in New Mexico in 2010. She learned techniques for banding and aging birds at the park, as well as at the Manzano Mountains hawk watch station where raptors are caught, measured, and banded. "This was one of the best training opportunities I had," she said, adding "I chose the program for its social component." "I love working with people, especially with children and teens, and there I had the chance of directing several discussions in schools, I guided children at the banding station, we organized the park fair, and several other wonderful experiences. I took all the tools to my country, I finished my master's thesis and I am still implementing several tools, ideas, and activities with children and teens in several areas of Chiapas."

She also participated in the National Science Foundation project, "Engaging Latino Audiences in Informal Science Education," doing community surveys to determine the barriers to Latino participation in educational programs offered by the park. "The best part," she said, "was to see some people and contacts at Bandelier in their Fall Nature Fiesta. It was incredible to see some of the kids that took our bird presentation there with their families; they were so excited showing the games to their families."

She was excited to see that "we could transmit to them the interest in birds" and could meet our true goal, to engage them in the park and with nature.

She felt the public speaking aspect of this internship was very valuable. "This fascinating life experience allowed me to guide discussions in English, participate in radio programs, organize several activities such as opening a library in a nearby town, and organize visits with children to the study site." She thought it was a great opportunity to practice her English, which "increased my motivation to improve my language skills to be able to communicate and to lead discussions at schools and all of the activities that have to do with people."

She said she loved to work with a team. "I always worked with Andrés Felipe Peña Monroy [the other Park Flight intern at Bandelier, from Colombia]. We had several great ideas that would not have been possible if I had been on my own. The same happened with the chief bander [Stephen Fettig, NPS] and colleagues of the banding team." Laila later had the opportunity to visit Andrés in Colombia, exchanging "some bird studies of our countries."

She came back to her country "very inspired and motivated." She worked with PAUTA (Programa Adopte un Talento) science workshops with teachers and children, then started her Master of Science degree in Natural Resources and Rural Development. Her research project, which was assessed by Susan Bonfield/Environment for the Americas, a Park Flight partner, was working with children in two communities of Chiapas trying to find out how they relate to birds. "Nobody had ever worked with or listened to the children in these communities." She then worked with the Programa de Aves Urbanas (PAU; Urban Birds Program) in San Cristobal de las Casas, organizing birdwatching activities and environmental education and culture events related to birds, such as dedicating the Day of the Dead celebration to birds who have passed on or are endangered. She was also the Educational Coordinator for Mundo de Talentos, developing and designing vocational orientation workshops for children and teens, and a high school biology professor. Since 2016, she has taught biology/zoology at Universidad de Ciencias y Artes de Chiapas (UNICACH), holding science fairs and public awareness events about birds. "I constantly watch birds and use social media to disseminate the importance of birds and their conservation."

In assessing the impact of her Park Flight internship, Laila said, "Being part of this program has been one of the best experiences in my life and I will always be grateful for having had this opportunity and for having been given this marvelous and positive influence in my life."