PACIFIC SEABIRDS

A Publication of the Pacific Seabird Group

Volume 42, Numbers 1 and 2 2015

PACIFIC SEABIRD GROUP

Dedicated to the Study and Conservation of Pacific Seabirds and Their Environment

The Pacific Seabird Group (PSG) was formed in 1972 due to the need for better communication among Pacific seabird researchers. PSG provides a forum for the research activities of its members, promotes the conservation of seabirds, and informs members and the public of issues relating to Pacific Ocean seabirds and their environment. PSG members include research scientists, conservation professionals, and members of the public from all parts of the Pacific Ocean. The group also welcomes seabird professionals and enthusiasts in other parts of the world. PSG holds annual meetings at which scientific papers and symposia are presented; abstracts for meetings are published on our web site. The group is active in promoting conservation of seabirds, including seabird/fisheries interactions, monitoring of seabird populations, seabird restoration following oil spills, establishment of seabird sanctuaries, and endangered species. Policy statements are issued on conservation issues of critical importance. PSG publishes the on-line bulletin *Pacific Seabirds* (formerly the PSG Bulletin; www.pacificseabirdgroup.org) and the journal *Marine Ornithology* (www.marineornithology.org). Other publications include symposium volumes and technical reports; these are listed near the back of this issue. PSG is a member of the International Union for Conservation of Nature (IUCN), the Ornithological Council, and the American Bird Conservancy. Annual dues for membership are $30 (individual and family); $24 (student, undergraduate and graduate); and $1200 (Life Membership, payable in five $240 installments). Dues are payable to the Treasurer; see the PSG web site or the Membership Information at the back of this issue.

World Wide Web

http://www.pacificseabirdgroup.org

Donations

The Pacific Seabird Group is a nonprofit organization incorporated under the laws of the State of California. Contributions to the Pacific Seabird Group are tax deductible to the fullest extent allowed by U.S. law (IRS Section 501[c][3]).

Pacific Seabirds

This on-line bulletin reports on the work and committee activities of the Pacific Seabird Group, conservation news, and other items of importance to conservation of seabirds in the Pacific Ocean. The bulletin is in transition from a twice-yearly publication to an on-line news bulletin and archive of PSG activities. This issue was compiled by an interim editor and summarizes a year of PSG activities for 2015-2016, and will be available on-line as a pdf. Back issues of the PSG Bulletin and *Pacific Seabirds* are posted on the group's web site (see Membership next to inside back cover for details).

Pacific Seabirds Interim Editor (for this issue only)

Kathy Kuletz, pastchair@pacificseabirdgroup.org

Associate Editors for This Issue

Laura Bliss, Jane Dolliver, Vivian Mendenhall, Martin Renner, Leslie Slater; layout: Mesha Wood

Marine Ornithology

Marine Ornithology presents peer-reviewed contributions concerning international seabird science and conservation. The journal is published two times a year. It is available on its web site (www.marineornithology.org) or by subscription. The journal is supported by a partnership of global seabird societies, including the Pacific Seabird Group (PSG), African Seabird Group, Australasian Seabird Group, the Seabird Group (UK), Dutch Seabird Group, and Japan Seabird Group.

Change of Address

Send changes of address to the PSG Membership Coordinator, **Jennifer Lang**, membership@pacificseabirdgroup.org

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LIFETIME ACHIEVEMENT AWARD

The Pacific Seabird Group occasionally honors major contributors to seabird science and conservation with Lifetime Achievement or Special Achievement awards. The Lifetime Achievement Award recognizes an individual whose outstanding work for seabirds has influenced the course of research, conservation, and/or education throughout the Pacific or the world.

DR. DAVID AINLEY

By Craig Strong and Gregory Spencer

The Pacific Seabird Group honored Dr. David Ainley (pictured above with Adelie penguins) with a Lifetime Achievement Award in 2015.

In 2015 the Pacific Seabird Group honored **Dr. David Ainley** with a Lifetime Achievement Award. Growing up in the wilds of New England, with plenty of time spent in the mountains of New Mexico, Colorado and California, David was inspired to pursue his BS degree from Dickinson College, Pennsylvania. While still a student there, he published his first paper based on his senior research. His attention to the ocean was inspired by summers at Kent Island in the Bay of Fundy, as well as the Yukon-Kuskokwim Delta and Chesapeake Bay. This led to a Ph.D. at Johns Hopkins University, in which he investigated Adélie penguins in Antarctica. He since has made about 35 trips to Antarctica and the Southern Ocean, with a third of those on oceanographic research vessels.

When not in the Antarctic, David established, and for 20 years led, the marine research program at Point Reyes Bird Observatory (PRBO, now Point Blue Conservation Science). This included the design and implementation of the Farallon Island marine bird and mammal research program in 1971, most of which is ongoing today and makes up one of the longest and most detailed seabird data sets in the world. Learning about birds on the islands naturally led David to sea, where he studied community foraging ecology in the Gulf of the Farallones, Eastern Tropical Pacific, and Antarctic regions. Assisted by Larry Spear, he studied the ecology of seabirds in the eastern tropical Pacific (in comparison to the Southern Ocean) aboard Equatorial Pacific Ocean Climate Studies (EPOCS) cruises, and aided by Gregory Spencer studied the ecology and worked for the preservation of endangered procellarids in Hawaii. For the past 20 years David has been on the staff of H.T. Harvey & Associates where he has continued to provide unparalleled expertise on the ecology of seabirds and the trophic ecology of pelagic ecosystems. His time is divided between National Science Foundation (NSF) and other grant-funded research in the Antarctic and California Current, as well as carrying out consulting work with the support of Ron Duke and Scott Terrill. Some of the H.T. Harvey projects David has been involved in include the *Exxon Valdez* oil spill, GLOBEC-California Current and Southern Ocean, and San Francisco Bay Dredge Materials Disposal efforts.

Dr. David Ainley

Currently – well, for the past 18 years – through the NSF, he has been researching Adélie penguin demography with co-researchers Grant Ballard and Katie Dugger. Concurrently, he has been studying on effects of cetacean foraging on penguin prey availability adjacent to Ross Island in the Ross Sea. Included in the latter is use of an ocean glider and ROVs, with co-researchers Walker Smith and Stacy Kim, to assess effects of penguin foraging on prey availability. For the past 10 years, as an avocation, he's been 'tilting at windmills,' attempting to protect the Ross Sea from excessive

human use, most immediately industrial fishing (www.lastocean.org). David's passion led to the founding of Friends of the Ross Sea Ecosystem (FORSE), for which he wrote proposals and lead efforts to designate the Ross Sea as a Marine Protected Area. The Ross Sea constitutes 3.2% of the Southern Ocean and 0.01% of the World Ocean and is the subject of international resolutions from IUCN World Conservation Congress, MCBI and Mission Blue; nonetheless its cause is still ongoing in the chaotic geopolitical grab for ocean resources.

David's underlying motivation in how one should conduct science is inspired by Thomas Jefferson, who in charging Meriwether Lewis with surveying the Louisiana Purchase, noted that making observations is important but those not recorded and reported is information lost. David knows and appreciated that information remains obscure unless published, thus he has authored or co-authored 4 books, 12 monographs and at least 230 papers about the ecology of marine upper trophic level organisms - seabirds, marine mammals, and sharks. He is the first to acknowledge that he could not have done this without the support of family, who graciously allowed him the long periods of absence from the 'normal' world.

Dr. David Ainley (pictured above) in Antarctica with penguins. Photo©Chris Linder, WHOI

Another source of David's success is his acute understanding that there is always a big picture that must be considered in interpreting the story his data tells him. One cannot see the big picture without recognizing the increasingly serious threats and stressors affecting marine ecosystems, and this has motivated David's crusade to protect the Ross Sea.

Dr. David Ainley (pictured below) out at sea working from a boat.

One of David's greatest contributions to seabirds and our seabird community has been his mentorship of budding seabird biologists and his support for contributing researchers. In addition to providing jobs and experience to younger researchers, David serves as adjunct professor at Moss landing Marine Lab, where he advises graduate students. It is hard to know how many marine science careers David has helped launch, but if you are among them (dear reader), we plan to set up a link where you can let others know how your success and knowledge benefited from David's support.

Somehow in addition to his field research, prolific publishing efforts, and consulting work, David has found time to take on the responsibility of Editor-in-Chief of our own PSG journal, *Marine Ornithology*. We also note that David was one of the founding members of PSG, whose first meeting consisted of 8 researchers that met at Palomarin Field Station (which was then the main office of PRBO).

Thank you, David - you have truly earned this Lifetime Achievement Award.

REGIONAL REPORTS FOR 2015

Edited by Leslie Slater and Robb Kaler

Regional Reports summarize current and recent seabird work of interest to PSG members. Regional Reports generally are organized by location, not by affiliation of the biologist. They should not be cited without permission of the researchers.

ALASKA & RUSSIA

Compiled by Robb Kaler

BERING AND CHUKCHI SEAS

Annual seabird monitoring at St. George and St. Paul islands was led by **Marc Romano** (Alaska Maritime National Wildlife Refuge; AMNWR) with summer-long field crews consisting of **Greg Thomson** and **Michael Johns** (St. Paul) and **Jason Tappa, Stephanie Walden,** and **Laney White** (St. George). Both crews collected data on a variety of species including Red-faced Cormorants *(Phalacrocorax urile)*, Common Murres *(Uria aalge)*, Thick-billed Murres *(Uria lomvia),* Least Auklets *(Aethia pusilla)*, Black-legged Kittiwakes *(Rissa tridactyla),* and Red-legged Kittiwakes *(Rissa brevirostris)*. In addition, a boat-based cormorant survey of the Pribilof Islands was conducted by **Marc Romano, Heather Renner, Greg Thomson, Michael Johns, Jason Tappa, Stephanie Walden,** and **Laney White.** This survey was supported by the AMNWR ship R/V Ti^gla^x.

Kathy Kuletz and **Liz Labunski** (U.S. Fish and Wildlife Service; USFWS) completed the sixth year of pelagic seabird surveys in the Bering and Chukchi seas, as part of the Seabird Distribution in the Offshore Environment project, funded by the Bureau of Ocean Energy Management (BOEM). This program relies on collaborations with a variety of oceanographic and fisheries programs. In 2015, seabird observers were placed on nine Bering or Chukchi research cruises from July to mid-October. This was also the first year of the Arctic Marine Biodiversity Observing Network, a five-year program to monitor the Chukchi Sea ecosystem with funding through a partnership with Shell Inc., BOEM, National Ocean and Atmospheric Administration (NOAA), and National Aeronautics and Space Administration (NASA). The 2015 seabird observers were **Toby Burke, Mary Cody, Dan Cushing, Angie Doroff, Luke DeCicco, Nick Hajdukovich, Kathy Kuletz, Liz Labunski, Catherine Pham, Martin Reedy, Stephanie Walden, Charlie Wright,** and **Tamara Zeller.** Data from all of the at-sea surveys will be archived in the North Pacific Pelagic Seabird Database.

Kathy Kuletz, Liz Labunski (USFWS), and **Catherine Pham** (Hawai'i Pacific University; HPU) will continue to work with other investigators as part of the Arctic Ecosystem Integrated Survey; a multi-agency funded collaboration. Catherine was the seabird observer for these cruises and is incorporating the data into her Master's degree at HPU, with **David Hyrenbach** as her major professor. Catherine received a Graduate Student Award from the North Pacific Research Board to support her Arctic studies. Efforts are underway to synthesize oceanographic, plankton, fish, and seabird data from 2012 and 2013 in the northern Bering and Chukchi seas.

Kathy Kuletz is leading the write up for, and working with other members of the Circumpolar Seabird Group (a Conservation of Arctic Flora and Fauna sub-group), to produce the five-year summary of progress in Arctic seabird monitoring; this State of the Arctic Marine Biodiversity Report is scheduled to be ready for peer review in April 2016.

Rachael Orben, Alexander Kitaysky (University of Alaska Fairbanks), Rosana Paredes (Oregon State University) and **Scott Shaffer** in collaboration with **Marc Romano** (AMNWR), initiated a study to characterize movements and life-history responses of red-legged kittiwakes *(Rissa brevirostris)* during the pre-laying and early incubation periods at St. George Island, Alaska. In May and June 2015, **Rachael Orben, Abram Fleishman** (San Jose State University) and **Dean Kildaw** (Biological Consultant), deployed GPS tags during pre-lay and incubation along with over-winter loggers. A second field season will occur in 2016.

ALEUTIAN ISLANDS

Annual seabird monitoring at Buldir and Aiktak islands was led by **Jeff Williams** (AMNWR) with summer-long field crews consisting of **Kevin Pietrzak, McKenzie Mudge** and **Ryan Mong** on Buldir. They collected productivity, diet and population data on a variety of species including Red-legged *(Rissa brevirostris)* and Black-legged Kittiwakes *(R. tridactyla)*; Least Auklets *(Aethia pusilla)*, Crested *(A. cristatella),* Whiskered *(A. pygmaea)*, and Parakeet *(A. psittacula)*; Common *(Uria aalge)* and Thick-billed Murres *(U.lomvia)*; along with Fork-tailed and Leach's Storm-Petrels *(Oceanodroma furcata* and *O. leucorhoa).* **Sarah Youngren** and **Dan Rapp** on Aiktak monitored Horned and Tufted Puffins *(Fratercula corniculata* and *F. cirrhata*, respectively), Glaucous-winged Gull *(Larus glaucescens)*, Common and Thick-billed Murres *(Uria aalge* and *U. lomvia*, respectively), and Ancient murrelets *(Synthliboramphus antiquus).*

GULF OF ALASKA

Although there was no formal seabird monitoring at East Amatuli Island in the Barren Islands in 2015, and in light of poor or failed ledge-nester colonies at Chowiet Island and in the lower Cook Inlet region, **Arthur Kettle and Leslie Slater** (AMNWR) made a one-day visit in early September to East Amatuli Island for a quick read on Common and Thick-billed Murre (*Uria aalge*, and *U. lomvia*, respectively) reproductive success. Neither adults nor chicks were observed on cliffs; an unprecedented

occurrence. **Robin Corcoran** (Kodiak National Wildlife Refuge; Kodiak NWR), assisted by four volunteers, completed the fifth year of nearshore marine bird surveys in June and August on the northeastern end of the Kodiak Archipelago. The skiff-based line transect survey study design systematically selected transects so that a minimum 20% of shoreline around the Kodiak Archipelago was surveyed. Program goals are to determine population estimates, long-term population trends, and habitat associations for key marine bird species relevant to Kodiak NWR management objectives and to contribute data to regional monitoring programs in the Gulf of Alaska.

With National Fish and Wildlife Foundation support, the eighth consecutive season of a nesting ecology study of Kittlitz's Murrelet (*Brachyramphus brevirostris*, KIMU) was conducted on the western end of Kodiak NWR by **James Lovvorn** and graduate student **Timothy Knudson** (both with Southern Illinois University), assisted by volunteers. Both individuals are continuing their work with Kittlitz's Murrelet at the Kodiak NWR. In coordination with Alaska Maritime National Wildlife Refuge, U. S. Geological Survey Alaska Science Center, and Region 7 U. S. Fish and Wildlife Service Office of Ecological Services, this cooperative project has a five-year plan to characterize nesting habitat, monitor activities at the nest (incubation shifts, meal delivery to chicks, prey delivered to chicks, etc.), measure chick growth rate, measure reproductive success, and collect samples for genetic analyses. The 2015 field season brought the lowest apparent nest success, 0%, since the pilot season of 2008 when the study area was a quarter the size. Over the eight-year study, apparent nest success averaged 22% (range 8-48 %). During the later stages of incubation, with the help of U. S. Fish and Wildlife Service Biologists **Michelle Kissling** and **Steve Lewis**, three adult KIMUs were trapped and fitted with a satellite transmitter, however the three trapped adults never returned to their nests sites which led to failure in all cases. Satellite data from the tagged birds showed all birds nearby the Trinity Islands of the Kodiak Archipelago, immediately south of the study area. Ongoing analysis at Southern Illinois University will investigate the influence of diet on nest success, and will assess the hypothesis that the KIMU population has declined in part due to lower chick growth rates resulting from reduced availability of high-energy forage fish.

Numerous people were active in responding to seabird mortality events that occurred throughout 2015 in Alaska waters. Federal, state, and local agencies as well as the Coastal Observation and Seabird Survey Team (COASST) collaborated to collect information, synthesize records, and send carcasses for testing to the U. S. Geological Survey National Wildlife Health Center. A seabird mortality monitoring database was developed to catalog reports of dead birds from across the state of Alaska. The collected information will be used to assess the range and magnitude of seabird mortality event in 2015.

Ed Melvin (Washington Sea Grant), **Rob Suryan,** and **Amanda Gladics** (Oregon State University; OSU), **Kim Dietrich** (Kim Dietrich Consulting), and **Tracee Geernaert** (International Pacific Halibut Commission) initiated a project to assess characterization of spatiotemporal patterns and trends in albatross and other seabird bycatch rates in Alaskan longline fleets based on over 20 years of National Oceanic and Atmospheric Administration (NOAA) groundfish fisheries observer data. The team will also be re-engaging Alaskan fishermen to conduct seabird bycatch avoidance best practices workshops, the first of which were conducted in May 2015 in Kodiak, Homer, and Seward, Alaska.

SOUTHEAST ALASKA

The 2015 seabird monitoring crew at St. Lazaria Island consisted of **Stacie Evans, Leeann McDougall,** and **Emily Schmidt,** led by **Leslie Slater** (AMNWR), and with assistance from **Roberta Swift** (USFWS, Migratory Bird Management, Region 1). Population trend data were collected at St. Lazaria for the following species: Fork-tailed and Leach's Storm-Petrels (*Oceanodroma furcata, O. leucorhoa*, respectively), Pelagic Cormorant (*Phalacrocorax pelagicus*), Glaucous-winged Gull (*Larus glaucescens*), Pigeon Guillemot *(Cepphus columba*), Common and Thick-billed Murres (Uria aalge, U. lomvia, respectively), Rhinoceros Auklet (*Cerorhinca monocerata*), and Tufted Puffin (*Fratercula cirrhata*). Annual productivity data were collected at St. Lazaria for the following species: Fork-tailed and Leach's Storm-Petrels, Pelagic Cormorant, Glaucous-winged Gull, Common and Thick-billed Murres, Rhinoceros Auklet, and Tufted Puffin. Chick growth data were collected for: Fork-tailed and Leach's Storm-Petrels and Rhinoceros Auklet. Diet samples were collected for: Fork-tailed and Leach's Storm-Petrels, Glaucous-winged Gull, Rhinoceros Auklet. **Alexis Will** (Ph.D. candidate, University of Alaska, Fairbanks), in addition to her own work at St. Lazaria, retrieved geolocator units attached in previous seasons to Rhinoceros Auklets to assist **Katie Studholme** (Ph.D. candidate, Dalhousie University) in learning about non-breeding distributions. **Brian Hoover** (Ph.D. candidate, University of California, Davis [UCD]) visited St. Lazaria to collect genetic material from Leach's Storm-Petrels to investigate the degree to which environmental pressures influence local adaptation. **Steve Lewis** and **Justin Jenniges** (Alaska Department of Fish and Game) checked artificial burrows at Lowrie Island to get a gross estimate of productivity of species known thus far to use the burrows (i.e., Fork-tailed and Leach's Storm-Petrels, Ancient Murrelet (*Synthliboramphus antiquus*), and Cassin's Auklet (*Ptychoramphus aleuticus*).

RUSSIAN FAR EAST

Falk Huetmann (Ecological Wildlife Habitat and Data Analysis of the Land- and SeascapE; EWHALE at the University of Alaska, Fairbanks) was invited by World Wildlife Fund Russia/Norway to help with a Strategic Conservation Planning (Machine Learning and Strategic Conservation planning using MARXAN software (www.uq.edu.au/marxan/)) exercise for marine protected area (MPA) networks in the waters of the Russian High Arctic.

WASHINGTON & OREGON

Compiled by Peter Hodum

OREGON

Peter Sanzenbacher and **Brian Cooper** of ABR, Inc. – Alaska Biological Research - conducted marine radar and night vision surveys of Leach's Storm-Petrel colonies on the southern coast of Oregon during summer 2015. The surveys followed the same protocols as research conducted in 2008-2009 investigating the use of radar as a tool for monitoring nearshore seabird colonies. The results of the 2015 studies will be compared to results from previous years, as well as results from visual, acoustic, and other survey methods conducted concurrently in 2015 by **Rob Suryan** and **Amanda Gladics** (Oregon State University; OSU). This work was done with support and in partnership with the Oregon Coast NWRC and USFWS Region 1 Migratory Bird Management Office.

Researchers from OSU, the U.S. Geological Survey-Oregon Cooperative Fish and Wildlife Research Unit (USGS-ORCFWRU), Real Time Research, Inc. (RTR), and cooperators continued to study interactions between seabirds and forage fish in the Pacific Northwest in 2015. This year, research and monitoring was focused on Caspian Terns (*Hydroprogne caspia*) at colonies in eastern Washington, interior Oregon and northeast California, and at East Sand Island in the Columbia River estuary. Investigations into the effects of avian predation on survival of juvenile salmonids (Oncorhynchus spp.) in the Columbia River basin were a continuing emphasis of this research.

In 2015, management by the U.S. Army Corps of Engineers, Bureau of Reclamation, and their cooperators reduced Caspian Tern nesting habitat at three sites within the Columbia River Basin, as part of efforts to reduce Caspian Tern predation on threatened and endangered Columbia River salmonid populations. The research team monitored the response of terns to this management using a combination of banded tern resighting, satellite telemetry of displaced terns, and monitoring of alternative colonies.

This year's research team included **Dan Roby** (U. S. Geological Survey -Oregon Cooperative Fish and Wildlife Research Unit; USGS-ORCFWRU), **Jessica Adkins, Olivia Bailey, Chris Baird, Kirsten Bixler, Carly Congdon, Tim Lawes, Pete Loschl, Don Lyons, John Mulligan, Amy Munes, Allison Patterson, Adam Peck-Richardson, Rebecca Cull Peterson, Alexa Piggott, Ethan Schniedermeyer, Yasuko Suzuki, James Tennyson** and **Amy Wilson** (OSU), **Ken Collis, Brad Cramer, Allen Evans, Mike Hawbecker, Quinn Payton,** and **Aaron Turecek** (RTR, Inc), and numerous seasonal technicians and volunteers. Funding was provided by the Bonneville Power Administration, U. S. Army Corps of Engineers, U. S. Fish and Wildlife Service, and Grant County (Washington) Public Utility District.

At the mouth of the Columbia River, **Don Lyons** and **Adam Peck-Richardson** (OSU), and **Dan Roby** (USGS-ORCFWRU), continued a study to investigate the use of diving waterbirds to collect physical oceanographic data. Field work was conducted in 2014 by fitting Brandt's and Double-crested Cormorants with GPS tags having integrated depth and pressure sensors; analysis is ongoing. **Jim Lerczak** (OSU's College of Earth, Ocean, and Atmospheric Sciences) is an important collaborator on the project, which is funded by the Office of Naval Research.

Dan Roby (USGS-ORCFWRU), **Don Lyons** and **Kirsten Bixler** (OSU) continued to collaborate with **James Lawonn** (Oregon Department of Fish and Wildlife) to study the diet and prey consumption of Double-crested Cormorants in three estuaries along the Oregon coast. The study is investigating potential consumption of juvenile salmonids in Tillamook Bay, the Umpqua River Estuary, and the Rogue River Estuary. The third year of field work concluded in 2015; diet composition and prey consumption analyses are ongoing.

Yasuko Suzuki and **Don Lyons** (OSU), and **Dan Roby** (USGS-ORCFWRU) began collaborating with **Kentaro Kazama** (Meijyo University, Japan) in 2015 to study the effect of seabird guano on nitrogen cycling in aquatic ecosystems surrounding seabird colonies. During the first year of collaboration, we collected samples at double-crested cormorant colonies in Washington and Oregon, and analyses are ongoing.

Kim Nelson (USGS-ORCFWRU and OSU) continued her project using song meters and dawn surveys to look at the presence and occupancy of Marbled Murrelets (*Brachyramphus marmoratus*) on lands purchased in Lincoln County, Oregon as mitigation for the New Carissa oil spill. This project is funded by the USGS and USFWS; the Confederated Tribes of the Siletz is a cooperator. The primary objective of this project is experimental: produce a robust estimate of the number of murrelets nesting on the Reed Creek property. This will be accomplished by: (1) deploying multiple acoustic sensors to monitor murrelet activity for a longer period of time and over a larger area than accomplished by previous surveys; (2) conducting simultaneous acoustic and dawn audiovisual surveys on some days at each survey site to compare the relative sensitivity of the two techniques; (3) analyzing the data to produce a best estimate of the number of murrelets nesting on the Reed Creek property; and

(4) identifying nest trees for possible future monitoring of nesting success. A goal is to develop a correction factor between automated acoustic and PSG survey methods that could be applied to historic murrelet data to produce a more accurate estimate of historic murrelet use of the property. Murrelets were present throughout the property, though in apparently lower numbers than expected compared to the oil spill damage assessment. Several potential murrelet nest trees were located. Song meters were successful in recording murrelet presence throughout the landscape, but there are many limitations to their use (e.g., only record vocal detections). Research assistants and field crew in 2015 included **Mandy Wilson, Cathleen Rose, Stephen Rossiter, Jen Rothe, Gwyn Case,** and **Cordelia Finley**.

Rob Suryan, Stephanie Loredo, Ian Throckmorton, Jess Porquez and **Amanda Gladics** (OSU), and **Oscar Garzon** and **Carlos Lerma** (Environment for the Americas) conducted studies of Common Murres (*Uria aalge*) and Pelagic and Brandt's Cormorants (*Phalacrocorax pelagicus* and *P. penicillatus*, respectively) at the Yaquina Head colony in Newport, Oregon. This is the ninth consecutive year of collaborative studies at this site among OSU, the Bureau of Land Management, and the USFWS. For the first time in the 14-year time series, both murres and Pelagic Cormorants experienced complete reproductive failure. Reproductive loss to predators was higher this year than in previous years, primarily attributed to increased disturbance by Bald Eagles (*Haliaeetus leucocephalus*), and subsequent egg predation by gull species (*Larus spp.*). The frequent eagle disturbances concentrated on previously unaffected areas of the colony, contributing to the total failure.

Rob Suryan (OSU) and **Josh Adams** (USGS) initiated a project with funding from the Bureau of Ocean Energy Management (BOEM) to use individual tracking to characterize resident and migrant seabird distribution and three-dimensional movement patterns during winter, night, and inclement weather for species off the Oregon coast. The project also involves integration of ship-based surveys. **Rachael Orben** (OSU) and **Stephanie Loredo** recently joined the Seabird Oceanography Lab and will be involved in this collaborative project. During spring 2015, the team began tracking Pink-footed Shearwaters (*Puffinus creatopus*), Common Murres, and Western Gulls (Larus occidentalis). **Jonathan Felis** and **Ryan Carle** (Oikonos) deployed satellite transmitters on Pink-footed Shearwaters on Isla Mocha, Chile in April 2015, which were expected to migrate into Oregon waters. **Josh Adams, Rob Suryan, Amanda Gladics, Emma Kelsey** (USGS)**, Max Czapanskiy** (USGS), **Shawn Stephensen** and **Peter Pearsall** (Oregon Coast National Wildlife Refuge Complex; OCNWRC) deployed satellite transmitters on Common Murres offshore from the Yaquina Head breeding colony in Newport. **Leigh Torres** (OSU), **Stephanie Loredo, Rob Suryan, Jess Porquez**, and **Amanda Gladics** deployed archival GPS tags on Western Gulls from a breeding colony in Yachats, Oregon, and collected bacterial and viral samples for a collaboration with **Scott Shaffer** (San Jose State University), **Hillary Young** (University of California, Santa Barbara), and **Corey Clatterbuck** (University of California, San Diego).

Rob Suryan, Jess Porquez, Ian Throckmorton and **Amanda Gladics** continued vessel-based at-sea surveys of seabird distribution off the central Oregon coast. The research areas include the Newport Hydrographic Line, an oceanographic cross-shelf sampling line extending west from Newport, Oregon and two Pacific Marine Energy Center potential wave energy sites. In collaboration with scientists from the NOAA Northwest Fisheries Science Center, **Amanda Gladics** conducted seabird surveys from Brookings, Oregon, to Willapa Bay, Washington, during the West Coast rockfish pre-recruitment survey from the R/V Bell M. Shimada. **Rob Suryan** and **Jess Porquez** consulted with resource agencies and industry staff about seabird monitoring at the future WindFloat offshore wind demonstration site near Coos Bay, Oregon, and assisted with preliminary surveys of the site.

Rob Suryan and collaborators at OSU and University of Washington completed the design and testing of an integrated multi-sensor array to continuously monitor for interactions (including impacts) of avian and bat species with offshore wind turbines. The synchronized array of sensors includes accelerometers, contact microphones, visual and infrared spectrum cameras, and bioacoustics. The team conducted final testing of the fully integrated sensor test with experimental impacts during fall 2014 and spring 2015 at the National Renewable Energy Lab's National Wind Technology Center in Colorado. The next steps of this project include research into commercial applications.

Amanda Gladics and **Sjurdur Hammer** (Ph.D. candidate, University of Glasgow) co-organized a six-part online videoconference series to engage early career scientists in preparation for the 2nd World Seabird Conference. Each "Meet the Masters" session featured two experienced seabird scientists answering questions from a panel of three to six early career scientists in a live video conversation. Archived recordings of the sessions are available at http://tinyurl.com/ha32w2r

Dan Roby (USGS, OSU), **Rob Suryan, Amanda Gladics, Roberta Swift** (USFWS-Migratory Birds and Habitat Program), **Shawn Stephensen, Bill Bridgeland** (OCNWRC), **Amelia O'Connor** (OCNWRC), and **Ian Throckmorten** continued to develop and test non-invasive population monitoring techniques for burrow-nesting seabirds. The approach combines simultaneous data collection using remote cameras and acoustic recorders in long deployments up to an entire breeding season. During 2015, the group deployed equipment at Goat Island, near Brookings, Oregon, for a second season and also expanded

the study to include nearby Saddle Rock. **Peter Sanzenbacher** (ABR, Inc.) and **Roberta Swift** collaborated to conduct simultaneous radar surveys and **Peter Hodum** assisted in testing burrow probe cameras alongside traditional grubbing methods at both study sites to assess a broad range of non-invasive monitoring techniques. This project is also in partnership with **Matthew McKown** and **Abram Fleishman** (Conservation Metrics).

Turnstone Environmental Consultants, Inc. (Turnstone) conducted work related to seabirds for several projects in 2015, which are summarized below. These projects involved surveys for Marbled Murrelets (*Brachyramphus marmoratus*) and all surveys were conducted according the PSG's 2003 protocol requirements.

The Oregon Department of Forestry (ODF) contracted Turnstone to conduct Marbled Murrelet surveys on state lands in the Coast Range of Oregon in four ODF districts (Astoria, Tillamook, Western Lane, and West Oregon). Visiting a mixture of first, second, and multi-year survey sites, surveyors conducted 896 surveys at 131 unique sites and 522 unique stations. Murrelets were detected during 39 surveys at 23 sites in five different districts; nesting behavior was observed during six of these surveys. Tom Williamson is the Turnstone project manager and Corey Grinnell is the ODF primary contact.

Turnstone conducted Marbled Murrelet surveys for two districts of the Bureau of Land Management (BLM) in 2015. The Salem District contracted Turnstone to conduct Marbled Murrelet surveys in the Mary's Peak Resource Area, Oregon. Turnstone biologists conducted 97 surveys at 15 unique sites and 37 unique stations. **Jeff Reams** is the Turnstone project manager and **Scott Hopkins** is the BLM contract administrator and primary contact. The BLM Coos District contracted Turnstone to conduct Marbled Murrelet surveys in survey areas within the Coos District, Oregon. Turnstone biologists conducted 113 surveys at 17 unique sites and 75 unique stations. **Jeff Reams** is the Turnstone project manager and **Jennifer Kirkland** is the BLM contract administrator and primary contact.

Turnstone biologists also conducted approximately 26 additional Marbled Murrelet surveys over five unique sites and 23 unique stations for a private landowner in the coast range of Oregon. The project was conducted as part of the pre-management process in advance of timber management plans. Murrelets were not detected during these surveys. **Tom Williamson** is the Turnstone project manager for this project.

WASHINGTON

Jennifer Lang (formerly Jennifer Ma; M.Sc. student, University of Washington; UW) is developing models to describe the baseline of beached bird patterns and evaluating wreck (seabird die-offs) events for the outer coast of Washington and Oregon using data collected by participants of the citizen science project, Coastal Observation And Seabird Survey Team (COASST), under the direction of **Julia Parrish** (UW). After identifying wrecks as statistically anomalously high encounter rate events compared to the normal pattern, wrecks are assessed by duration and intensity, and the body condition and species composition of the carcasses.

Sue Thomas and Lorenz Sollmann (USFWS Washington Maritime National Wildlife Refuge Complex; WMNWRC) conducted two aerial surveys of surface-nesting seabirds on 24 islands within Flattery Rocks, Quillayute Needles, and Copalis National Wildlife Refuges (NWRs) on 18 June and 1 July 2015. Species surveyed included Common Murre (*Uria aalge)*; Double-crested, Brandt's and Pelagic Cormorants (*Phalacrocorax auritu, P. penicillatus* and *P. pelagicus*, respectively); and Glaucous-winged, Western and hybrid gulls (*Larus glaucescens* and *L. occidentalis*, respectively) as well as Tufted Puffins (*Fratercula cirrhata*) opportunistically. This survey is part of a larger effort to assess abundance and distribution in seabird colonies along the Pacific Coast. The same survey methodology is followed along the Oregon coast and a similar methodology is followed in California. Aerial surveys were conducted aboard a 206 B3 Bell® helicopter from 210-399 m above ground level. The helicopter circled each refuge island until staff captured images of all faces where surface-nesting seabirds might be observed. Common Murres were observed on Erin Island, Copalis NWR; Huntington, Cakesosta, Table Rock and an unnamed island within the Quillayute Needles Archipelago; Jagged, Carroll Island & Pillar, Quillayute Needles NWR; and White Rock, Flattery Rocks NWR. Ongoing analysis includes counting birds in digital photos in a geospatial database.

Sue Thomas and **Lorenz Sollmann** (WMNWRC) conducted surveys in May to determine abundance and distribution of Pigeon Guillemots (*Cepphus columba*) on Protection Island NWR and select islands within the San Juan Island NWR. Other breeding species were noted as well, particularly Black Oystercatchers (*Haematopus bachmani*) and gulls. This survey effort followed methodology established by Evenson et al. 2004 (Proceedings of the 2003 Georgia Basin/Puget Sound Research Conference) which refined population estimates for Pigeon Guillemots in the Salish Sea. This effort was intended to reassess abundance of guillemots associated with refuge islands and gauge the need for an additional comprehensive surveys throughout the Salish Sea.

Sue Thomas (WMNWRC) recently completed a pilot project testing the use of remote trail cameras in a diet study of Tufted Puffin chicks on Protection Island NWR and the Zella Schultz Seabird Sanctuary. The objectives of this study were to assess the use of remote cameras in identifying and quantifying species of prey and feeding frequencies. Photos have not yet been fully analyzed. **Sue Thomas** and **Lorenz Sollmann** (WMNWRC) participated in the Pacific Flyway Double-crested Cormorant survey in July 2015. Six refuge islands that have historically supported >50

Double-crested Cormorant nests were circumnavigated once at 2-5 knots from roughly 200 yards off shore while photos were taken of the colony. All adults as well as chicks or occupied nests were counted in photographs.

Peter Hodum, Chair of the Science Committee for Seattle Audubon, reports that Seattle Audubon has been working with other environmental organizations as part of the Murrelet Survival Project (Marbled Murrelet, *Brachyramphus marmoratus*), the goal being to educate the members of the Washington State Board of Natural Resources (BNR) on a suite of four Alternatives for the Marbled Murrelet Long-Term Conservation Strategy. The coalition works with state and federal agency staff and other research scientists to ensure that these alternatives reflect the latest scientific research on the habitat needs of and prey availability for this threatened species. By the end of 2016, Washington State's BNR will also determine a land use plan for the following decade that will impact timber revenue for Washington state communities and old-growth forest habitat.

Lora Leschner continues to work as a partnership coordinator for the Joint Venture program. Pacific Coast Joint Venture has rebranded and is now Pacific Birds Habitat Joint Venture. Reorganization is intended to improve efficiencies across the region (Alaska, Hawaii, British Columbia, Washington, Oregon and northern California) as well as throughout the Pacific flyway. We conducted an analysis of existing important bird conservation plans (e.g., State Wildlife Action Plans, USFWS plans) to identify overlaps and gaps. Partners then reviewed the results and the Joint Venture identified two major habitat-based priorities: Coastal wetlands and oaks prairie conservation. The goals for coastal wetland habitat include: understand coast-wide implications of sea level rise and other climate effects, develop a coast-wide strategy that blends mitigation strategies, improve restoration techniques to address long-term transformation of coastal wetlands, and increase public awareness and support for good policy decisions.

Elizabeth Phillips (Ph.D. candidate in the School of Aquatic and Fishery Sciences, University of Washington) is examining the influence of river plumes on seabird-prey interactions, with a focus on Sooty Shearwater (*Puffinus griseus*) and Common Murre (*Uria aalge*) near the Columbia River in the northern California Current. She is working in collaboration with **Jen Zamon** (NOAA-Fisheries) and **Josh Adams** (U.S. Geological Survey).

Scott Pearson (Washington Department of Fish and Wildlife), **Tom Good** (NOAA Northwest Fisheries Science Center) and **Peter Hodum** (University of Puget Sound and Oikonos) continued their long-term study of reproductive success patterns of Rhinoceros Auklets (*Cerorhinca monocerata*) on Protection (tenth year) and Destruction (eighth year) islands, Washington. Dietary studies were conducted during the late chick-rearing stage on both islands. Preliminary analyses of burrow occupancy and fledging success suggest that occupancy was lower than the long-term average for Destruction but not Protection. Fledging success was comparable to previous years on both islands.

Undergraduate research students in **Peter Hodum's** lab at the University of Puget Sound (UPS), in collaboration with Oikonos and the Slater Museum of Natural History at UPS, conducted seabird-related research on three focal projects during the past year: (1) plastic ingestion patterns in seabirds of the Outer Coast of Washington and northern Oregon, (2) a historical ecology study of trophic levels of Tufted Puffins (*Fratercula cirrhata*) using stable isotope analyses, and (3) a pilot study of neurophysiological impacts of plastic ingestion in Northern Fulmars (*Fulmarus glacialis*).

OREGON & WASHINGTON

Ed Melvin (Washington Sea Grant) and **Rob Suryan, Amanda Gladics** (OSU) and **Joe Tyburczy** (California Sea Grant) continue to promote seabird conservation through research and outreach in California, Oregon and Washington groundfish fisheries with funding from NOAA Northwest Fisheries Science Center and Northwest Region, National Fish and Wildlife Foundation, and the Packard Foundation. In 2014-2015, **Amanda Gladics** wrapped up at-sea research on seabird interactions with longline fishing gear. The team promoted seabird avoidance at several industry and public events and reported their research findings to the Pacific Fisheries Management Council in April, and in meetings with fishermen in four West Coast ports (Astoria, Newport, Charleston, Port Orford). The group continues to work closely with the NOAA West Coast Groundfish Observer Program to characterize the diversity of vessels and gear types in this fleet, and **Amanda Gladics** conducted trainings for fisheries observers to measure the sink rates of longlines on vessels selected for observer coverage.

REPORTS FROM WA/OR MEMBERS WORKING IN OTHER REGIONS

ANTARCTICA

Peter Kappes is working on a Ph.D. with his adviser **Katie Dugger** at Oregon State University (OSU), investigating the reproductive ecology and population dynamics of Adélie Penguins (*Pygoscelis adeliae*) on Ross Island, Antarctica.

HAWAI'I

Matthew McKown (Conservation Metrics), **Roberta Swift** (U. S. Fish & Wildlife Service Migratory Birds and Habitats Program), and **Meg Duhr-Schultz** (U. S. Fish & Wildlife Service Midway Atoll National Wildlife Refuge) initiated a two-year study to develop methods to survey Bonin Petrels (*Pterodroma hypoleuca*) on Midway Atoll using Wildlife Acoustics Song Meter SM3's®. The study will simultaneously collect burrow occupancy and acoustic data in order to calibrate Song Meters for use as a refuge monitoring tool for this species.

NORTHERN CALIFORNIA

Compiled by Anna Weinstein

The Common Murre Restoration Project (U. S. Fish and Wildlife Service – Fremont, California; Humboldt State University – Arcata, California; and others), which is funded by the Luckenbach Oil Spill Trustee Council, concluded its 20th season of seabird productivity and disturbance monitoring. Co-Principal Investigators on the project are **Gerry McChesney** (USFWS) and **Rick Golightly** (Humboldt State University; HSU); biologist **Allison Fuller** (HSU) coordinated field activities. Field biologists in 2015 included **Johanna Anderson, Jared Zimmerman, Justin Windsor, Ryan Potter, Amanda Hooper** and **Sarah Wartman.**

Four colony complexes in California were monitored by six seasonal field biologists in 2015, including Point Reyes Headlands (Marin County), Drakes Bay Colony Complex (Marin County), Devil's Slide Rock and Mainland (Pacifica), and Castle-Hurricane Colony Complex (Big Sur). Murre numbers were steady at Devil's Slide Rock, which was recolonized using social attraction from 1996 to 2005, compared to 2014. Aircraft and boat disturbance was relatively infrequent in 2015.

Humboldt Redwood Company, LLC (HRC) continued the conservation activities for the Marbled Murrelet (*Brachyramphus marmoratus*) under the company's Habitat Conservation Plan (HCP). Project leaders were **Sal Chinnici** and **Mark Freitas** of HRC. The HCP requires tracking of murrelet occupancy and numbers over time using both radar and audio-visual (AV) survey techniques. Surveys were continued in 2015 at the Headwaters Forest Reserve and Humboldt Redwoods State Park (the Reserves), and also at the Marbled Murrelet Conservation Areas (MMCAs) on HRC forestlands, with the collaboration of **Sean McAllister**, O'Brien Biological Consulting, and **Adam Brown**. Since the inception of HCP monitoring (1999), behaviors indicating occupancy have been observed in the MMCAs and Reserve stands using AV surveys. In 2015, surveyors conducted 142 surveys at 33 stations and observed "occupying behaviors" (below canopy flight or circling) in all monitored Reserves and all MMCAs. Radar surveys tracked murrelets traveling to and from nesting areas within the MMCAs and Reserves; radar counts are considered an index to the breeding population size. In 2015, 56 radar surveys were conducted at 14 sites. Most murrelets tracked by radar were at Humboldt Redwoods State Park and the Shaw Creek MMCA. Final analyses of the 2015 data have not yet concluded. The 2014 data indicated that after 12 years of monitoring there has been an increase in radar detections in the MMCAs, but not in the Reserves, since the 2002 baseline.

David Ainley (H.T. Harvey & Associates Ecological Consultants), **Peter Adams** (Adams Fishery Consultants), **John Field** (National Oceanic and Atmospheric Agency [NOAA]- National Marine Fisheries Service, Santa Cruz), **Michelle Hester** (Oikonos Ecosystem Knowledge), **Jaime Jahncke** (Point Blue Conservation Science) and **Jarrod Santora** (University of California, Santa Cruz [UCSC]), along with other members of their respective institutions, began a data synthesis and analysis project, funded by NOAA, entitled: "Advancing Effective Ecosystem-based Fisheries Management in the California Current System: Metrics for Quantifying Prey Availability to Predators thus to Model Allocations of Allowable Biological Catches". The project grew from a National Fish and Wildlife Foundation-funded workshop held in September 2013 in which the spatial and temporal aspects of prey switching among California Current seabirds was investigated and discussed. This NOAA-funded project will combine a few decades of data gathered in the central California Current region on forage fish availability, along with seabird foraging habitat use, foraging effort and energetic factors. The aim is to devise "harvest rules," i.e., levels of forage fish abundance that result in life-history changes among predators, by which ecosystem-based fishery management can be applied in the California Current.

Tori Seher (Golden Gate National Recreation Area) monitored Pelagic Cormorants (*Phalacrocorax pelagicus*), Pigeon Guillemots (*Ceppus columba*), California Gulls (*Larus californicus*), and Black Oystercatchers (*Haematopus bachmani*) on Alcatraz Island. Pelagic Cormorants did not nest on the island for the second consecutive year and California Gulls were also absent from the island for the first time since 2004. Black Oystercatcher nests increased to three for the first time on record. Video cameras were used for the second year to monitor reproductive success and diet of Pigeon Guillemots. **Harry Carter** and **Mike Parker** (California Institute of Environmental Studies) monitored for presence of Ashy Storm-petrels (*Oceanodroma homochroa*) after two were found dead on Alcatraz the previous year. **Heather Robinson** (Farallon Institute) monitored phenology, reproductive success, and disturbance of Western Gulls (Larus occidentalis) and Brandt's Cormorants (*Phalacrocorax penicillatus*) on Alcatraz Island.

Jan Roletto and **Dre Devlin** (Greater Farallones National Marine Sanctuary, NOAA), and **Kirsten Lindquist, Taylor Nair** and **Peter Pyle** (Sanctuary Supporters) coordinated the Beach Watch program of Greater Farallones National Marine Sanctuary (GFNMS). Beach Watch is a public-private partnership engaging 150 citizen scientists in standardized monitoring of live and dead wildlife on 56 outer coast beaches of the North Central Coast. In anticipation of the GFNMS expansion of April 2015, Beach Watch program expanded its survey range to Manchester Beach, Mendocino County, in November 2014. Forty new volunteers started surveys in November 2014. In fall and winter 2014 Beach Watch found significant increased deposition of Cassin's Auklets

(*Ptychoramphus aleuticus*) more than 100 times than the 21-year baseline. Preliminary findings were presented at PSG annual meeting in 2015. Again in fall 2015 there was significant increase in deposition of Common Murre (Uria aalge). Necropsies conducted by the National Wildlife Health Center indicated starvation as the cause of both mortality events. Notably during this year, Beach Watch also documented significant die-offs in California sea lion (*Zalophus californianus*) and Guadalupe fur seal (*Arctocephalus townsendi*). Beach Watch data-query can be found on-line. More information contact **Jan Roletto**, Jan.Roletto@noaa.gov or **Kirsten Lindquist**, klindquist@farallones.org, or check out the data query system at http://www.farallones.org/BeachData/BeachWatchData.php

The Seabird Bycatch Necropsy Program continued investigations of the demographics and health of seabirds killed in Hawaii and Alaska longline fisheries at the Marine Wildlife Veterinary Care and Research Center, in Santa Cruz. The program is led by **Shannon Fitzgerald** (NOAA - Alaska Fisheries Science Center), **Jessie Beck** and **Michelle Hester** (Oikonos), with support from NOAA - Pacific Islands Regional Office and California Department of Fish and Wildlife. Plastic ingestion was quantified as part of Oikonos' "Biological Indicators of Ocean Plastic Pollution Program" (BiOPS). Diet studies were conducted in collaboration with **William Walker** (National Marine Mammal Laboratory, Sand Point, Washington). In addition, a Short-tailed Albatross from the Alaska hook-and-line groundfish fishery was examined in December 2014 in collaboration with **Paul Collins** and the Santa Barbara Museum of Natural History.

The BiOPS network works to reduce marine plastic pollution by using seabirds and fish as biological samplers of litter at sea. The network is managed by **David Hyrenbach** (Oikonos, Hawaii Pacific University), with projects led by **Jessie Beck, Michelle Hester** (Oikonos), and **Peter Hodum** (Oikonos, University of Puget Sound [UPS]), with **Gary Shugart** (UPS), **Myra Finklestein** (UCSC), and a growing number of collaborators in the United States, Japan, and Australia. Project centers are located in O'ahu (HPU's Pelagicos lab), Santa Cruz (Marine Wildlife Veterinary Care and Research Center and UCSC), and Tacoma (UPS's Slater Museum). Investigations focus on quantifying plastic ingestion in seabirds and their prey, assessing pollutant loads in marine food-webs, and identifying the biological impacts of ingested plastics and associated pollutants on marine predators.

The BeachCOMBERS (Coastal Ocean Mammal and Bird Education and Research Surveys) is headed by Principal Investigator **Jim Harvey** (Moss Landing Marine Labs, MLML), with additional coordination from **Patty Brown** (MLML), **Cori Gibble** (UCSC/UCD), **Emma Kelsey** (U. S. Geological Survey,USGS) and **Erica Donnelly-Greenan.** Additional support came from Monterey Bay National Marine Sanctuary, U.S. Fish and Wildlife Service, UCD, USGS, California Department of Fish and Wildlife, U.S. Bureau of Land Management, Oikonos, and the hundreds of volunteers who have made this program possible. BeachCOMBERS systematically surveys beaches in Santa Cruz, Monterey, and San Luis Obispo counties (California) to determine human and natural impacts to marine birds and mammals. Project coordinators completed a volunteer training session at Moss Landing Marine Laboratories in October 2014. The Southern Chapter, established in 2013, is headed by Principal Investigator, **Robert McMorran** of the U. S. Fish and Wildlife Service.

Josh Adams, Emma Kelsey and **Jonathan Felis** (USGS), in collaboration with **David Pereksta** (Bureau of Ocean Energy Management; BOEM), are finalizing a report on the vulnerability of seabirds to offshore wind farms in the California Current System. **Josh Adams** and **Emma Kelsey** (USGS), in collaboration with **David Pereksta** (BOEM) and **Kevin Lafferty** (USGS) created a seabird monitoring survey to compile information on seabird research and researchers in California, Oregon, Washington, Alaska, and Hawaii.

Josh Adams, Max Czapanskiy, and **Emma Kelsey** (USGS), with support from the Montrose Settlements Restoration Program, in collaboration with the Channel Islands National Park (**David Mazurkiewicz**) completed seasonal mist-netting efforts to quantify catch per unit effort for Ashy Storm-petrels at three colonies off southern California. These data will be compared with similar efforts during 2004-2007. **Josh Adams, Jonathan Felis, Bill Henry, Jennifer Broughton** (UCSC), **John Mason,** and **John Takekawa** are completing several projects related to the Pacific Continental Shelf Environmental Assessment (PaCSEA) program including compilation and atlas representation of seabird telemetry data for the California Current Large Marine Ecosystem, characterization of water masses of the northern California Current using airborne hyperspectral radiometry, and a comparison of density and distribution among seabirds off northern CA, OR, and southern Washington between the 1990s and 2011-12.

Ron LeValley, in conjunction with the California Coastal National Monument (CCNM), Mendocino Coast Audubon Society, the Sea Ranch Stewardship Taskforce and other groups, has continued monitoring Pelagic Cormorant (*Phalacrocorax pelagicus)* colonies in the Mendocino County region of northern California for the 7th year. Citizen scientists monitor known colonies. More volunteers and sites have been added to the project, and more than 15 sites with 5 to 25 nests each are now being monitored for reproductive success. Productivity was poor in 2015 compared to the past six years, with many of the colonies lacking any nests this year. Ron is collaborating with others along the West Coast to compile a broad assessment of Pelagic Cormorant.

Scott Shaffer, Sue Cockerham, Anne Cassell (San Jose State University) are continuing a large collaborative project on the foraging ecology of Western Gulls (*Larus occidentalis*) with **Pete Warzybok, Russell Bradley,** and **Jaime Jahncke** (Point Blue Conservation Science), **Josh Adams** and **Emma Kelsey** (USGS), **Rob Suryan** and **Leigh Torres** (OSU), **Hillary Young** (University of California, Santa Barbara), and **Corey Clatterbuck** and **Rebecca Lewison** (San Diego State University). This multi-colony study (southern and central California and Oregon) focuses on intercolony differences in foraging behavior, diet, and contaminant exposure of gulls that feed on natural foods or in landfills.

Scott Shaffer is also collaborating with **Pete Warzybok, Russell Bradley,** and **Jaime Jahncke** to examine the foraging ecology of Rhinoceros Auklets (*Cerorhinca monocerata*) at Southeast Farallon Island. Two pilot efforts have produced interesting and amazing data showing the extensive foraging range and travel distances of Rhinoceros Auklets breeding at the Farallon Islands. **Greg Taylor** (San Jose State University) and **Scott Shaffer** are working with **Josh Ackerman** (USGS to examine the effect of mercury contamination on egg turning behavior in Forster's terns (Sterna forsteri) in San Francisco Bay.

Scott Shaffer is continuing a long-term study (since 2002) on the foraging ecology of Laysan and Black-footed albatrosses (*Phoebastria immutablis* and *P. nigripes,* respectively) in the Papahānaumokuākea Marine National Monument. Several students including **Michelle Antolos, Melinda Conners,** and **Morgan Gilmour** (UCSC), **Sarah Gutowsky** (Dalhousie University), and **Corey Clatterbuck** have/are conducting their thesis research on this project. In addition, Scott is collaborating with **Lindsay Young** and **Eric Vander Werf** (Pacific Rim Conservation) to examine egg attendance behavior and breeding success in Laysan Albatrosses in the main Hawaiian Islands.

Caitlin Kroeger (UCSC) and **Scott Shaffer** are collaborating with **David Thompson** (National institute of Water and Atmospheric research in New Zealand). Their project focuses on the foraging ecology and energetics of Campbell and grey-headed albatrosses (*Thalassarche impavida* and *T. chrysostoma*) at Campbell Island, New Zealand. Lastly, Scott is collaborating with **Pierre Blevin, Olivier Chastel, Fred Angelier** (Centre d'Etudes Biologiques de Chizé, France) and **Geir Gabrielsen** (Norwegian Polar Institute) on a study to examine the effects of contaminants and hormone levels on egg turning behavior and breeding success in Black-legged Kittiwakes (*Rissa tridactyla*) in Svalbard.

Mark Rauzon has completed the book, "Isles of Amnesia: History, Geography and Restoration of America's Forgotten Pacific Islands", published in 2016 from University of Hawaii Press. It is the story of an invasive species eradication practitioner trying to save seabirds in America's newest marine national monuments. How the islands were colonized and how they were restored is the story told from Rauzon's personal experience for over 25 years. In addition, Mark is completing the monitoring of Double-crested Cormorants (*Phalacrocorax auritus*) on the San Francisco Bay bridges, which are either closed to birds or being demolished. Along with **Meredith Elliott** of Point Blue Conservation Science, they are perhaps documenting the end of the bridge colonies in San Francisco Bay.

Laurie Harvey and **Anna Weinstein** (Audubon California) continued to coordinate a statewide study on Black Oystercatcher (*Haematopus bachmani*) productivity. In 2014, 60 participants tracked 55 pairs over the entire breeding season (including re-nesting) in locations from Mendocino to San Luis Obispo counties. Participants include staff of California State Parks and the Bureau of Land Management as well as expert amateurs. Fledge success at 0.37/pair was similar to 2013. Productivity tracking and territory mapping will continue in 2016. Funding was provided from the Bureau of Land Management, the Resources Legacy Fund and the Marisla Foundation.

SOUTHERN CALIFORNIA

Compiled by Yuri Albores-Barajas

Annette Henry is studying the physiological changes of Eared Grebes (*Podiceps nigricollis*) associated with migration. Habitat changes to staging areas for this species during autumn and spring are being monitored to evaluate effects at a population level. As part of her work with Marine Mammal and Turtle Division, Southwest Fisheries Science Center (SWFSC), NOAA, she is working on distribution of select seabird species within the eastern tropical Pacific and California Current using data collected by the SWFSC as part of their cetacean and ecosystem assessment surveys.

Lisa T. Ballance (SWFSC) continues to oversee the seabird portion of the center's Cetacean and Ecosystem Assessment Surveys in the greater Pacific Ocean (California Current, Hawaiian Archipelago - in collaboration with colleagues at the Pacific Islands Fisheries Science Center, and eastern tropical Pacific). These surveys date to 1988, with the most recent being completed in 2014. Lisa continues to work with **Robert Pitman** (SWFSC) on data analysis focused on at-sea ecology of seabirds in the Pacific, and with **Trevor Joyce** (see dissertation details below). In December of 2015, Lisa became the National Seabird Coordinator of NOAA Fisheries' Seabird Program, with the retirement of **Kim Rivera**.

Trevor Joyce is nearing the completion of his doctoral research on the oceanic seabird abundance distributions, feeding ecologies, and responses to El Niño Southern Oscillation climatic variability in both threatened and common taxa of the Central and Eastern Pacific. Trevor's

seabird research principally employs the extensive time series of seabird transects surveys collected by the SWFSC over the period 1988-2014 in the California Current, Hawaii, the Line Islands, and the Eastern Tropical Pacific, as well as linked information from the Inter-American Tropical Tuna Commission and a variety of remote sensing products from NOAA and National Atmospheric and Space Administration (NASA). Trevor's research also includes inquiries into novel systems for seabird imaging and automated counting from a variety of aerial platforms.

HAWAI'I

Compiled by Yuri Albores-Barajas

Lindsay Young and **Eric VanderWerf** (Pacific Rim Conservation, PRC) just completed installation of a second predator-proof fence in collaboration with the American Bird Conservancy, USFWS and the Kauai Endangered Seabird Recovery Project at Kilauea Point National Wildlife Refuge on Kauai, and successfully removed all predators from within the fenced area. Hawaiian Petrel (*Pterodroma sandwichensis*) chicks will be translocated into the fenced area starting in November 2015 to establish a new, predator-free breeding colony of the species and we anticipate translocating Newell's Shearwaters (*Puffinus newelli*) in 2016. Translocations at that site are expected to be ongoing for the next five years. PRC also conducted a Laysan Albatross (*Phoebastria immutablis*) translocation using eggs laid on a military runway on Kauai and moved those eggs to Oahu. Eggs were incubated at PRC offices for two months, and hatched out under foster parents at Kaena Point. When chicks were one month old they were moved to James Campbell National Wildlife Refuge (JCNWR) where they were raised by hand until they fledged in June. The purpose of the project was to save viable albatross eggs from being destroyed on Kauai and simultaneously create a new colony of albatrosses at JCNWR) on Oahu. With partners at USGS, Oikonos and the state of Hawaii, PRC also participated in the third and final year of a multi-species (Laysan Albatross, Wedge-tailed Shearwaters (*Ardenna pacificus*), Red-tailed Tropicbirds (*Phaethon rubricauda*) and Red-footed Boobies *(Sula sula*) tracking project to determine pelagic habitat use of these species in the main Hawaiian Islands. They continue to monitor Laysan Albatrosses and Wedge-tailed Shearwaters at Kaena Point Natural Area Reserve on Oahu, as well monitor and control threats to Red-tailed tropicbirds on Oahu as well as nesting success of seabirds on Lehua Islet.

Rae Okawa, Development Coordinator with the Hawai'i Wildlife Center (HWC), reports that seabirds that were brought to the Hawaii Wildlife Center (HWC) wildlife hospital in 2014-2015 since last year's report included one Brown Booby (*Sula leucogaster*), two Red-footed Boobies (*Sula sula*), one Hawaiian Petrel (*Pterodroma sandwichensis*), three Wedge-tailed Shearwaters (*Puffinus pacificus*), two Laysan Albatross (*Phoebastria immutablis*) and four White Terns (*Gygis alba*). Birds were brought to HWC from Kauai, Maui, Oahu and Hawaii islands. Patients came in for a variety of reasons, with most cases due to impact injuries or debilitation. The Brown Booby had a severe beak injury and both Red-footed Boobies had broken wings. The Hawaiian Petrel was found downed. Two of the three Wedge-tailed Shearwaters were brought to HWC as adults, one was injured from fishing line and one was stranded on a ship. The most recent Wedge-tailed Shearwater patient was brought to HWC as an orphaned chick, as were the four White Terns. Both Laysan Albatross were rescued as failed fledgers with the partnership of state and federal wildlife agencies.

HWC is now in the implementation phase of its Ho'opulama Science and Discovery Center. Fundraising is underway to fabricate and install exhibits highlighting native wildlife in the Hawaiian archipelago, the conservation work of HWC, and the diversity of Hawaii's native species. HWC hopes to have much, if not all, of the project completed by September 2016, in time for the International Union for the Conservation of Nature (IUCN) World Conservation Congress convening in Hawaii that month.

NON-PACIFIC UNITED STATES

Compiled by Samantha Richman

PELAGIC SURVEYS

As of October 2015, the Biodiversity Research Institute (BRI) completed a three-year effort that included two years of broad-scale baseline surveys (2012–2014) for seabirds, marine mammals, and sea turtles in federal waters of the mid-Atlantic region. The Department of Energy (DOE) funded the initial offshore project, with additional funding from the Maryland Department of Natural Resources and the Maryland Energy Administration to extend the surveys into coastal waters off Maryland in year two. These projects employed a combination of high-resolution digital video aerial surveys and boat-based surveys. Digital surveys proved to be an effective method of capturing distribution and abundance information on a broad range of marine taxa in a single survey platform. Project reports and outreach documents are available for download at http://www.briloon.org/mabs/reports. Among others, **Iain Stenhouse** (BRI), **Richard Veit** (City University of New York), and **Beth Gardner** (North Carolina State University) are co-PIs on these projects.

TRACKING STUDIES

Iain Stenhouse, Andrew Gilbert, Lucas Savoy, Carrie Gray (BRI), **Bill Montevecchi** (Memorial University of Newfoundland), and **Alicia Berlin** (U. S. Geological Survey; USGS) completed the fourth year of capture on a collaborative satellite telemetry study of diving bird species wintering in the mid-Atlantic region. Funded by the Bureau of

Ocean Energy Management (BOEM), and coordinated by the U.S. Fish and Wildlife Service (USFWS) (**Scott Johnson and Caleb Spiegel**), this study has been highly successful in tracking the movements of three focal marine bird species – Northern Gannets (*Morus bassanus*), Red-throated Loons (*Gavia stellata*), and Surf Scoters (*Melanitta perspicillata*). Birds were caught at sea in winter (2012–2015) to examine their winter use of the mid-Atlantic continental shelf area and their migratory movements in relation to the federally-designated Wind Energy Areas (WEAs) off the eastern seaboard. Trials of experimental harness attachments are ongoing.

OTHER STUDIES/NEWS

Andrew Gilbert (BRI) continues to manage tracking data from several projects involving large numbers of satellite tags, including the multi-year collaborative work of the Sea Duck Joint-Venture (SDJV). Hundreds of implanted satellite tags have been deployed on sea ducks in the Atlantic over the last 14 years and work is ongoing to collect, organize, filter, and map these data for analyzing the spatial patterns of sea duck species.

In 2015, BRI (**Andrew Gilbert, Iain Stenhouse**) received funding from BOEM to develop a Mobile Avian Survey Data Collection Application – an offshore survey 'app' – for use on small devices, such as tablets. They have worked closely with Tilson Government Services, LLC, to develop this software, named SeaScribe. The app is now undergoing field trial and review, and should be freely available from BOEM in 2016.

Jeff Spendelow (USGS Patuxent Wildlife Research Center) coordinates a cooperative research project on the metapopulation dynamics and ecology of the endangered northwest Atlantic breeding population of Roseate Terns (*Sterna dougallii*) that began in 1987. After many years of concentrating on colony-site research in the Massachusetts-New York-Connecticut (MA-NY-CT) area, since 2011 he has been examining temporal and geographic variation in the use of staging sites in the "Cape [Cod] & Islands" area of southeastern MA. Hatch Year (HY) and adult Roseate Terns (ROST; and in particular non-breeding adults) were given 3-character plastic field-readable (PFR) bands at nine colony sites spanning the entire breeding range (CT to Nova Scotia).

Funding from Cape Cod National Seashore (CACO) in 2014 and 2015 supported: (1) the long-term "variation in staging site use" work that Jeff and colleagues with Massachusetts Audubon's Coastal Waterbird Program have been doing since 2006, and (2) two Master of Science projects under the direction of **Sarah Karpanty** at Virginia Technical Institute and **Jonathan Cohen** at State University of New York-Empire State College (SUNY ESC). Jonathan's student **Melissa Althouse** will categorize, quantify, and evaluate the impacts of different types of disturbances to mixed-species staging tern flocks. Sarah's student **Kayla Davis** will examine how disturbances and other factors may be impacting the bond between an HY (with a PFR band) and its care-giving parent, and the ability of the HY to prepare for becoming independent and to survive its first long-distance migration to South America. In 2015 they had 12 people doing "full-time" fieldwork on these various aspects of the "CACO ROST Staging Site Project."

Recent results from their cooperative work done since 2011 indicate that a higher percentage of the entire northwest Atlantic Roseate Tern population is making use of the "Cape and Islands" area in July-September than was previously suspected and therefore could be impacted by hurricanes, oil spills, habitat modification, etc., in this area), and that HY ROSTs and their parents may have greater "length of stay" staging times here than Common Terns *(Sterna hirundo)* from the same colony sites. Although data have not been summarized for 2015 at the colony sites, the past several years at Cape Cod typically have included resightings of between two-thirds and three-quarters of the HYs given PFR bands.

Laura Bliss is continuing her work presented at the 2015 PSG conference, "Seabirds and Fine Scale Tidal Dynamics", in collaboration with **Dena Spatz** at University of California, Santa Cruz (UCSC), **Breck Tyler** at UCSC, **Morgan Eisenlord** at Cornell University, and **Emma Schlatter.** In August 2015, she continued to work with seabirds by volunteering in with the Maui Nui Seabird Recovery Project in Maui, Hawaii. She is currently pursuing a Master's degree in Wildlife Ecology at Texas State University.

Steve Kress and **Paula Shannon** of the National Audubon Society's Seabird Restoration Program (NAS-SRP) continued long-term monitoring of breeding seabird populations in the Gulf of Maine, focusing on diet studies, productivity, growth, and populations of Common, Arctic, and Roseate Terns (*Sterna hirundo, S. paradisaea,* and *S. dougallii*, respectively), Atlantic Puffins (*Fractercula arctica*), Razorbills (*Alca torda*), and Black Guillemots (*Cepphus grylle*). The study of Atlantic Puffin winter movements continued with the recapture of 12 geolocator-tagged puffins. In partnership with 'explore.org', NAS-SRP deployed five HD cameras streaming live video of nesting puffins, terns, guillemots, and Osprey (*Pandion haliaetus*) to the internet. Audubon's international training program continued, with fellows from the China, Mexico, and Chile.

Samantha Richman, in collaboration with **Keith Hobson**, has continued her work with captive Common Eiders (*Somateria mollissima*) at the Livingston Ripley Waterfowl Conservancy in Connecticut to examine nutrient allocation to specific tissues and determine baseline isotopic discrimination factors for birds on single-source, homogenous diet that differ in source nutrients (marine or terrestrial origin).

LATIN AMERICA

Compiled by Yuri Albores-Barajas

Yovana Murillo and **Luis Alberto Delgado** are working on a project aiming to rescue, recover, and evaluate Ringed Storm-Petrels (*Hydrobates hornbyi*) that are found in urban places, outside of their natural environment. In 2015, more than 200 Ringed Storm-Petrels were rescued in 40 districts of metropolitan Lima, Peru. They also collected morphometric and landing data and did the first analysis on adjacent light and structure characteristics related to groundings. This is significant because Ringed Storm-Petrels are classified as a "data deficient species". Little is known about population size and breeding sites.

Cristián Suazo is working on several fronts with Chilean seabirds. Among the activities carried out between September 2014 and 2015, in Chilean waters, two important actions are highlighted. First, the collaborative participation of local researchers who have worked on the first project sponsored by the Chilean authorities (SUBPESCA-Chilean Government) focused on diagnosing the ecosystem effects of artisanal fisheries including an important fraction of small-scale fishing locations in the country. This project considered a geographical coverage in the southeast Pacific between the northern limit of Chile with Peru (~18° South) and its south-central region (~39° S). Along this gradient within the Humboldt Current System (HCS) real-time information was obtained on the: 1) interaction of seabirds (abundance, bycatch) with unstudied fishing gear (purse seine and gillnets), 2) marine debris generated by these activities, and 3) perception of fishermen on the intrinsic value of seabirds as co-inhabitants of their marine environment.

In addition, they are developing in situ research activities in various fishing ports along the HCS in order to diagnose and develop mitigation measures for small-scale fisheries such as purse seine and gillnets. In these waters, purse seine fisheries are strongly associated with the bycatch of diving seabirds such as the Pink-footed and Sooty (*Ardenna creatopus* and *A. grisea*, respectively) Shearwaters. In turn, the gillnet fisheries are strongly linked to bycatch events of seabirds such as cormorants (*Phalacrocorax spp*.) and penguins (*Spheniscidae*) during their seasonal movements and on feeding grounds during the breeding season. The evaluation of mitigation measures in these fisheries will continue. These initiatives are ongoing thanks to the support from the National Fish and Wildlife Foundation, the Royal Society for the Protection of Birds, and the Ornithological Council small grants program for ornithological research.

Rosana Paredes (Oregon State University) and a team of Peruvian biologists led by **Susana Cárdenas** (Punta San Juan Program, Universidad Cayetano Heredia) in collaboration with **James Fox** (Migrate Technology), obtained the first information on the migration patterns of Humboldt Penguins (*Spheniscus humboldti*) during the non-breeding season. **Marco Cardeña** at Punta San Juan, Peru recovered the last geolocator this year. As part of the Punta San Juan Program, **Antje Chiu** led the GPS tracking of Humboldt Penguins again this year, obtaining information of the foraging patterns during the breeding season. Both studies will continue in 2016, and as a whole, will provide information on the year-round movement patterns of this endangered species at one of the largest colonies in Peru and Chile.

Peter Hodum, Jessie Beck and **Ryan Carle** of Oikonos, along with local colleagues, continued the long-term breeding season monitoring of threatened Pink-footed Shearwaters (*Ardenna creatopus*) on the Juan Fernández Islands and Mocha Island. In addition, Oikonos is currently undertaking its fifth consecutive season of breeding season monitoring of the threatened De Filippi's Petrel (*Pterodroma defilippiana*), a Chilean endemic that breeds in only two island groups in the world, the Juan Fernández Islands and the Desventuradas Archipelago.

CANADA

Compiled by Ken Morgan

WESTERN CANADA

Alan Burger (University of Victoria, Victoria, British Columbia [BC] / independent consultant) is mostly retired but continues some work on the Marbled Murrelet (*Brachyramphus marmoratus*) including contracts, reviews, conservation and publishing (E.g., Cragg et al., *Marine Ornithology* 43:151, 2015). Alan was awarded the Steve Cannings Award for BC Ornithology for 2015 by the British Columbia Field Ornithologists. He was also elected as the Vice-president of the Federation of BC Naturalists.

Ken Morgan (Environment Canada, Canadian Wildlife Service [EC-CWS], Sydney, BC) and **Anton Wolfaardt** (Knysna, South Africa) have kept busy co-chairing the 9-person Travel Awards Committee, to provide financial assistance to applicants hoping to attend the 2nd World Seabird Conference in Cape Town South Africa (October 2015). Ken continued chairing both the Canadian Albatross and Shearwater Recovery Team and the Pacific Region Seabird Bycatch Working group. He also continued to provide input to several major Environmental Assessment reviews of marine shipping of petroleum products. In January 2015, Ken participated in the workshop, 'Reducing the Bycatch of Seabirds, Sea Turtles, and Marine Mammals in Gillnets', held at the U.S. Fish and Wildlife Service National Conservation Training Center, Shepherdstown, West Virginia, and co-sponsored by American Bird Conservancy and BirdLife International. In May, Ken participated in the Meeting of the Parties to the Agreement on the Conservation of Albatrosses and Petrels in Santa Cruz de Tenerife, Spain. Ken hired contract seabird observer **Luke Halpin**, (Halpin Wildlife Research, Vancouver, BC) to conduct fall and winter seabird surveys off the west

coast of BC. In July, for the first time in many years, Ken managed to get out on the water to also conduct a seabird survey off the west coast of Haida Gwaii, BC! Ken continued working with **Patrick O'Hara** (EC-CWS, Sidney, BC) and **Colin Robertson** (Wilfrid Laurier University, Waterloo, Ontario [ON]) on modeling the marine distribution of selected seabird species, and their overlap with commercial longline fisheries. This year, Ken, who has served for many years as the PSG Canada Regional Representative, passed the torch to **Stephanie Avery-Gomm** (Environment Canada- Science and Technology Branch [EC-S&T], St. John's, Newfoundland [NL]).

Trudy Chatwin (BC Ministry of Forests, Lands and Natural Resource Operations [BC MFLNRO], Province of BC, Nanaimo, BC) continued to work on the Canadian Marbled Murrelet (*Brachyramphus marmoratus*) Recovery Team to make recommendations for recovery of the Marbled Murrelet (listed as Threatened in Canada).

Harry Carter (Carter Biological Consulting, Victoria, BC) has primarily conducted seabird projects in California this year. Fieldwork in BC involved limited colony surveys in the Strait of Georgia region for Double-crested and Pelagic Cormorants (*Phalacrocorax auritus* and *P. pelagicus*, respectively). In collaboration with **Trudy Chatwin** (BC MFLNRO, Nanaimo, BC) and **Mark Drever** (EC-CWS, Delta, BC), a complete survey for all three cormorant species (Double-crested Cormorant, Pelagic Cormorant and Brandt's Cormorant (*P. penicillatus*) populations in the Strait of Georgia, BC, was conducted in 2014-2015 and analyses of population trends are underway (Adkins et al., J. Wildlife Manage. 78: 113, 2014; Carter, British Columbia Birds 26:8, 2016). In collaboration with **Spencer Sealy** (University of Manitoba, Winnipeg, Manitoba) and others, work on historical seabird records and alcid vagrancy in BC continues.

The Laskeek Bay Conservation Society (LBCS), based in Queen Charlotte, BC, completed their 26th field season of monitoring marine and terrestrial ecology in Laskeek Bay, Haida Gwaii. **Vivian Pattison** and **Ellen Hunter** Perkins (LBCS) spent 1 May-10 July on Limestone Island, conducting various research and monitoring projects, and coordinating the many volunteer and student assistants. In May, monitoring of Ancient Murrelet (*Synthliboramphus antiquus*) chick departures from this small colony took place for the 26th season. There was a dramatic change in the number of chicks fledging from the colony this season (a 60% decline). In the past, declines in chick numbers have been related to introduced raccoon (*Procyon lotor*) presence in the colony, but due to monitoring and control, no raccoons have been on the island since 2009, making this year's decline especially concerning. Black Oystercatcher (*Haematopus bachmani*) surveys took place once again, in Laskeek Bay and to the south in Gwaii Haanas National Park Reserve, on the islands surrounding Lyell Island. **Jake Pattison** (LBCS) joined the crew for one survey in Gwaii Haanas. Black Oystercatcher breeding success for all areas was similar to past years. Many other activities took place over the season, including Glaucous-winged Gull (*Larus glaucescens*) censuses, and Cassin's Auklet (*Ptychoramphus aleuticus*) and Pigeon Guillemot (Cepphus columba) nestbox monitoring.

Laurie Wilson (EC-CWS, Delta, BC) continued the third year of a 3-year study to better understand the timing and movement of Ancient Murrelets (*Synthliboramphus antiquus*) that breed in Haida Gwaii. In collaboration with **Anthony Gaston** (EC-S&T, Ottawa, ON), and **Yuriko Hashimoto** (EC-CWS, Delta, BC) results from geolocators recovered from George Island and Susk Gwaii (formerly known as Frederick Island) in 2014 were published (Gaston et. al., IBIS 157:877 2015). Tracklogs showed Ancient Murrelets migrated approximately 7,600 km west across the entire width of the North Pacific to over-winter in the waters between Japan and China. In 2015, fieldwork involved retrieving 48 geolocators deployed in 2014 on breeding Ancient Murrelets on George Island, Reef Island, Hippa Island and Susk Gwaii. Initially, most birds moved to the Bering Sea in July-August.

Thereafter, two distinct migration strategies were observed. About two-thirds of adults from most colonies continued to the west, via the Kuril Islands and the Sea of Okhotsk, to spend December-February in the Yellow Sea or Sea of Japan. The remainder returned south along the west coast of North America in October to over-winter in waters from British Columbia south to California. Both sets of birds returned to Haida Gwaii in March, when breeding commences. The reason for the existence of different wintering areas among birds from the same colony warrants further investigation. Field crew included **Laurie Wilson, Dan Shervill , Yuriko Hashimoto, Erika Lok,** and **Rhonda Millikin** (all of EC-CWS, Delta, BC), **Glen Keddie** (EC-CWS Contractor, Lasqueti Island, BC), and **Jake Pattison** (LBCS). **Laurie Wilson** also expanded the EC-CWS seabird colony monitoring program, establishing permanent plots at the Ancient Murrelet and Cassin's Auklet colonies on Susk Gwaii. Occupancy rates were also determined for both species. Field crew consisted of **Laurie Wilson, Dan Shervill, Erika Lok,** and **Glen Keddie** (EC-CWS contractor, Lasqueti Island, BC). Finally, Laurie continued with monitoring seabird bycatch in commercial salmon gillnet fisheries. Reports of bird entanglements from DFO test fisheries with observer programs and bycatch events reported by fishers were tallied; these data will be used to derive seabird bycatch estimates.

Jocelyn Wood (CWS Contractor, Delta, BC) is spearheading a project studying the ingestion of microplastics by Cassin's Auklet wrecked off the West Coast in December 2014. Working in collaboration with **Patrick O'Hara** (CWS, EC, Sidney, BC), **Stephanie Avery-Gomm** (EC, St. John's, Newfoundland) and **Laurie Wilson** (CWS, EC Delta, BC) this project will combine at-sea winter distribution

models of Cassin's Auklets with previous studies mapping the distribution of microplastics and macroplastic to elucidate where exposure of Cassin's Auklets to microplastic most likely occurred.

Joanna Smith (Marine Spatial Planning Science Manager, The Nature Conservancy (TNC) Canada, Smithers, BC) has been busy providing leadership for marine planning with the Global Oceans Team. Jo develops science-based marine plans with TNC's country or regional programs and leads a marine spatial planning network for practitioners to share lessons learned and amplify innovative ideas. Currently, her main project is in Seychelles, where she is using seabird colony and at-sea data, draft marine Important Bird Areas from BirdLife International, 150+ more data layers for marine species and habitats, spatial data for human uses and economic development, and stakeholder consultations to develop a zoning design that includes a 30% goal for marine protection (approx. 400,000 km^2). Jo also supports marine planning in Indonesia, Mexico, the Caribbean, and Canada, including implementation of the Marine Planning Partnership for the North Pacific Coast (MaPP). Jo continues to serve on the Science Advisory Committee for Sea Doc Society in Washington State.

CENTRAL AND EASTERN CANADA

Tony Diamond's Atlantic Laboratory for Avian Research (University of New Brunswick, (UNB), Fredricton, New Brunswick (NB)) personnel continued working on the seabirds of Machias Seal Island (MSI]. Censuses of Atlantic Puffins (*Fratercula arctica*) numbers (ca. 5,000 pairs) showed a 20% decline in breeding numbers since the last census in 2011 Razorbill (*Alca torda*) numbers (ca. 2,550 pairs) had increased by 40% since 2012 geolocator tags deployed on Atlantic Puffins (*Fratercula arctica*) in 2014 and containing data, showed that most puffins remain in or close to the Gulf of Maine over winter, with some individuals ranging as far south as New York and others into the Gulf of St Lawrence. Two geolocator tags recovered from 5 Razorbills (*Alca torda*) marked in 2014 were also recovered, showing most time spent in the Gulf of Maine/Bay of Fundy with excursions beyond the shelf edge in fall and winter. Three rounds of lethal control of predatory Herring Gulls (*Larus smithsonianus*) on MSI allowed more Arctic Tern (*Sterna paradisaea*) chicks (c. 35) to fledge than in any year since 2004. Geolocator tags were deployed on more puffins and razorbills to track winter range. In collaboration with **Neil Burgess** (EC-S&T, St. John's, NL), geolocator tags were also deployed on 16 nesting Leach's Storm-Petrels (*Oceanodroma leucorhoa*) so that feeding range during incubation can be compared against mercury levels and stable-isotope signatures from blood samples.

Kevin Kelly (M.Sc. - UNB, Fredricton, NB) completed his master's thesis on physiological indicators of health in Atlantic Puffins. **Erin Whidden** (M.Sc. - UNB, Fredricton, NB) has nearly completed her thesis which is an analysis of factors affecting recruitment in puffins. **Lauren Scopel** (Ph.D.-UNB, Fredricton, NB), in collaboration with other members of the Gulf of Maine Seabird Working Group (GOMSWG) used the database on Arctic Terns to explore the pattern and causes of the abandonment of North America's largest Arctic Tern colony in 2006. **Stephanie Symons** (M.Sc.-UNB, Fredricton, NB) completed a second season of GPS-tracking of puffins and razorbills breeding on MSI, finding quite sharp segregation in feeding areas of the two species. **Kate Shlepr** (M.Sc. - UNB, Fredricton, NB) completed a field season of GPS-tracking of Herring Gulls nesting on Brier (Nova Scotia (NS) and Kent Islands (NB) at the mouth of the Bay of Fundy, comparing diets and productivity of individuals using anthropogenic and more "natural" sources of food.

Stephanie Avery-Gomm, Dave Fifield, Amy-Lee Kouwenberg, and **Greg Robertson** (all of EC-S&T, St. John's, NL), and **Carina Gjerdrum** (EC-CWS, Dartmouth, Nova Scotia [NS]) have been busy working on two large projects related to understanding the risk and impact of the offshore oil and gas industry on seabirds. Stephanie presented one output from these projects, a map of seabird densities in the Labrador Sea showing the importance of the Labrador Shelf as a post-breeding migration corridor, at the Society of Canadian Ornithologists meeting (Wolfville, NS) in July. Stephanie also attended the Atlantic Seabird Working Group meeting in Sackville, NB, coordinated this year by **Sabina Wilhelm** (EC-CWS, St. John's, NL). Fieldwork opportunities were plentiful in 2015 – including Newfoundland Tern Colony surveys with **Pierre Ryan** (ECCWS, St. John's, NL), seabird surveys aboard the Coast Guard vessel Teleost, and assisting **Greg Robertson** and **Rob Ronconi** (ECCWS, Dartmouth, NS) with research on Gull Island, in Witless Bay Ecological Reserve, NL. Stephanie continues to be involved in numerous plastic ingestion studies including an assessment of plastic ingestion in Dovekies (*Alle alle*) - a collaboration that involves many people including **Ian Jones, Kathrine Robbins** (M.Sc), and **Carley Schaefer** (Ph.D; – all from Memorial University of Newfoundland, MUN, St. John's, NL).

ARCTIC CANADA

Kyle Elliott (McGill University, Montréal, Québec [QC]), **Grant Gilchrist** (EC-S&T, Ottawa, ON), **Oliver Love** and **Graham Sorenson** (both of University of Windsor, UoW, Windsor, ON), and **Thomas Lazarus** (McGill University, Montréal, QC) and others visited colonies of Thick-Billed Murre (*Uria lomvia*) on Coats and Digges islands. Ice was very late this year (much of the world's warmth appeared to be accumulated over the North Pacific). GPS units attached to murres indicated that murres from Digges Island flew up to nearly 300 km away to feed at Southampton Island during incubation. Those at Coats Island remained close to the colony, but appeared associated with

moving pack ice. Eggs were collected for contaminant analyses and blood samples for genomic and physiological analyses.

OTHER WORK

Gary Kaiser (Royal BC Museum, Victoria, BC) has been busy studying the paleontology of enantiornithine birds, a group that evolved parallel to modern ornithine birds but which went extinct with the dinosaurs. Life style is a matter of speculation, but these enantiornithine birds appear to have lived along the shores of lakes and rivers, somewhat like modern plovers. The fossil remains of bird eggs from the Cretaceous period are extremely rare, but recently, Gary had the opportunity to work with two important finds from shoreline nesting sites. One consisted of a single large boulder found in Romania which contained the shells of some 3400 eggs from a colony of birds that nested on a riparian sand bank. An unexpected flood apparently washed the eggs into the adjacent river where they were concentrated by currents (Dyke et al., Naturwissenschaften 99:435, 2012). The second site is at Neuquen, Argentina, where 65 eggs are preserved as they were laid, 'planted' in the ground, pointed end down. These sites have implications for the evolution of parental care in birds. The size of the Romanian colony suggests that the adult birds needed to be strong fliers that could gather food for their young. In the coming year, Gary anticipates being able to report on Oligocene seabird fossils (29 million years ago). If so, it will be the first time its family has been reported from Canada.

ASIA & OCEANIA

Compiled by Kuniko Otsuki

ASIA

Yutaka Watanuki (Hokkaido University, Japan) and his colleagues continued monitoring the diet and breeding success of Black-tailed Gulls (*Larus crassirostris*), Japanese Cormorants (*Phalacrocorax capillatus*) and Rhinoceros Auklets (*Cerorhinca monocerata*) at Teuri Island (west side of Hokkaido) in Hokkaido, Japan. Presumably, low breeding success was due to low number of anchovies around the island. **Akinori Takahashi** (National Institute of Polar Research), collaborating with **Yasuaki Niizuma** (Meijo University, Japan) and **Sasha Kitaysky** (University of Alaska, Fairbanks), started a new project on physiological carry-over effects using Rhinoceros Auklets. At Daikoku Island, **Akinori Takahashi** and **Yutaka Watanuki** conducted a second year of surveys on Rhinoceros Auklets, including geolocator tracking and diet sampling.

March-May 2015, **Yutaka Nakamura** and **Kuniko Otsuki** (Marine Bird Restoration Group, MBRG) conducted nest monitoring of Japanese Murrelets (*Synthliboramphus wumizusume*) to measure hatching success and predation at the largest known colony on Birojima Island in Miyazaki, Japan. Nest crevices were first located in 2013, within the forest canopy, along the lower staircase, and in shoreline caves. More have been discovered in the intervening years, with the majority (45 of a total of 61) monitored in 2015. Only 45% (n=45 nests) were occupied in 2015, and hatching success was much lower in 2015 (56%) than in 2013 (79%). Due to poor weather conditions in 2015, the survey was discontinued on 2 May.

Nina Karnovsky (Pomona College, California) assisted our survey by helping find evidence of predators. We set two cameras at Birojima from the end of March to early October, one of which was placed in the forest in late April 2015. We were successful in taking photos of a Jungle Crow (*Corvus macrorhynchos*) holding an egg presumed to be that of a Japanese Wood Pigeon (*Columba janthina*) in the forest in July 2015. As Japanese Wood Pigeons nest on the ground at Birojima due to a lack of mammalian predators, crow predation of murrelet eggs presumably also occurs. MBRG has been funded by Pro-Natufa Fund for a pilot survey on the status of crows at Birojima in 2016.

In June, July, and September of 2015, **Hiroto Okabe** (Kyushu Environmental Evaluation Association), **Masayoshi Takeishi** (Kitakyushu Museum of Natural and Human History), and **Kuniko Otsuki** led an expedition to study the breeding ecology of the Swinhoe's Storm-Petrel (*Oceanodroma monorhis*) on Koyashima Island where Japanese Murrelets and Swinhoe's Storm-Petrel were extirpated by Norway Rats (*Rattus norvegicus*) in 1987 and 2009, respectively. Assistance with obtaining funding and trip planning was provided by **Kuniko Otsuki**, with funds by the Pro-Natura Fund. MBRG used songmeters and mist-nets to help determine: 1) phenology of Swinhoe's Storm-Petrel, 2) the timing of arrival and departure time of Japanese Murrelet, and 3) estimating the breeding population of Swinhoe's Storm-Petrel at Koyashima.

Luke Halpin (Halpin Wildlife Research, Canada) assisted MBRG in using the songmeters and analyzing data.

According to Halpin, there is a large amount of petrel activity on Koyashima, almost nightly, beginning in late May. After rat reinvasion in 2009, no breeding petrels have been reported, but survey results indicate an increase in their population.

Simba Chan (BirdLife International (BLI) Asia Division), **Dan Roby** (U.S. Geological Survey -Oregon Cooperative Fish and Wildlife Research Unit; USGS-ORCFWRU), **Don Lyons** (Oregon State University, OSU), **Yasuko Suzuki** (OSU), and **Yu Yat-tung** (Hong Kong Bird Watching Society) worked on the colony restoration and banding of crested terns (*Thalasseus* spp.) at Jiushan Islands, Zhejiang Province, People's Republic of China. From May to August 2015, field monitors were based on Tiedun Dao, a 2 ha island in the Jiushan Islands of Zhejiang Province, to help restore the breeding colony of Chinese Crested Terns (*Thalasseus bernsteini*). Decoys and an audio playback system were used to attract this critically endangered species and the Greater Crested Tern (T. bergii). A record high number of Chinese Crested Terns were

observed (at least 52 adults), as well as 2,000 – 3,000 Greater Crested Terns used the island in 2015. This is the third year of using social attraction for Chinese Crested Tern colony restoration. In 2013 there was at least one Chinese Crested Tern chick fledged and 13 Chinese Crested Tern chicks fledged in 2014 after monitors were based on Tiedun Dao.

Dan Roby (USGS-ORCFWRU), **Don Lyons, Yasuko Suzuki,** and **Kirsten Bixler** (OSU), and **Steve Kress** (National Audubon's Seabird Conservation Program) continued to provide technical support and assistance for the third year of an effort to restore the critically endangered Chinese Crested Tern (*Thalasseus bernsteini*) in the Juishan Islands of the People's Republic of China. Project leaders included **Chen Shuihua** (Zhejiang Museum of Natural History), **Simba Chan** (BirdLife Asia), and officials from the Xiangshan Ocean and Fishery Bureau. Details on this year's results can be found in the Asia Region report. This Chinese Crested Tern conservation project is a past recipient of a grant from PSG's Craig S. Harrison Conservation Small Grants Program. A special paper session on tern conservation was convened by this group at the 2016 PSG Annual Meeting.

Terns were banded on Tiedun Dao for the first time. On 4 August 2015 a team of about 20 banders (including the six reporting members listed above) banded 31 tern chicks (probably all Greater Crested Terns but might have one atypical Chinese Crested Tern chick) with a three-digit red band and a metal band. Surveys in eastern Indonesia, where wintering Chinese Crested Terns were found in 2010 and 2014, are planned for the winter of 2015/16. For a photo of the banded tern chick, see:
http://www.birdlife.org/asia/news/brave-efforts-pay-doubly-successful-project-restore-colonies-chinese-crested-tern

Jane Dolliver departed from her decade-long tenure with the Coastal Observation and Seabird Survey Team (COASST) program at the University of Washington to join the Seabird Oceanography Lab to begin a Master's degree in the Department of Fisheries and Wildlife at Oregon State University (OSU). Her project entitled, "Viewing Albatrosses from Space: Using Satellite Imagery to Count Birds" will pair satellite image analysis with ground-based counts at selected albatross colonies to test the feasibility of estimating breeding colony size from satellite imagery. The initial primary application of this project is to conduct breeding population counts of Short-tailed Albatross (*Phoebastria albatrus*) at the Senkaku Island colony(ies), which is inaccessible to biologists, yet critical in determining whether the species is meeting recovery criteria. Depending on the level of success, this approach could have widespread application.

Rob Suryan (OSU) has continued satellite tracking efforts on Short-tailed Albatross, now in the twelfth year, with collaborators at the Yamashina Institute for Ornithology, Ministry of Environment Japan, and the U.S. Fish and Wildlife Service. There were no new deployments in 2015, but he and collaborators at the Yamashina Institute for Ornithology, **Kiyoaki Ozaki, Fumio Sato,** and **Tomohiro Deguchi**, were still tracking birds from tagging efforts in previous years. The current focus is assisting with monitoring hand-reared bird attendance and breeding attempts at the new colony, as well as data analysis and manuscript preparation.

OCEANIA

Anicee Lombal (Ph.D. Candidate, University of Tasmania) reported on re-establishment of Providence Petrels (*Pterodroma solandri*) on Norfolk Island. Seabird translocations are being increasingly proposed during the last decade in response to the large number of seabird species threatened with extinction throughout the world (28%). Nevertheless, information on population mixing among seabird colonies is crucial in assessing the potential genetic risks posed by this method of conservation (e.g., reduced genetic variation, genetic load or outbreeding depression).

The IUCN lists the Providence Petrel as Vulnerable due to its restricted breeding range. The only significant breeding locality of this species of pelagic seabird (~32,000 breeding pairs) is Lord Howe Island, a small island off the eastern coast of Australia. Providence Petrels used to breed on Norfolk Island (~1,000,000 breeding pairs) before becoming extinct after European settlement by the late 18th century. The species was considered extinct within the Norfolk Island group until 1986 when a small population (~20 breeding pairs) was discovered on Phillip Island, 7km south of Norfolk Island. Re-establishment of a Norfolk Island colony using Lord Howe Island individuals has been proposed to reduce the extinction risk of this species and to provide key nutrients for the regeneration of threatened native forests and associated species. However, this translocation may erode any distinctiveness of the small adjacent Phillip Island colony, which shows a specific behavioral adaptation to diurnal predators.

The study used molecular data to investigate genetic connectivity among Providence Petrel colonies and quantify the age of divergence between populations in order to assess the maximum possible duration across which differences in roosting behavior developed. Primary results show a high rate of gene flow between colonies and limited risks associated with this conservation management plan (publication in preparation.). If the translocation effort occurs, the resulting increase in marine-sourced nutrients would assist in halting and reversing the decline of Norfolk Island's native forest and associated fauna, which includes many other imperiled birds (e.g., the endangered Norfolk Island Green Parrot (*Cyanoramphus cookie*).

FRENCH POLYNESIA
Compiled by Sialesi Rasalato

Jacques Franc de Ferriere (journalist for Tahiti Infos) reported on the use of dogs to save Rimatara and Ultramarine Lorikeets (*Vini kuhlii* and *V. ultramarine*, respectively) from Black Rats (*Rattus rattus*) in French Polynesia. These dogs will ensure that inspections of goods arriving from Papeete by sea and air will keep black rats from becoming established on the islands. Their work will be a great addition to the system already in place by Manu and the local associations of Rima'ura and Vaiku'a i te manu o Ua Huka. This work will also help protect nesting seabirds.

Mike Britton (BLI Pacific Secretariat) reported that seabird populations are in trouble, especially in the Pacific. They are more threatened than any other comparable group of birds. Their status has deteriorated faster over recent decades and many of the species that live in this region are endangered. Many more have become extinct as a result of human activity, in both recent and prehistoric times. And some really special sea birds are right on the brink of joining the legions of ghosts of past birds. Over the years, BirdLife and its partners have taken actions to protect (and find) different species but the problem is so big, we need a Pacific-wide strategy for the conservation of this critically endangered group of seabirds. The petrels, which conventionally include species within the families Procellariidae, Oceanitidae and Hydrobatidae, have declined in numbers in Oceania more than any other bird family. That is why this new program gives emphasis to this group – the 'Petrels'. Specific projects that are being developed as part of the strategy for different flagship petrel species will also help other seabird species. Priority actions will be to find the breeding sites of Fiji Petrel (*Pseudobulweria macgillivrayi*), Beck's Petrel (*P. becki*) and Heinroth's Shearwater (*Puffinus heinrothi*). Overall there are more than 18 species for which action is needed including Vanuatu Petrel (*Pterodroma occulta*), Collared Petrel (*Pterodroma brevipes*), Polynesian Storm-Petrel (*Nesofregetta fuliginosa*), Tahiti Petrel (*Pseudobulweria rostrata*), Phoenix Petrel (*Pterodroma alba*), and Tropical Shearwaters (*Puffinus bailloni*)

Most islands in Oceania have not had systematic surveys of breeding seabirds. While there are some threats at sea for seabirds breeding in the region, the primary threats are on land. We need to eliminate predation pressure and the degradation of nesting/roosting colonies and establish these as secure sites. The help of sea bird lovers the world over is needed to develop the first comprehensive plan for the conservation of Pacific seabirds. With support we will find breeding sites , confirm the population status of species, and develop conservation plans. We will also improve the current conservation work, and identify where to start new actions. We will work with other organizations, develop networks for improved communication, resource sharing, capacity building, and further project development. For further information on this project, please contact **Mike Britton** via email: Mike.Britton@birdlife.org

Shaun Hurrell (BLI) reported that BLI, together with Société d'Ornithologie de Polynésie (SOP Manu – BLI partner in French Polynesia) and Island Conservation, has just completed an ambitious conservation operation on six remote islands in the Tuamotu (Acteon group) and Gambier Archipelago. The project makes an unprecedented contribution to saving endangered species from extinction. With the support of local people, government and NGO organizations – many helping directly in project implementation – this operation has reset the native ecological balance to a time probably not known on these islands since Polynesian colonization. Local livelihoods are also expected to benefit as a result of the project's successEven though these islands are in the middle of the Pacific Ocean over 1500 km from Tahiti, their isolation has not protected them from a negative human legacy. The birds on these islands evolved in the absence of predatory mammals, but the arrival of humans also brought a suite of invasive species. Flightless and defenseless, chicks and eggs are eaten by invasive predators such as rats, and native ecosystems are severely disturbed by other animal and plant invaders. **Poasa Qalo** (NatureFiji-MareqetiViti (NFMV) Fiji Petrel Project Officer, is involved with the control of rats, feral cats and pigs on Gau Island in Fiji, primarily for the purpose of protecting the Collared Petrel (Vulnerable), and also, by extension, the Fiji Petrel (Critically Endangered). While the Fiji Petrel is believed to raise its chicks on Gau, no one yet knows precisely where on Gau this highly cryptic petrel is nesting. There is a possibility that the Fiji Petrel occurs within the dispersed Collared Petrel colonies, therefore, in deploying predator control for this species, these benefits may also extend to the Fiji Petrel. The predator control operates within a wider recovery strategy for both petrels which includes the use of dogs trained to detect petrels, acoustic recorders in surveying the extensive forest area, and acoustic attraction to try to concentrate the Collared Petrel, and potentially attracting the Fiji Petrel, to an area in which both species are safeguarded. Rats, feral cats and pigs have been targeted at four Collared Petrel colonies (Delaisavu, Qarani, Nawaikama and Central Ridge) over an area of approximately 50 ha; results are mixed. Rat control has been maintained over the main breeding period (April to June), principally through the application of a rodenticide (brodifacoum), and monitoring of bait uptake. This uptake is high initially and quickly tapers off to a low but continuous loss of pellets. The use of motion activated cameras on burrows shows rats accessing the burrows, but it is unknown the extent to which this results in predation and failed breeding. The number of petrel burrows monitored has been progressively increasing (as dogs locate them) and as of June 2015, 91 (across the three colonies) are known. While the breeding success is less clear for 2013, and the analysis is not yet complete for 2015, the information

indicates Collared Petrels are being recruited to the population. Feral cats and pigs have been targeted (through trapping) in the colony areas, resulting in several captures. Nevertheless, 12 Collared Petrels in each of the three successive years are known to have succumbed to cat predation. **Steve Cranwell** (BLI) is assisting NFMV to review their predator control effort, and is supporting the collation and analysis of predator control and breeding outcome data which will reveal population trends and evaluate the effectiveness of control. For further information on this Project, please contact NatureFiji-MareqetiViti via email: support@naturefiji.org

Steve Cranwell (BLI Pacific Secretariat) reported that the Te Ipukarea Society (TIS), BirdLife Pacific, and Eco-Oceania, together with the Takūtea Trust (representing the island landowners), completed a biological survey and restoration assessment for Takutea. The survey confirmed internationally significant populations of Brown Boobies (*Sula leucogaster*), Red-tailed Tropicbirds (*Phaethon rubricauda*), green sea turtles (*Chelonia mydas*) and coconut crabs (*Birgus latro*). Of greatest significance were over 2,000 pairs of Red-tailed Tropicbird which exceed 1% of the global population and qualify the site as an Important Bird Area. Brown Booby were also notable, having increased from less than 10 birds in 2003 to the 120 (plus) pairs counted during this survey. A meeting with the Trust enabled the conservation needs to be outlined, which together with other island management options, was presented as a restoration discussion document for the Trust's consideration. The Trust indicated their support for the restoration actions, and together with TIS, are investigating funding options. Regionally, Takūtea is not a high restoration priority, but it is a national priority for safeguarding the seabird species present and as a site to which other species sensitive to rat depredation, could be attracted to establish breeding populations. For further information on this project, please contact **Kelvin Passfield** via email: kelvin.passfield@gmail.com

Correction:
In *Pacific Seabirds* 41(1-2), page 46, there was an error on the country name. Taiwan should be People's Republic of China. Apologies to **Simba Chan**.

EUROPE & AFRICA

No Report Submitted

ABOUT THE ARTIST AND ARTWORK

The seabird artwork in this issue of PS was first used in the 2015 meeting Program, and was contributed again for our use by Melinda Nakagawa, a California-based seabird researcher and artist. Melinda creates woodblock and linoleum block prints with a seabird and marine focus. Some of the prints you see here were inspired during her summers as a seabird intern on Southeast Farallon Island. The Brandt's Cormorant print was used for the 2015 PSG conference logo. Ms Nakagawa can be reached at: mnakagawa831@gmail.com.

*Murres at nes*t, ©Melinda Nakagawa

REPORTS OF PSG OFFICERS

CHAIR'S REPORT FOR 2014

Joanna Smith

My first memory of a PSG meeting is 1992 in Coos Bay, Oregon. I was a broke undergraduate student and two friends and myself happily slept in the ping-pong room and attended every single talk in the boathouse. The passion of the PSG members left a strong impression on me and inspired me to study seabirds and engage in marine conservation. Now, 23 years later, I have served on many local committees, represented student members, and it has been an honour to serve the society as Chair.

In this report, I present a quick rundown of the highlights of this last year and close with some recommendations. PSG should consider being more strategic than it is now and address some of the challenges that the Society faces with volunteer capacity and losing institutional knowledge.

2014 HIGHLIGHTS

- Bylaws review and revisions (where necessary); ExCo discussion and membership vote
- Elections Committee used Survey Monkey for second year in a row
- Endowment Investment Policy Revision
- Formation of Code of Conduct ad hoc Committee
- List serve was moved to a new host
- Local Committee used RegOnline for abstract submission second year in a row
- Member survey for Future Meetings
- Member survey for *Pacific Seabirds* format and content
- New Membership Coordinator, Jennifer Ma
- Provided financial support to *Marine Ornithology* to provide an honorarium for a Business Manager. Tony Gaston welcomed Gary Kaiser to this position.
- Review of all PSG operating expenses.

Financially, PSG is in relatively good shape. We have a modest balance in our operating account and the Endowment Funds are doing well. The Society continues to rely on annual membership dues and profit from the annual meeting to cover its operating costs. A balanced budget was passed at the beginning of the 2015 fiscal year (October-November) and the Trustees undertook a review of the Endowment Funds so that we could support *Marine Ornithology* and *Pacific Seabirds* publications in 2014-2015.

In the past year, the ExCo purchased a professional version of Survey Monkey for 2015 Elections and member surveys. This is a valuable tool to receive input from members on issues of importance.

The Society's 2014 workplan was extensive, with several items carried forward from the past one to three years. The Board made really good headway on the workplan and many of the high priority items were addressed during the year.

According to the Board Training provided in Portland, 2013, there are three main roles and responsibilities of a Board:

1) Establish Direction
2) Ensure Resources
3) Provide Oversight.

There are several responsibilities under each of these headings and to that end, I have several recommendations after two years on the ExCo as Chair and Chair-Elect:

ESTABLISH DIRECTION

Develop a Strategic Plan

Currently, the activities of the PSG Executive Council are largely reactionary and rarely proactive or forward-looking. The annual workplan maintains Society operations at the status quo and a Strategic Plan would establish strategic direction to develop and focus on PSG's vision and mission. Most non-profit organizations have a strategic plan (e.g., Waterbirds) and PSG has some experience in this regard (e.g., 2020 Plan). Given the capacity on ExCo currently, I think a plan should be realistic, modest, and focus on the most important priorities relative to generating financial resources and supporting the members, and ensure that it is implementable with current resources.

Organizational Management

The governance structure of the PSG, with 16 voting ExCo members, needs to be evaluated for effectiveness in decision-making and representation of members.

ENSURE RESOURCES

Generate financial resources

The PSG's operating budget to maintain current operations (without publications) is about $10,000/year. Financial resources should be secured to cover these expenses annually.

Create an "Annual Meeting Committee"

The planning of the annual meeting, including identifying a venue and local committee, is a major undertaking and requires many volunteer hours from a local committee and ExCo officers. The process would be more efficient if a small committee of experienced members led this annually. As I suggested last year, it would also be reasonable to consider hiring a professional conference organizer to assist with registrations, abstract submission, and the meeting program.

PROVIDE OVERSIGHT

Establish Financial Policies and Ensure Accountability

The ExCo and Code of Conduct ad hoc Committee will establish all applicable policies and procedures in 2015-2016. An investment fund policy and conflict of interest policy for the Board has been developed.

The accomplishments this year would not have been possible without active Board and Committee members, Technical Committee Chairs and Members, Working Group Chairs and members - thank you to all! I would like to say a special thanks to the following for their contributions this past year: Pat Baird (Secretary, Bylaws Committee), Doug Forsell (Past Chair, Bylaws Committee), Christine Ogura (Treasurer, Investment Fund), Ken Morgan (Canada representative, Elections Committee), Stan Senner (Vice-Chair for Conservation, Bylaws Committee), Kathy Kuletz (Chair Elect, Scientific Program), Tony Gaston (*Marine Ornithology*), Alan Burger and members of the Elections Committee, Jennifer Ma (Membership Coordinator), Lindsay Young (past Treasurer, RegOnline guru), Scott Shaffer (Local Committee Chair), Annette Henry (PSG website), Holly Freifeld (Interim *Pacific Seabirds* Editor), Verena Gill (PSG List Serve), Stephanie Avery-Gomm (Survey Monkeys for ExCo), Andrew Titmus, (Student Representative), Michelle Hester (past Membership Coordinator), Vivian Mendenhall (Past Editor *Pacific Seabirds*, Bylaws Committee), and Jim Kushlan and Ken Briggs (Investment Fund Trustees).

I hope that PSG continues to inspire all members for years to come.

CHAIR ELECT'S REPORT FOR 2014

Kathy Kuletz

As Chair-elect I've been learning about the many facets of the Executive Council (EXCO) under the guidance of the current EXCO and others who have been actively involved in the machinations and growth of the Pacific Seabird Group. The primary task of Chair-elect is to organize the Scientific Program for the PSG meeting following the election. In this task I was ably assisted by the current Chair (Jo Smith), Past Chair (Doug Forsell) and Secretary (Pat Baird), as well as Lindsay Young and Annette Henry. Local Committee chairs Scott Shaffer and Doug Forsell worked with me throughout, and Rachael Orben, Corey Clatterbuk, and Liz Labunski helped in organization and production of the printed program.

We continued with the use of RegOnline for abstract submission and registration, which is in many ways invaluable, but does have a learning curve; Lindsay was critical to the success of using RegOnline for program development. Scott Shaffer and I both posted announcements on the PSGlistserver for the opening of abstract submission, deadlines, and deadline extensions. Pat Baird also posted notices on the PSG Twitter and Facebook accounts, and Annette Henry posted announcements and updates on the PSG web site. The selected theme for the 2015 scientific program was "A Future for Seabirds".

The Plenary speakers secured for the 2015 meeting were Nate Mantua (NOAA Southwest Fisheries Science Center, Santa Cruz, California), Vicki Friesen (Queen's University at Kingston, Ontario, Canada), and the recipient of our Lifetime Achievement Award, David Ainley (H.T. Harvey & Associates Ecosystem Consultants, California). We had five Special Paper Sessions (SPS) proposed, of which four were carried through to the 2015 program (see "Meeting News" for details).

Program production occurred mainly in January, with final decisions and changes requested by registrants (about 35+ changes and requests) occurring up to the week prior to the meeting. Issues included: abstracts or registration done incorrectly, authors did not make changes and cancellations via RegOnline, special requests regarding titles and authors, special requests for dates of presentations. A preliminary conference schedule was posted on 30 December 2014 and the preliminary daily schedule of presentations posted on 2 February, with the revised program posted 9 February. Posting the daily schedule of talks earlier would be advisable, as about 10 people contacted me asking about dates so that they could make travel plans. In working with the Local Committee I exchanged enumerable emails and conference calls

By 28 January 2015 we had a total of 175 abstracts submitted (127 oral, 48 posters. As of 7 February we had 292 registrants, of which 38% were associated with academic institutions, followed by federal employees (29%) NGOs/non-profits (18%), industry/ private (8%) and state/province agencies or other (7%). Nearly a quarter of registrants were students.

Another task of the Chair-elect has been to sit on the Awards Committee. I assisted with the write up for the Lifetime Achievement Award, and we will be meeting in the near future to discuss future awards. We anticipate seeing many of you at the World Seabird Conference in Oct 2015, where PSG will surely have a strong showing. I am also pleased that our 2016 PSG meeting will be held at Turtle Bay, Oahu, with Lindsay Young once again offering to lead the local committee. One of my last acts as Chair-elect will be to hand the office responsibilities over to the very capable hands of Nina Karnovsky.

VICE-CHAIR FOR CONSERVATION REPORT FOR 2014

Stan Senner

In 2014, PSG submitted letters of support or comment on six topics. This level of activity, which was about the same as in 2013, is probably all PSG can reasonably undertake without increased volunteer capacity or having paid assistance. As is, we are not able to respond to all the relevant opportunities concerning the status and conservation of Pacific seabirds or respond as effectively as we might like to.

The following gives a brief account of PSG's interventions in 2014 (full letters that were submitted are available on the PSG website); these are in chronological order:

Marbled Murrelets/Big Basin State Park, California

Date: 12 February 2014
Recipient: California Department of Fish and Wildlife
Subject: Grant Application by the California State Parks Department for Preparation of a Marbled Murrelet Management Plan in Zone 6
PSG Action: Supported funding request.
Outcome: Proposal was funded and development of plan has been successfully initiated.

Marbled Murrelets/Proposed Recovery Strategy in British Columbia

Date: 8 March 2014
Recipient: Environment Canada
Subject: Proposed Recovery Strategy for the Marbled Murrelet under the Species at Risk Act in Canada
PSG Action: Public comment requesting that the proposed strategy be revised to better provide for the long-term survival and recovery.
Outcome: The strategy was adopted with a disappointing short-term goal of maintaining a MAMU population above 70% of 2002 levels and long-term goal of persistence.

Forage Fish/Unmanaged Forage Fish Initiative

Date: 30 March 2014
Recipient: Pacific Fishery Management Council
Subject: Whether to advance for public comment a range of alternatives to protect unmanaged forage species and whether to adopt a preferred alternative in federal waters of the California Current
PSG Action: Supported advancing alternatives to the public and adoption of alternative 2.2.1, Ecosystem Trophic Role Pathway, as a preliminary preferred alternative.
Outcome: The Council adopted alternative 2.2.1 as preliminary preferred alternative and final action is expected at March 2015 meeting.

Kittlitz's Murrelet and Aleutian Tern/Monitoring and Surveys

Date: 29 May 2014
Recipient: U.S. Fish and Wildlife Service Region 7 (Alaska)
Subject: Monitoring of Kittlitz's Murrelet following decision not to list under the ESA; surveys to determine status of Aleutian Terns in view of concerns about possible decline
PSG Action: Recommended long-term monitoring and research, as well as support for publication of prior work, for KIMU; suggested surveys of known and prospective ALTE colonies.
Outcome: Discussion but apparently no additional monitoring, surveys, etc.

Double-crested Cormorants/Columbia River Estuary

Date: 8 August 2014
Recipient: U.S. Army Corps of Engineers
Subject: Draft environmental impact statement on Double-crested Cormorant Management Plan to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary
PSG Action: Opposed preferred alternative to cull 16,000 DCCO from the East Sand Island colony; supported "no action" alternative pending a revised approach to managing avian predation and other sources of mortality on salmonids.
Outcome: Final environmental impact statement and revised preferred alternative just released proposing somewhat reduced kill and oiling of eggs

Old-growth Forest Tognass National Forest, AK

Date: 15 January 2015
Recipient: U.S. Department of Agriculture
Subject: Amendment of the Tongass National Forest Land Management Plan of 2008
PSG Action: Joined six other scientific societies, including American Ornithologists' Union and Ecological Society of America, in asking the U.S. Forest Service to accelerate the proposed transition away from logging old-growth forest habitats, which support Marbled Murrelets and other wildlife.
Outcome: None yet.

TREASURER'S REPORT FOR 2014

Christine Ogura

The closing of FY15 (October 1, 2014-September 30, 2015) ended with a gross income of $163,398.47 and expenses of $161,138.65, reflecting a surplus of $2,259.82. However, note that the Executive Council (ExCo) approved an amendment to the budget to add an additional $5k. If this had not been done, FY15 would have ended in the red. Unexpected costs requiring this amendment mainly resulted from the increased effort in bookkeeping to ensure we were accurately tracking our revenue and expenses. Previous bookkeeping had only involved portions of our operations, but in FY15 we expanded it to include entire operations. Due to the fact that two of the systems we use (PayPal that does our credit card transactions and RegOnline that processes our membership and annual meeting registration) do not talk to each other in terms of reporting line items and also providing the ability to import into Quickbooks, this generates a large amount of work for the bookkeeper. There is also considerable time spent between the bookkeeper and treasurer to resolve discrepancies and ensure proper accounting per the PSG budget line items. Other costs were an additional insurance policy for the board that was purchased and better tracking of fees related to RegOnline and PayPal (we changed the way to track these fees so the budgeted amount was anticipated to be lower than the actual as we were still gaining an understanding of what these fees truly were for FY15). Please also note that, at the time of this report being generated, a final budget for the San Jose annual meeting had not yet been finalized between the local chair and treasurer. Consequently, the closing out of the FY15 budget does not reflect this. This final annual meeting budget will be provided at a later date, likely as part of Executive Council meeting minutes. Current assets continue to be sufficient to cover the required three years of operational costs as well as publications.

Continuing to build on the work done in FY14, major accomplishments this year were to continue to streamline fiscal operations to better meet the needs of the organization and make accounting more transparent and understandable to the membership. Efforts were made to also identify ways to cut costs in operations as well as defer costs to accommodate unanticipated new costs. Lastly, operational changes related to accounting software used as well as credit card processing system evaluation was done to improve fiscal operation functions.

The Executive Council approved funds from the endowment for *Marine Ornithology* at $11,426 (adjusted for Canadian dollar) and Pacific Seabird Bulletin at $10,800. These amounts, which are higher than normal, reflect that the endowment had not been used by either publication in the previous FY14 and that funds from the PSG general fund had been used to pay for bulletin expenses. Therefore, in essence, unused FY14 endowment funds were rolled over into FY15 to assist with the increased expenses related to these two publications in FY15 as they dealt with hiring a business manager (*Marine Ornithology*) and transitioning from paper to web based publication (*Pacific*

Seabirds). However, of the approved amounts, only $3,999 for the bulletin (to pay PSG general funds back) and $5,425 (US) for *Marine Ornithology* were withdrawn. Accomplishments related to the endowment fund concerned the endowment fund investment policy. The endowment committee comprised of the treasurer, Ken Briggs, and Jim Kushlan, revised the policy to better clarify allocation formulations and to align with suggested revisions in the bylaws as well as committee reporting to the Executive Council.

Overview of all PSG Financial Accounts as of FY15 Ending

GENERAL FUNDS (which include operating costs) are kept in a checking account

September 30, 2011	$102,079.24
September 30, 2012	$88,173.87
September 30, 2013	$79,506.16
September 30, 2014	$50,663.75
September 30, 2015	**$68,154.50**

ENDOWMENT FUNDS (which are restricted) are kept in a mutual fund managed by Neuberger and Berman

September 30, 2011	$119,879.53
September 30, 2012	$146,197.30
September 30, 2013	$180,320.39
September 30, 2014	$206,824.23
September 30, 2015	**$181,268.22**

PAYPAL ACCOUNT (which is used to accept membership payments, contributions, and other monies received by credit card)

September 30, 2011	$15,100.28
September 30, 2012	$5,882.93
September 30, 2013	$7,132.73
September 30, 2014	$2,555.26
September 30, 2015	**$8,072.97**

STUDENT TRAVEL AWARDS SAVINGS ACCOUNT (which are restricted funds)

September 30, 2013	$5,216.24
September 30, 2014	$2,784.99
September 30, 2015	**$2,906.21**

CRAIG HARRISON CONSERVATION FUND SAVINGS ACCOUNT (which are restricted funds)

September 30, 2013	$12,346.95
September 30, 2014	$3,342.88
September 30, 2015	**$6,507.23**

Total Assets as of September 30, 2011	(includes restricted and non-restricted):	$242,699.05
Total Assets as of September 30, 2012	(includes restricted and non-restricted):	$241,344.25
Total Assets as of September 30, 2013	(includes restricted and non-restricted):	$285,312.76
Total Assets as of September 30, 2014	(includes restricted and non-restricted):	$266,909.15
Total Assets as of September 30, 2015	**(includes restricted and non-restricted):**	**$266,909.13**

REPORTS OF PSG OFFICERS

FY15 ACTUAL INCOMES AND EXPENDITURES

A. INCOME	**Budgeted**	**Actual (as of 9.30.15)**	**Surplus/-Loss**
Unrestricted:			
Membership (annual regular, student, and life):[1]	$11,500.00	$15,692.00	$4,192.00
General Fund Donations	$150.00	$793.47	$643.47
Amendment to the budget[2]		$5,000.00	$5,000.00
Annual Meeting:			
San Jose 2015	$129,709.00	$129,709.00[3]	$0.00
Student Travel (*Restricted*)	$2,780.00	$2,780.00	$0.00
Restricted:			
Publications:			
Marine Ornithology	$11,426.00	$5,425.00	-$6,001.00
Pacific Seabirds	$10,800.00	$3,999.00	-$6,801.00
A: Total Income	**$166,365.00**	**$163,398.47**	**-$2,966.53**
B. EXPENSES: Administrative Operations	**Budgeted**	**Actual (as of 9.30.15)**	**Overspent/-Underspent**
Chairs Discretionary Fund[4]	$2,000.00	$0.00	-$2,000.00
Insurance premium[5]	$1,500.00	$2,192.30	$692.30
Online Services:			
Website/Email[6]	$0.00	$874.90	$874.90
Listserve[7]	$0.00	$29.99	$29.99
Survey Monkey	$300.00	$300.00	$0.00
Operations:			
Postage	$100.00	$29.40	-$70.60
Telephone	$400.00	$611.82	$211.82
Office supplies	$70.00	$53.89	-$16.11
USPS PO Box Rental	$96.00	$96.00	$0.00
Professional services:			
Accountant	$2,000.00	$2,298.43	$298.43
Bookkeeper[8]	$720.00	$2,261.44	$1,541.44
Legal	$0.00	$0.00	$0.00
Service fees:			
PayPal Fee[9]	$700.00	$3,341.65	$2,641.65
RegOnline Fee (membership, donations, bulletin subscription, and annual meeting)[9]	$1,150.00	$4,376.33	$3,226.33
Bank Fees	$350.00	$188.18	-$161.82
Government Registration Fees	$200.00	$30.75	-$169.25

B. TOTAL ADMINISTRATIVE OPERATIONS EXPENSES:	**$9,586.00**	**$16,685.08**	**$7,099.08**
C. EXPENSES: Society Services (*meetings, publications, support*)	**Budgeted**	**Actual (as of 9.30.15)**	**Overspent/-Underspent**
Annual Meeting:			
San Jose 2015	$129,709.00	$129,709.00[3]	$0.00
Student Travel	$2,780.00	$2,780.00	$0.00
Dues and Subscriptions:			
Ornithological council	$2,060.00	$2,060.00	$0.00
Publications:			
Marine Ornithology (layout, printing, business manager, mailings)	$11,426.00	$5,425.00	-$6,001.00
Pacific Seabirds (layout, printing, editor, mailings) for 3 editions (combined 2014 and two 2015 editions)	$10,800.00	$4,479.57	-$6,320.43
C. TOTAL SOCIETY SERVICES EXPENSES:	**156,775.00**	**144,453.57**	**-$12,321.43**
D. PSG BUDGET SUMMARY	**Budgeted**	**Actual (as of 9.30.15)**	
TOTAL INCOME (A)	**$166,365.00**	**$163,398.47**	**-$2,966.53**
TOTAL EXPENSES (B + C)	**$166,361.00**	**$161,138.65**	**-$5,222.35**
RESULT: SURPLUS/(LOSS)	**$4.00**	**$2,259.82**	**$2,255.82[2]**

[1] This includes 2014 lag membership payments due to the RegOnline glitch, the bulk of which were paid in Nov-Dec 2014.
[2] ExCo increased $5k above the already approved budget due to unanticipated expenditures (higher bookkeeping fees, second insurance, higher fees for PayPal/RegOnline).
[3] Not finalized yet at the time of the close out report. This was the projected figure.
[4] Originally set aside for PSG banner to use at events, but deferred to FY16, and funds used in website transition necessary for 2016 annual meeting.
[5] Higher cost resulted from an additional $792.30 for a second insurance policy to address a gap in board coverage. Regular insurance renewal was $1,400.
[6] 5-year domain name renewal was due and a contractor was hired to help transition the website; this was paid for by the Chair's discretionary fund.
[7] The Listserv was transitioned from USFWS to another platform (BlueHost). This is the monthly fee.
[8] Bookkeeping in previous years only serviced portions of the budget so the actual reflects a what is needed for bookkeeping for the entire fiscal operation.
[9] We changed the way to track these fees so the budgeted amount was anticipated to be lower than the actual as we were still gaining an understanding of what these fees truly were for FY15.

REPORTS TO PSG EXECUTIVE COUNCIL FOR 2014-2015

PSG's committees support research, work on conservation, keep us in touch, and support members throughout the Pacific. Their reports contain information on field work, current issues, and committee participation. Contact information for committee coordinators (i.e., chairs) can be found near the back of this issue.

JAPANESE AND KOREAN SEABIRD CONSERVATION COMMITTEE

Kim Nelson and Kuniko Otsuki, Coordinators

The mandate of the Japanese and Korean Seabird Conservation Committee (JKSCC) is to "Summarize and follow progress of seabird conservation issues in Japan and Korea, encourage international collaboration between scientists on certain projects, and provide information to PSG and other parties. The JKSCC will also serve as a repository of technical advice". The full report on activities and meetings during 2014 were published in *Pacific Seabirds* Vol 41.

KITTLITZ'S MURRELET TECHNICAL COMMITTEE

Sara Schoen, Coordinator

The Kittlitz's Murrelet Technical Committee (KMTC) was formed in 2008 to begin addressing concerns related to the status and conservation of this rare seabird. The purpose of the KMTC is to (1) act as a technical authority on the status, distribution, and life history of the Kittlitz's Murrelet; (2) identify, encourage, and facilitate research; (3) address conservation problems related to the Kittlitz's Murrelet; and (4) act as a liaison between research and management. The KMTC currently comprises roughly 40 members that meet annually in conjunction with the PSG annual meeting and occasionally at other opportunistic venues. The 2014-2015 Coordinator was John Piatt, but as of 2016, Sara Schoen became the KMTC Coordinator; for more information please contact Sara at Sara.Schoen@usgs.gov.

SCRIPPS'S MURRELET AND GUADALUPE MURRELET TECHNICAL COMMITTEE

Harry Carter and Shaye Wolf, Coordinators

The Scripps's Murrelet and Guadalupe Murrelet Technical Committee (SMGMTC; formerly known as the Xantus's Murrelet Technical Committee) was formed in 1992. In 2002, PSG petitioned for U.S. federal and California state ESA listing. In 2004, they were listed as state threatened, U.S. federal candidate species, and endangered in Mexico. The Committee (1) monitors the U.S. federal listing petition, status, research, and conservation issues for the Scripps's and Guadalupe murrelets; (2) provides information to interested parties; and (3) coordinates research and conservation in the U.S., Mexico, and Canada. For more information, please contact: Shaye Wolf, swolf@biologicaldiversity.org and Harry Carter, carterhr@shaw.ca.

MARBLED MURRELET TECHNICAL COMMITTEE

Kim Nelson and Peter Harrison, Coordinators

The Marbled Murrelet Technical Committee (MMTC) has been a long-standing committee of the Pacific Seabird Group. The mandate of the MMTC is to act as a technical authority regarding the status, distribution, and life history of the Marbled Murrelet; to identify, encourage, and facilitate research; to address conservation problems related to the Marbled Murrelet, and to act as a liaison between research and management.

MMTC ACTIVITIES & UPDATES

The full committee met on 19 February 2014, at Centennial Hall in Juneau, AK during the Pacific Seabird Group 2014 Annual Meeting.

The MMTC Inland Survey Protocol (ISP) Working Group continued working on revisions and updates to the survey protocol and training curricula. We have formed a new ISP subcommittee that includes biologists/interested parties from a variety of agencies and industry groups. Subgroups within this working group are addressing different sections of the protocol and providing revisions. All revisions are posted on Basecamp for the entire ISP group to view. Databases of murrelet surveys are being sent to a statistician in New Zealand, Darryl MacKenzie, to redo the probability of occurrence analysis. We are currently working with this statistician to revise methods and discuss options. The reanalysis should be completed this spring and the final protocol finished by September 2015 for use during the 2016 field season.

The MMTC Marine Working Group was formed in the spring of 2014 and kicked off their first meeting on 18 June 2014. The Marine Subcommittee consists of members from Canada Federal, U.S. Federal, U.S. State, academia, and consultants in Alaska, British Columbia, Washington, Oregon, and California. Priorities include gathering information and completing technical reports on marine Marbled Murrelet (1) bycatch in fisheries, (2) identification of important marine areas/reserves, (3) prey resources, (4) oil mortality, (5) chemical contaminants, (6) wave/wind farms, (7) marine aquaculture, and (8) underwater construction and sound pollution. The subcommittee developed

an outline and technical report template. Individual subgroups are working on completion of the technical reports that address priorities 1-4; the remaining four priorities (5-8) will be addressed in 2016. The reports will describe related research, information needs, recommended or implemented management actions, and funding opportunities to implement those actions on the eight priorities identified above. Technical reports 1-4 should be completed by December 2015.

SURVEYS & RESEARCH

Marbled Murrelet population monitoring continued as part of the Northwest Forest Plan (NWFP) Effectiveness Monitoring Program. An overall population estimate of about 19,700 birds in the NWFP survey area was derived from at-sea surveys conducted in 2013 (95% CI: 17,800-21,600). The estimated mean annual rate of population change during the 2001 to 2013 period was -1.2 percent (95% CI: -2.9 to 0.5%), which was not statistically significant (P = 0.15). At the single-zone scale, declines were observed for the 2001-2013 period in Conservation Zone 1 (Puget Sound to Strait of Juan de Fuca) (-3.9% per year; 95% CI: -7.6 to 0.0; P = 0.05) and in Conservation Zone 2 (outer coast of Washington) (-6.8% per year; 95% CI: -11.4 to -1.9; P = 0.01). Declines were not observed in other zones. The 2014 estimates are forthcoming in spring 2015. At-sea monitoring will continue in 2015, but only in half of the monitoring zones, due to federal budget constraints; monitoring for the remaining sampling zones is planned for 2016, pending funding. In addition to monitoring populations, the program also monitors Marbled Murrelet nesting habitat and is currently completing an evaluation of habitat status and trends during the first 20 years of the NWFP (1993-2012) in Washington, Oregon, and northern California. A report with results from the monitoring of nesting habitat and populations during this period will be available in mid-2015. In 2014, the program published an initial analysis of the relationships between nesting habitat conditions, marine conditions and Marbled Murrelet distribution and trends in the NWFP area (Raphael et. al 2014, Journal of Marine Systems).

The status of the central California Marbled Murrelet population (Recovery Zone 6) continues to be of concern because of continued declining population numbers and threats that include anthropogenic food subsidies for corvids that prey on murrelet nests. Both AV surveys (6 stations) and at-sea surveys show low or slightly declining numbers. Results of recent park corvid surveys are not yet available, but parks are making good progress on implementation of their "crumb clean" campaign. Members of the MMTC and others from California met on 14 January 2014, in Santa Cruz, CA, to initiate planning for a landscape management plan for the Santa Cruz mountains murrelet population. California State Parks initiated the effort, which is in part a response to a lawsuit against State Parks, and has recently received a grant of Section 6 money to fund part of the work.

The U.S. Fish and Wildlife Service (USFWS) voluntarily remanded murrelet critical habitat, without vacatur. The agreement with the court requires the U.S. Fish and Wildlife Service to submit a new proposed critical habitat designation by no later than 30 September 2015, and a new final critical habitat designation by no later than 30 September 2016. In addition, the American Forest Resources Council (AFRC) appealed the district court's ruling regarding their petition to delist the murrelet. An opinion by the U.S. Court of Appeals will be made based on briefing documents submitted by USFWS and the AFRC.

ACTION ITEMS

MMTC members will continue working on: (1) revisions to the Inland Survey Protocol and (2) addressing marine issues that affect murrelets. Still pending approval by the EXCO is the Draft Radar Protocol at Proposed Wind Farms; no movement was made on this item in 2014.

LITERATURE CITED

Raphael, M.G., A.J. Shirk, G.A. Falxa, and S.F. Pearson. 2014. Habitat associations of marbled murrelets during the nesting season in nearshore waters along the Washington to California coast. Journal of Marine Systems http://dx.doi.org/10.1016/j.jmarsys.2014.06.010.

SEABIRD MONITORING COMMITTEE

Heather Renner and Robb Kaler, Coordinators

Seabird monitoring is the accumulation of time series data on any aspect of seabird distribution, abundance, demography, or behavior. The PSG Seabird Monitoring Committee was formed in 1992 and has four main themes: (1) coordinate sharing of monitoring results in a timely manner, (2) evaluate current year results to help inform other PSG committees, (3) develop standardized protocols and data management practices, and (4) promote the effective use of seabirds as indicators of local and large-scale change in the Pacific marine environment. During the 2014 PSG meeting in Juneau, the Seabird Monitoring Committee nominated and elected two co-coordinators: Heather Renner (US Fish and Wildlife Service [USFWS] - Alaska Maritime National Wildlife Refuge) and Robb Kaler (USFWS – Region 7 Migratory Bird Management).

SEABIRD MONITORING COMMITTEE ACTIVITIES & UPDATES

While recent committee meetings have largely focused on the Pacific Seabird Monitoring Database (PSMD), in 2014 the Seabird Monitoring Committee aimed to broaden the scope of the group and focus on a Pacific-wide effort to address "real time" concerns regarding the state of Pacific seabirds. For the February 2015 Seabird Monitoring Committee meeting, we requested that each of the regional representatives elect a delegate to attend the committee meeting and provide a brief report which

highlights headlines from the 2014 field season and identifies any immediate concerns for Pacific seabirds. We will use these updates to discuss ways to best contribute to coordinated efforts, identify topics of conservation concern, and decide on next steps with regards to informing the other PSG committees (Executive Committee, Conservation Committee, Technical Committees, etc.).

In 2015, we will ask committee members to help identify challenges to overcome and provide input on how we can be more effective at sharing information and directing our conservation efforts. Topics include: Are research results available in a timely enough manner to be useful for their intended purpose? Are methods consistent enough for broader synthesis? Do we have the data needed to answer key questions?

ACKNOWLEDGEMENTS

We thank Dr. Scott Hatch for his vision and dedication to the Seabird Monitoring Committee and the PSMD since the committee's inception in 1992. We are grateful and look forward to Scott's continued participation and help with the Seabird Monitoring Committee.

CRAIG S. HARRISON CONSERVATION FUND COMMITTEE

Verena Gill, Chair

This report covers January 2014 to January 2015. The Craig S. Harrison Conservation Fund Committee is comprised of the following members; Verena Gill (Chair), Louise Blight, Dave Duffy, Shannon Fitzgerald, Doug Forsell, Scott Hall, Craig Harrison, Bill Henry, Mark Rauzon, and Melanie Steinkamp.

ACTIVITIES & UPDATES

In 2014, we received five inquiries for funding. One was received in 2013 but not funded until 2014, thus, six inquiries are listed below. Of the five inquiries in 2014, one was funded. Three were denied as being outside the scope of our grant (not the Pacific Ocean region, not seabird related, or not from a qualifying country), and one was dropped by the applicant.

Shuihua Chen of China received $2,000 from the fund (accepted in 2013, but implemented in 2014) for the project "Conservation of the Critically Endangered Chinese Crested Tern: Restoration of a Lost Breeding Colony. Muhammad Iqbal of Indonesia also received $2,000 from the fund in 2014 for the project "Seabird survey in Menui island, southeast off Sulawesi (Celebes, Wallacea)". Congratulations to both recipients!

FUNDING

On 5 May 2013, the PSG Craig S. Harrison Conservation Fund received $8,000 from the National Fish and Wildlife Foundation (NFWF) to advance the conservation of seabirds in developing countries in the Pacific basin. The project will provide funding or supplies for conservation and restoration activities that benefit seabirds and that develop in-country seabird expertise. As a part of the agreement, PSG was obliged to provide $9,500 of matching funds. The period of performance was 1 May 2013 to 30 April 2014 and all of the funds were used to support projects. Both the final written and final financial reports were submitted to NFWF in 2014 and will be posted on their website at http://www.nfwf.org/whatwedo/grants/.

The Conservation Fund continues to receive donations through the PSG website and now totals $5,459.38.

Pigeon guillemot on rocks, ©Melinda Nakagawa

ELECTIONS COMMITTEE, 2015 ELECTION

Alan E. Burger, Coordinator

The committee included: Alan Burger (Coordinator), Pat Baird (PSG Secretary), Ken Morgan, Kim Nelson and Mark Rauzon. Stephanie Avery-Gomm was co-opted onto the committee to help set up the Survey Monkey ballot but since she was a candidate in the 2014-2015 election she stepped down once the Survey Monkey ballot was in place and tested.

BALLOT UPDATE

PSG now has a Survey Monkey Pro subscription. Voting using this system worked well and seemed to promote a higher voter response than systems used in previous elections. We received many favorable comments from members regarding the ease of voting. Each member was sent a region-specific Survey Monkey link so that the problem of members voting for reps outside their region seems to be solved. The system should be easily modified for subsequent elections. Huge thanks to Stephanie Avery-Gomm who spent many days setting up these ballots on Survey Monkey.

2015 ELECTION RESULTS

Once again it proved very difficult to find candidates to run for Chair-elect in 2015, despite the committee's efforts to persuade qualified members to run. At least 14 prominent and experienced PSG members were approached and all declined, except for Nina Karnovsky who is the new chair-elect. Likewise, the positions of Vice-chair of Conservation and Secretary had only a single candidate each. Fortunately, we had more candidates for the regional representatives.

Voting began 15 December 2014 and ended 15 January 2015. Reminders were sent to those who had not yet voted by 7 January 2015. At the end of the 30-day vote period, a total of 183 of the 449 members had voted (40.8%) (Table 1).

ACTION ITEMS

We encountered a minor issue in this election. Because the election period (15 December – 15 January) spans the period that memberships are renewed (after 1 January), We thus recommend the following amendment to the handbook or bylaws to specify who is eligible to vote: "Members who have paid their annual subscriptions (or are life members) before the start of the voting period are eligible to vote." This would make it clear who is eligible to vote. Elections generally begin mid-December.

Table 1. 2015 Pacific Seabird Group Election Results

REGION	TOTAL MEMBERS	VOTED	%VOTED
Alaska/Russia	59	26	44.1
Canada	53	28	52.8
Washington/Oregon	89	42	47.2
Northern California	79	29	36.7
S. California/Hawaii/Latin America	81	35	43.2
Non-Pacific U.S.	32	11	34.4
Europe/Africa	18	7	38.9
Asia/Oceania	38	5	13.2
ALL REGIONS	**449**	**183**	**40.8**

ELECTIONS COMMITTEE, 2015 ELECTION

The following is the outcome of the 2015 election:

POSITION	CANDIDATES (elected in bold)			
Chair-elect	**Nina Karnovsky**			
Secretary	**Jane Dolliver**			
Vice-chair for Conservation	**Stan Senner**			
Washington/Oregon	**Peter Hodum**	Michelle Antolos		
Non-Pacific U.S.	**Samantha Richman**			
S. California/Hawaii/ Latin America	**Yuri Albores-Barajas**	Trevor Joyce	Jay Penniman	Cristián Suazo
Canada	**Stephanie Avery-Gomm**	Trudy Chatwin	Patrick O'Hara	

There were no write-in votes

PSG ELECTRONIC MAILING LIST

Verena Gill

The PSG electronic mailing list (hereafter "Listserve", reflecting the service used by PSG in 2015) is now an open Listserve, that is, one does not need to be a PSG member to be a member of the Listserv (as agreed upon by EXCO in 2013). However, membership has to be requested and is monitored by the administrator. The Listserv has 865 members as of 20 January 2015. That is an increase from 802 members in 2013, 757 members in 2012 and 683 members in 2011.

At the 2014 annual meeting, it was agreed that PSG would transfer the Listserv from a USFWS server to an independent one. EXCO voted that PSG would stay with the same company that hosts our website (BlueHost) and purchase a perpetual license for Listserv software. This involved a one-time fee of $2,075 for the license and an annual maintenance fee of $450. In September 2014, the perpetual license was purchased but due to some setbacks, unforeseen circumstances, and personal issues it has yet to be installed and the PSG Listserv remains on the USFWS server. The main obstacle is a software issue with BlueHost. We need BlueHost to install Lightweight Directory Access Protocol (LDAP) software to run Listserv, but this requires a different type of hosting account. If the website and the Listserv are on the same virtual private server (VPS), the PSG web pages will lose automatice backups, virus protection, and other features. The website and Listserv should be hosted with separate accounts, even within the same hosting service. The second account at BlueHost for Listserv would cost $25/month if paid for on a yearly basis. We need authorization from EXCO for this extra $300/year, and then we can transfer the PSG Listserv over from the USFWS site.

In summary, annual costs to run the Listserv would now be $952/year; $450 annual maintenance fee, $202/year for the website's BlueHost account, and $300/year for a listserv BlueHost account.

PSG MEMBERSHIP REPORT

Jennifer Ma, Membership Coordinator

CURRENT MEMBERSHIP STATUS

As of 31 January 2015, 603 current, lapsed, and payment pending PSG members are recorded on RegOnline (Table 1). Of this total, PSG consists of 409 current and confirmed members, including 80 life members. There are 66 confirmed student members, which is 16.2% of the total current members in PSG. Life members comprise 19.2% of the total current members with 80 members. There are 262 members holding individual memberships, constituting 64.4% of the total current members in PSG.

194 members have currently lapsed; 81.96% (n=159) of lapsed members were not current members in 2014. This can be attributed to the renewal glitch on RegOnline that occurred in January 2014 where individual and student members that opted for the recurring payment option (automatic charge on their credit card by RegOnline to renew membership) were not charged due to a failure in the system (Fig. 1). Therefore, their memberships lapsed in the 2014 year with failure to notify the members. Other members lapsed in 2013 (n=12), or have not yet renewed for the 2015 year (n=23). A renewal notice will be sent out again on 1 April 2015 for the remaining lapsed members.

PSG members are a diverse group of researchers, supporters, and students. Current, confirmed members represent 20 countries (Fig. 2), 20 USA states, and 9 Canadian provinces.

ACTION ITEMS COMPLETED

Michelle Hester provided Jennifer Ma (JM) a document outlining the duties associated with the PSG Membership Coordinator position. This document includes descriptions of each type of membership, type of member lists to create for regional representatives and EXCO, items to address at certain dates, and other details pertinent to maintaining the position.

We addressed the 2014 RegOnline membership auto-renewal failure by directly contacting the members affected on 12 November 2014 and encouraged them to manually renew their 2014 membership. JM received several emails in response from members.

JM has created a document keeping track of all membership issues communicated directly to the membership coordinator from members and EXCO. As of 4 September 2014, JM has addressed 73 emails/issues from members and fulfilled 9 requests from EXCO members, not including creating member lists for representatives. Requests from EXCO are primarily related to elections, mailing lists, or budget inquiries.

***Table 1. Totals of membership type and status of membership* since 31 January 2015**

MEMBERSHIP TYPE	CONFIRMED	% OF TOTAL CONFIRMED	LAPSED	% OF TOTAL LAPSED	PENDING PAYMENT	TOTAL
Honorary	1	0.24	0	0	0	1
Individual	109	26.7	69	35.9	1	179
Individual recurring	153	37.4	83	43.2	1	237
Life	78	19.1	0	0	0	78
Life payment plan	2	0.49	0	0	0	2
Student	12	2.93	15	7.8	0	27
Student recurring	54	13.2	25	13	0	79
GRAND TOTAL	**409**	**100**	**192**	**100**	**2**	**603**

ISSUES ENCOUNTERED

RESOLVED:

Life members must be entered into the RegOnline system. Since many of them do not have email accounts, a generic email was created to be used by JM to create accounts for these members. Great thanks to Annette Henry for assistance with this issue. JM must enter 26 more life members.

UNRESOLVED:

RegOnline recognizes two different membership rates for individual and student memberships. For members who used RegOnline in 2013, their records for renewing in 2015 show that they are responsible for paying both the old rate ($30 for individual, $24 for student) and the new rate ($40 and $30, respectively) on their statement, but in actuality are only charged the new rate when they renew. This caused a lot of confusion for individuals renewing in Jan 2015, which I addressed individually ("standing balance" issue, Figure 4) by eliminating the old membership rates in their records. Our final goal is to find a more efficient method of addressing this issue.

ACKNOWLEDGEMENTS

Thanks to Michelle Hester and Lindsay Young for their support in the transition to becoming Membership Coordinator. Thanks to Jo Smith, Pat Baird, and Christine Ogura for assistance with addressing member issues, and thanks to PSG for the opportunity to be involved in this position.

CORRESPONDING MEMBERSHIP

Jessica Hardesty, John Piatt, and Melanie Steinkamp, Coordinators

The Corresponding Membership Committee provides PSG membership to researchers and conservationists in developing countries. Committee members presently include Jessica Hardesty, John Piatt, and Melanie Steinkamp. To retain "Corresponding Membership", recipients are asked to provide a brief report on research or conservation in their area, at least, every three years for *Pacific Seabirds*. Corresponding members facilitate other communications, such as the Indian Ocean Seabird Group Newsletter, which has been periodically posted to the PSG Listserv.

ACTIVITIES & UPDATES

There is a total of 16 Corresponding Memberships allotted by the PSG. We can provide those names upon request. There have been no changes in membership over the past year. We presently have eight Corresponding Members representing Chile, China, Colombia (2), Fiji, Ecuador, The Indian Ocean, and Peru.

Committee members were surveyed last year to determine how the Corresponding Membership Committee could best meet their needs. All but one committee member believed that reports every three years was adequate and were not interested in submitting reports more frequently. We will be asking for reports from all Committee Members this year.

The main goal of the committee in 2015 is to gain two new members. Please contact Melanie Steinkamp (Melanie_Steinkamp@fws.gov) if you have suggestions for other members.

MARINE ORNITHOLOGY

David Ainley, Editor-in-Chief; Tony Gaston, Managing Editor; Reber Creative, Layout; Carolyn Brown, Technical Editing; Ben Saenz, Webmaster.

ORGANIZATION

2015 is David Ainley's second year as sole Editor-in-Chief (2013 was an overlap year with Tony Gaston). He will continue in this position until at least the end of 2016. Under Dave's Editorship, the processing of papers has sped up. More than half of the papers submitted receive a decision within 3 months of submission. As of June 2013, we began to post "online early" as soon as papers were accepted. This system took some time to implement, but now has most papers posted on the website within 2 months of acceptance. To clarify the workings of the journal I have appended a flow chart of the manuscript review and publication process (Figure 1).

Two issues were published in 2014, containing a total of 33 papers. Both appeared on time in April and October. First authors came from 13 Countries: US (14 papers), Canada (4), UK (2), Australia (2), Brazil (2) and one each from Mexico, Chile, Argentina, Ecuador, Costa Rica, Japan, France, Netherlands. Total pages were 195 and words published 127,000. Some additional appendices which appeared only on the website are not included in that total. Based on citations, *Marine Ornithology* continues to be listed in the second quartile of zoology journals by SCImago.

FINANCES

Table 1 on the next page, shows income and expenditure since 2005. During

MARINE ORNITHOLOGY

the past few years, *Marine Ornithology* finances have suffered from the strength of the Canadian dollar, which was above par with the US dollar for a long period, because all our income is in US dollars but virtually all expenses are in Canadian dollars. However, that situation reversed recently and with the Canadian dollar close to 80 cents USD our financial situation should improve. In addition, page charges will be raised for papers submitted after 1 January 2015, from $30 to $40/page. We receive page charges for about 60% of pages published. Charges on the rest are waived for authors with no institutional support. The rise in page charges follows a rise in Institutional subscriptions from $90 to $100 for the 2014 volume year. We expect to hold this level at least until 2017.

Thanks to a grant of $6000 from PSG, we recently (as of 1 February 2015) hired a Business Manager who will relieve the Managing Editor of most of the financial management (invoicing subscribers, authors; soliciting sponsorships, mailing journals, etc.).

Unlike previous years, I am not soliciting anything from the PSG EXCO. I think things are running fine and we should continue as we are for now. However, feedback is always appreciated.

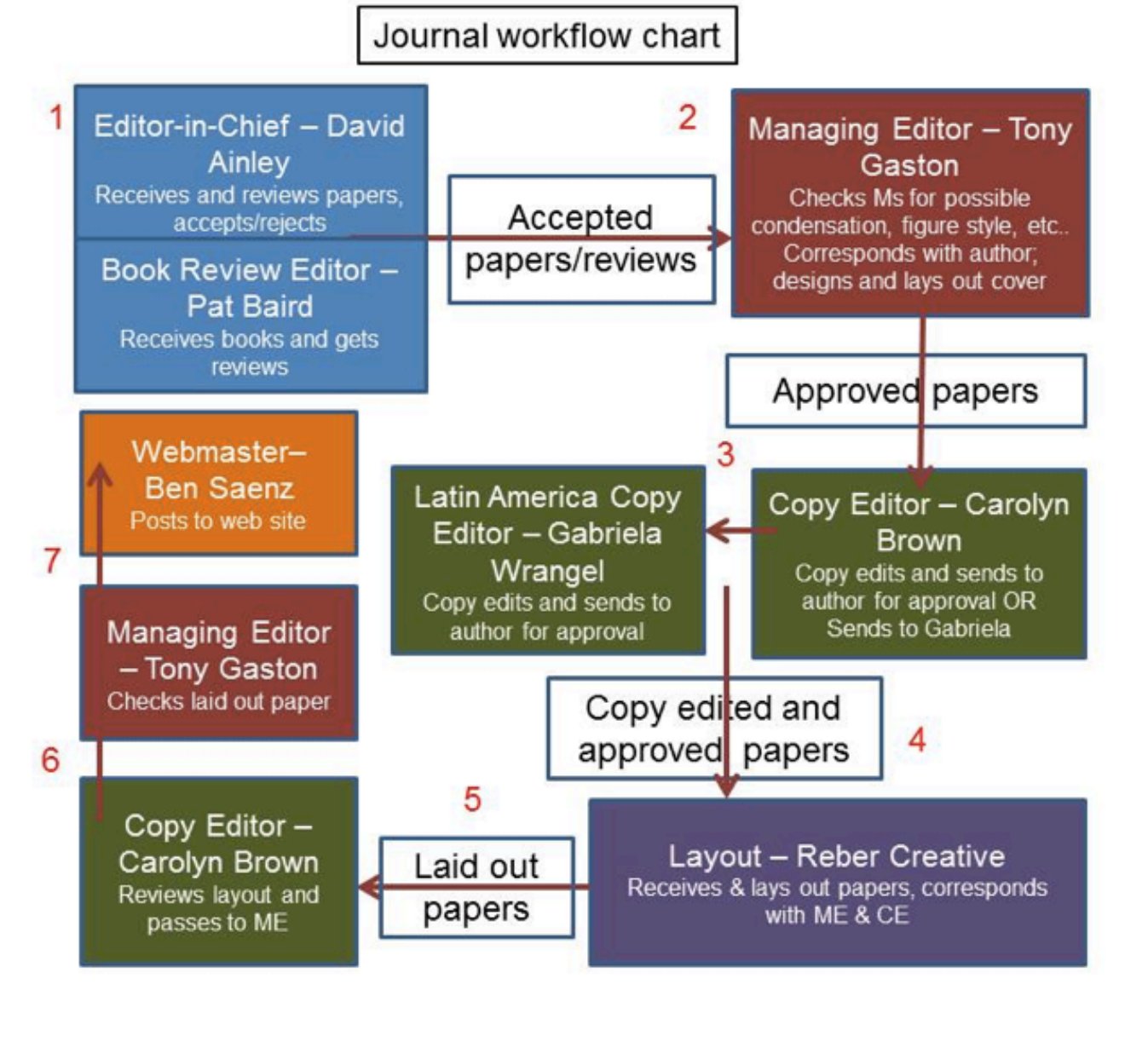
TABLE 1. Income and expenditures for Marine Ornithology, 2005-2014, including financial support by PSG.

Balance on 1 January 2005	**$7,731.26**				
	Income	**Expenses**	**PSG contribution**	**PSG symposium**	**Deficit/profit**
2005	$9,042.53	$12,867.35	$4,200.00	Yes	($3,824.82)
2006	$16,979.87	$9,663.29	$4,065.00		$7,316.58
2007	$6,157.59	$15,304.08			($9,146.49)
2008	$17,296.25	$11,990.19	$6,000.00		$5,306.06
2009	$10,569.07	$13,103.64		Yes	($2,534.57)
2010	$7,256.40	$8,564.51			($1,308.11)
2011	$14,223.15	$9,823.53		Yes	$4,399.62
2012	$15,426.22	$20,618.33	$7,850.00		($5,192.11)
2013	$18,060.02	$12,944.24	$6,000.00		$5,115.78
2014	$4,980.84	$11,120.69			($6,139.85)
Totals	**$127,723.2**	**$125,999.9**	**$28,115.00**		

PSG average annual contribution	$2,811.50
Mean annual cost	$12,599.99
PSG as %income	22%

Note: the above figures for PSG contributions do not include any money granted to symposium organizers

FIGURE 1. Flow chart of Marine Ornithology publication operations



STUDENT REPRESENTATIVE REPORT

Andrew Titmus

There continues to be a healthy student membership within the Pacific Seabird Group. We currently have 64 active student members and 25 members who have either graduated, or let their membership lapse. Advertising the society outside of the usual channels of recruiting current member's graduate students could boost membership. Gaining new student members is very important for PSG as a whole as the majority of student members say they would continue to be a member of PSG after graduation.

The silent auction held at the annual meeting continues to be a success. There is a high amount of involvement through donations from many members, and this fund continues to support student travel to the annual meeting. Students have repeatedly identified this source of funds as vital to their attendance of annual meetings.

I believe we should be generating greater interest and involvement in PSG within the student membership, and events at the annual meeting are a great way to promote further involvement. Particularly the student-mentor night held during the annual meeting is a chance for students and professionals within the society to meet and learn from each other. We are still working on finding the best way to structure this event in a way that will promote greater attendance from both student and regular members. In addition, students are very interested in being able to learn about some of the valuable and interesting skills that many of our regular members use in the course of their work and research. To this end, we should try to organize a series of workshops that could be held during annual meetings by either willing individuals, or panels on a variety of topics.

Finally, the current Student Representative is a two-year position. The ability to plan events, and be successful at raising funds to support student travel could be greatly boosted if the current structure was changed to having overlapping terms with the student serving the first year of the term as a non-voting assistant to the student representative. In this way, the current student representative can mentor and work with the future student representative. This would result in greater student participation, and greater effectiveness at promoting student membership within PSG.

Titles from presentations at the 2015 annual meeting in San Jose, California, were used to produce this wordle artpiece.

ORNITHOLOGICAL COUNCIL REPORT

Ellen Paul, OC Executive Director, Pat Baird and Doug Forsell, PSG Representatives to OC

Following is a summarized version of the Annual Report of the Ornithological Council covering activities from 1 July 2013 through 30 June 2014. There are updates on key activities for the entire year as well as activities initiated since the midyear report. Contact the OC representatives Doug Forsell or Pat Baird, or the OC Executive Director Ellen Paul [e-mail: ellen.paul@verizon.net; phone 301/986-8568] for more information on any matter of interest to you. The OC welcomes your input at any time and is particularly interested in hearing about issues or problems of concern to you that they may not be addressing.

The Ornithological Council seeks to:

- Ensure that the best ornithological science is incorporated into legislative, regulatory, and management decisions that affect birds;

- Enhance the ability of ornithologists to pursue professional activities; and

- Promote the influence of ornithology in public affairs.

The OC's work focuses on animal welfare issues, permits, research funding, and other policies that affect ornithologists and ornithological societies. Activities below describe OC's work over the past fiscal year.

ANIMAL WELFARE

Activities related to implementation of the Animal Welfare Act took priority in the first half of 2013. Here are the main issues that the OC addressed:

1. A FAQ on the application of animal welfare laws and policies to wildlife research, requested by the Animal Subject subcommittee of the Federal Demonstration Partnership (http://sites.nationalacademies.org/pga/fdp/index.htm), a consortium of federal funding agencies and research institutions and universities. Status: the subcommittee has formed a working group to discuss and review the FAQ in preparation for publication. The authors – OC Executive Director Ellen Paul and the president-elect of the American Society of Mammalogists, Bob Sikes, have been invited to join this working group, which began meeting on 16 July 2014.

2. A model protocol form for wildlife biology for use in the required review by Institutional Animal Care and Use Committees. The form was drawn from those used by the U.S. Fish and Wildlife Service Alaska Region IACUC and by the National Park Service, with input from a committee of volunteers drawn from those who attended the OC/ASM "Wildlife IACUC" held in October 2011. Status: The protocol was reviewed by a number of experts and then submitted to the Animal Subjects subcommittee of the Federal Demonstration Partnership as a resource to complement the FAQ on wildlife biology. It was released in beta on Ornithology Exchange on 6 Jan 2014, followed by extensive outreach efforts by OC and ASM through direct contact with researchers, IACUCs, notices from AAALAC International, PRIM&R, and other organizations. The outreach culminated in a webinar offered by the Office of Laboratory Animal Welfare of the National Institutes of Health on 20 March 2014; the webinar and follow-up questions are archived and available to the public.

3. The OC and ASM completed a training module on Animal Welfare Act compliance in the context of wildlife biology. This module was prepared for CITI, an organization that provides online research ethics education to all members of the research community (https://www.citiprogram.org/). Status: The review and revision have been completed and is now available on the CITI website and in use by 96 institutions; 655 people have completed the course.

4. The OC continues to entreat other federal funding agencies to follow the lead of the National Science Foundation, which revised its Grant Proposal Guide to give formal recognition to the taxonomic society guidelines for assessment of wildlife research protocols funded by the NSF.

The Guidelines to the Use of Wild Birds in Research (on the OC's website http://www.nmnh.si.edu/BIRDNET/guide/index.html) is now regarded by NSF as an official reference document for Animal Welfare Act compliance. Status: A continuing outreach effort is underway to be sure that all universities and research institutions know about this change and about resources pertinent to wildlife biology.

5. To assist ornithologists whose research requires the use of thoracic compression, the OC, with the help of the AOU Committee on Collections and especially chair Kim Bostwick, revised its fact sheet on thoracic compression to justify the use of this method (justification is required under the Animal Welfare Act). The OC and AOU also developed and published a new position statement on the same topic. Status report: As of June 2014, the fact sheet and position statement have been requested by approximately a dozen ornithologists and IACUC members. To date, every IACUC that has reviewed this information has approved the use of thoracic compression to "pending."

6. In 2013, the American Veterinary Medical Association published its revised Guidelines for the Euthanasia of Animals. The federal grant-making agencies require use of AVMA-approved method of euthanasia as a condition of compliance with the Animal Welfare Act. Despite a submission from the Ornithological

Council of observational data to support the continued classification of thoracic compression (TC) as at least "conditionally acceptable" the AVMA chose to re-classify it as unacceptable. The OC arranged for an independent study by Dr. Joanne Paul-Murphy (DVM Dipl. American College of Veterinary Medicine and Dipl. American College of Animal Welfare) and Andy Engilis (UC Davis Curator Museum of Fish and Wildlife Biology) to compare the effects of TC and intraosseus pentobarbital (IP) on the time to circulatory arrest and an isoelectric EEG in anesthetized birds. They found that time to cessation of pulse (and consequent loss of consciousness) was faster (statistically significant) with TC than with the IP as to both range and median. Time to death, as measured by an isoelectric EEG, was faster with the IP, but the difference was not statistically significant. The OC will press the AVMA to change the classification of TC and, should the AVMA refuse to do so, will take such other measures as may be necessary and appropriate to assure that ornithologists are permitted to use this method of euthanasia.

7. Tentative planning for a second "Wildlife IACUC" conference has started. They will again work with the American Society of Mammalogists. Status: The conference will be held at the Smithsonian Environmental Research Center in Edgewater, Maryland and the USGS Patuxent Wildlife Research Center. Grant proposals are in preparation and we hope to hold the conference in the spring of 2015.

8. The Animal Welfare Act regulations require that research protocols include plans to render medical care (i.e., in the case of injuries sustained during the course of the research) or euthanize animals that would otherwise experience severe or chronic pain or distress that cannot be relieved. However, to do so would be illegal unless the MBTA or ESA permit expressly allows these activities. For nearly two years, OC has been asking the USFWS to include a standard permit condition pertaining to euthanasia of injured birds. The Office of Laboratory Animal Welfare is awaiting the results of the thoracic compression study before they engage in discussion with the USFWS on this issue.

9. The OC has been consulted by the U.S. Forest Service which is in the process of establishing its own Institutional Animal Care and Use Committee. We expressly requested that the Forest Service officially recognize Guidelines to the Use of Wild Birds in Research as an official reference standard.

Status: *pending*

PERMITS

1. Completion of the guide to Canadian national and provincial research permits was put on hold due to the need to address pressing, deadline-driven policy matters.

Status update: work has resumed and we continue to try to provide full and complete information for each province.

2. The OC is working with the Society of Canadian Ornithologists/Société des Ornithologists du Canada to encourage the national and provincial governments to reform and streamline permit policies and practice.

Status: Letters to the Canadian Wildlife Service and the provincial and territorial governments have been drafted and will be sent by SCO/SOC.

3. OC Executive Director Ellen Paul and North American Banding Council (NABC) Chair John Alexander continue to press the USGS to address the new practice of the Bird Banding Lab to refuse to issue permits for projects that it perceived would require resources (bands, data management) that it might not have in coming years. In addition, OC and NABC raised concerns about other restrictions on banding permits that the upcoming revisions to the banding regulations are said to impose.

Status: We met in late October with the new staffer who was assigned to oversee the BBL, followed by a second meeting in December with that staffer and another whose role in the matter is not clear. As reported on Ornithology Exchange, we proposed a strategy to eliminate the funding problems said to be the basis of the recent band denials. In June 2014, we met with the acting director of the USGS Patuxent Wildlife Research Center (which oversees the BBL) and in July, we met with the BBL chief. The discussion continues.

4. OC Executive Director Ellen Paul met with Brad Bortner (USFWS Chief of the Division of Migratory Bird Management) in November and subsequently with Jerome Ford (USFWS Assistant Director for Migratory Birds) in June to discuss a number of pending permit issues, including continuing development of a "comprehensive" Migratory Bird Treaty Act permit that would cover an array of research activities to be conducted for the duration of the permit. It is hoped that such a permit would serve as a model for other research institutions and groups and that all USFWS regions would eventually consider issuing such permits under appropriate conditions.

5. The OC helped dozens of ornithologists to obtain Migratory Bird Treaty Act, ESA, APHIS, CDC and other permits and navigate the complex import and export processes. Ornithologists also notify the OC about problems they have encountered and the OC works with the agencies to identify the source of the problem and devise ways to correct the problem.

Status: We continue to receive at least one request for assistance with permits each week. Most recently, we assisted someone who studies a species that was added to the endangered species list in the middle of the field season.

We also helped two graduate students whose endangered species import permits seemed to be languishing on a desk and who were unable to get a response from the USFWS and a researcher who faced confiscation of imported materials because a wildlife official in the country of origin had mistakenly written the same scientific name for two different species. Perhaps most notably, OC was able to break a Catch-22 situation in which a state agency refused to issue an endangered species permit based on the mistaken belief that a federal permit was required. We persuaded the USFWS to send written confirmation that this was not the case. We are now working on a similar problem with regard to the issuance of MBTA permits in that same state.

6. The OC has asked the USFWS to reconsider its recent and unannounced imposition of import inspection fees on state universities, which had previously been considered "state agencies" and therefore exempt from these fees.

Status: The USFWS has refused to reconsider this stance even though, for permit purposes, these same institutions are considered state agencies.

7. The OC met with USFWS Director of Law Enforcement Director William Woody and Brian Aroyo, USFWS International Affairs Director of International Affairs, to discuss the problems resulting from the USFWS requirement for validation of CITES permits. The OC was joined in this request by the Society for the Preservation of Natural History Collections and the American Society of Mammalogists.

Status: In April 2014, the OC, together with the American Society of Mammalogists and the Society for the Preservation of Natural History Collections has petitioned the Secretary of the Interior to revoke or suspend this requirement with regard to scientific specimens and samples. We are preparing a letter asking the CITES Standing Committee to do the same.

8. The OC, in consultation with the USFWS Division of Migratory Bird Management, compiled a short guide to effective permit applications and published it on Ornithology Exchange. In addition, we obtained from the USFWS the practical details about import clearance procedures at the airports and shared that information with ornithologists.

9. The OC was alerted by ornithologists of a substantial backlog in permit issuance by USFWS Region 8 (Pacific Southwest). It is now taking 15 months to obtain a Migratory Bird Treaty Act permit in that region. To prompt a resolution of this problem, OC contacted Jerome Ford (USFWS Assistant Director for Migratory Birds), Erick Davis (Region 8 Assistant Regional Director for Migratory Birds) and Marie Strasburger (Region 8 Migratory Bird Chief) to address this problem. OC has asked that the region ask each of the other regions to take a dozen or more of the longest-pending applications for priority review and issuance. We also asked that the USFWS develop a system to track permit issuance and to require regions to report to the Assistant Director for Migratory Birds if they begin to approach a 90-day issuance time so solutions can be devised and implemented.

10. The rule that removed legal barriers that made it difficult for federal employees to serve on the boards of outside organizations was made final in March 2013. This is an issue that the OC has been working on for nearly a decade.

Status: There has been discussion about a strategy to persuade Congress to re-write the statute entirely but the consensus among the organizations who have taken part in the discussion is that as long as the administrative policy change seems to be working, it would be better to avoid this extremely time-consuming effort which, in the current Congress, is not likely to succeed and, with upcoming mid-term elections, may even cause unwanted backlash. We are currently in discussion with the Forest Service Ethics officers about the procedures that the agency will require; current procedures require submission of information that is inapposite to the regulatory change and to the White House memorandum that encourages agencies to allow scientists the opportunity for full participation in scientific societies, including service on boards.

11. An anti-collecting article was published in Science in April 2014. A group of scientists organized a response that has been accepted for publication. The OC has drafted a letter to the editor-in-chief (not for publication) asking for a review of the peer-review process because the original article contained numerous errors that would have been questioned if the reviewers had had the appropriate expertise. The consequence of the failure of peer review in this case has significant negative consequences for scientists, who are already facing restrictions from permitting agencies who have, in recent years, developed permit policies that seem to have little basis in population biology.

OTHER SERVICES TO ORNITHOLOGICAL COMMUNITY

1. The OC concluded the first of the three years of the pilot phase of the small grants program and issued a request for proposals for the second round of funding. We hope for as many excellent proposals as we received in 2012. The funder and the OC Board were pleased with the results of the first round – so much so that the funder increased funding by nearly 50% and the OC Board agreed to allow the Executive Director to seek additional funds for the following year.

Status report: The second round of grants has been awarded and we are preparing for the third and final round

under the pilot project. We are discussing potential sources for additional funding.

2. Upon request, OC conducts webinars for faculty and students on permits, animal welfare issues, the role of science in bird conservation, and other topics of interest. The OC keeps scientists informed about policy changes that affect the way they do their research. Via Ornithology Exchange, the Ornithological Newsletter, and direct e-mail as well as use of the NEOORN list owned by Van Remsen, OC posts updates on various issues of concern.

PROVIDING SCIENTIFIC INFORMATION ABOUT BIRDS

1. OC also provides scientific information about birds to government agencies, business entities, landowners, the press, and others. See the OC website for a myriad of specific instances.

PSG NEWS

Read about changes to the format of *Pacific Seabirds* and other transitions in 2015.

INTERIM EDITOR'S NOTE

Pacific Seabirds has been in a transition phase, from printed to on-line news bulletin, and this change has been hampered by not having a dedicated Editor in Chief. For many years Vivian Mendenhall served as Editor and in 2014 Holly Freifeld volunteered to fulfill those duties for one year. As Chair of PSG, I became Interim Editor, and relied on the volunteer editorial assistance of Laura Bliss, Jane Dolliver, Vivian Mendenhall, Martin Renner, and Leslie Slater. Photographs were graciously provided by Nina Karnovsky, Gregory Spencer, Craig Strong, and Chris Linder. We all thank Mesha Wood for putting everything into a traditional *Pacific Seabirds* format, which has allowed us to post this single-issue on the PSG website. Our lives and work sites were scattered throughout the PSG regions, requiring long-distance coordination, so I greatly appreciate the time everyone has put into this issue. Thanks also to Jo Smith and Pat Baird for guidance and for answering my questions.

The 2015 team-PS was a temporary, volunteer effort, and PSG is looking for a more permanent Editor and Associate Editors for *Pacific Seabirds*. We welcome new ideas and people. For further information, contact the PSG Chair at: chair@pacificseabirdgroup.org.

- Kathy Kuletz

FUTURE OF PACIFIC SEABIRDS AD-HOC COMMITTEE SUMMARY

In March 2015, the Future of *Pacific Seabirds* Ad-hoc Committee met to discuss if/how PSG's *Pacific Seabirds* publication might change in light of the EXCO's decision to cease paper printing of the publication. Eight committee members (Jane Dolliver and Andrew Titmus, working with Yuri Albores, Morgan Gilmour, Marc d'Entremont, Marc Romano, Lauren Scopel, and Stan Senner) provided feedback and reviewed the membership survey on the future of *Pacific Seabirds*. The committee concluded that *Pacific Seabirds* should remain as a stand-alone, downloadable pdf document published annually as a composite of quarterly electronic newsletters. With the exception of peer-reviewed journal articles and translations, the committee recommended retaining all the sections and content of *Pacific Seabirds* (Achievement Award synopses, Conservation Report, Regional Reports, Officers Reports, Committee Reports, PSG News, Meeting News, Executive Council Minutes) and encouraged select sections to be published more frequently in a mobile-friendly e-newsletter format (i.e., Conservation Report, Regional Reports, PSG News). In summary, the goal is to make *Pacific Seabirds* a quarterly PDF that would roll up available reports and information submitted over the quarter.

Pacific Seabirds also serves to fulfill PSG compliance as a registered charity and thus must maintain key elements, such as our financial statement to members, EXCO minutes, and bylaw changes. It also serves as a record or archive of Society business (PSG news and reports from annual meetings, working groups, etc).

After two years of relying on Interim Editors that have other PSG responsibilities as well, it is apparent that we need a dedicated team to make *Pacific Seabirds* timely and complete. A full editorial team will be required to publish a quarterly newsletter, with

the newsletter and the PSG website. You can be a part of this important PSG team! If interested, please contact chair@pacificseabirdgroup.org to get involved.

TRANSITIONS AND THANK YOU'S

One of the unique qualities of the Pacific Seabird Group is its strong membership-based operations. The PSG relies on the active engagement of its members to complete the business of PSG, including running the Executive Council, serving as an interface between PSG and regional members, conservation initiatives, and planning and execution of our annual meetings. Those who step forward contribute their expertise and time, ranging from hours to years of work. There is of course turnover, which is good for PSG growth and it allows others to benefit from this valuable experience. I'd like to thank and honor those who handed over the baton in 2015.

During the 2014-2015 year, PSG had several long-term Society members transition from EXCO positions or committees. Pat Baird left EXCO after serving as Secretary of PSG from 2009 to February 2015. During this time she was key to keeping PSG records and meeting minutes and she guided EXCO operations while also working on the PSG Bylaws revision. In the past, she also served as California Representative and Associate Editor for *Pacific Seabirds* in 2012 and 2013. As Chair-elect and Chair we often relied on her institutional knowledge, and we'll continue to do so well into the future. Doug Forsell served as Chair in 2014 and Past Chair in 2015, during which he not only assisted with the Bylaws revision but worked with Scott Shaffer and his local committee to host the 2015 meeting in San Jose. He was generous in helping incoming and current chairs. Vivian Mendenhall left her 14 year position as Editor of *Pacific Seabirds* in 2014, but continues to assist us during the transition to a new format and editorial team. Vivian also served as Secretary of PSG for four years, and we're counting on her continued contributions and archival knowledge.

Finally, we thank several outgoing Regional Representatives. Ken Morgan served as the Canadian representative for many years, and was one of the experienced EXCO folks we could call on to get something done, provide background, or explain a point of order. Iain Stenhouse served as the US (non-west coast) representative and Annette Henry as the representative for the Southern California/Latin America/Hawaii region. Both Iain and Annette had a lot of territory to cover! Thanks to everyone for your contributions to PSG.

Pigeon guillemot forging and fish, ©Melinda Nakagawa

MEETING NEWS

PSG's 42nd ANNUAL MEETING, FEBRUARY 2015

Kathy Kuletz and Scott Shaffer

The Pacific Seabird Group's 42nd Annual Meeting was held at the San Jose Airport Garden Hotel in San Jose, California on 18-21 February, 2015. The three days of scientific presentations were preceded by two days of committee meetings, including the Executive Council, the Short-tailed Albatross Recovery Team, the Marbled Murrelet Technical Committee, the Kittlitz's Murrelet Technical Committee, the Seabird Monitoring Committee, the North Pacific Albatross Working Group, Scripp's Murrelet and Guadalupe Murrelet Technical Committee, and the World Seabird Conference 2 working group. Before and after the meetings, attendees had a choice of two field trips, with a pelagic seabird excursion to offshore waters of Monterey Bay and several opportunities for a day trip to the Don Edwards National Wildlife Refuge. There were 319 registered attendees for the meeting, which had the theme "A Future For Seabirds"

The Local Organizing Committee, Chaired by Scott Shaffer and Doug Forsell, gave a warm welcome to attendees starting with the opening reception in the hotel, assisted by donations from the Lagunitas Brewing Company. Other social events included the evening Poster Session on Thursday and the Student Mentoring Reception on Friday. Lunchtime mixed with business during the open Conservation Committee meeting on Friday and the PSG Members Meeting (formerly called Business Meeting) on Saturday.

Our opening plenary talks for each of the three days of presentations provided a range of geographies and disciplines. On Thursday, Nathan Mantua Peter

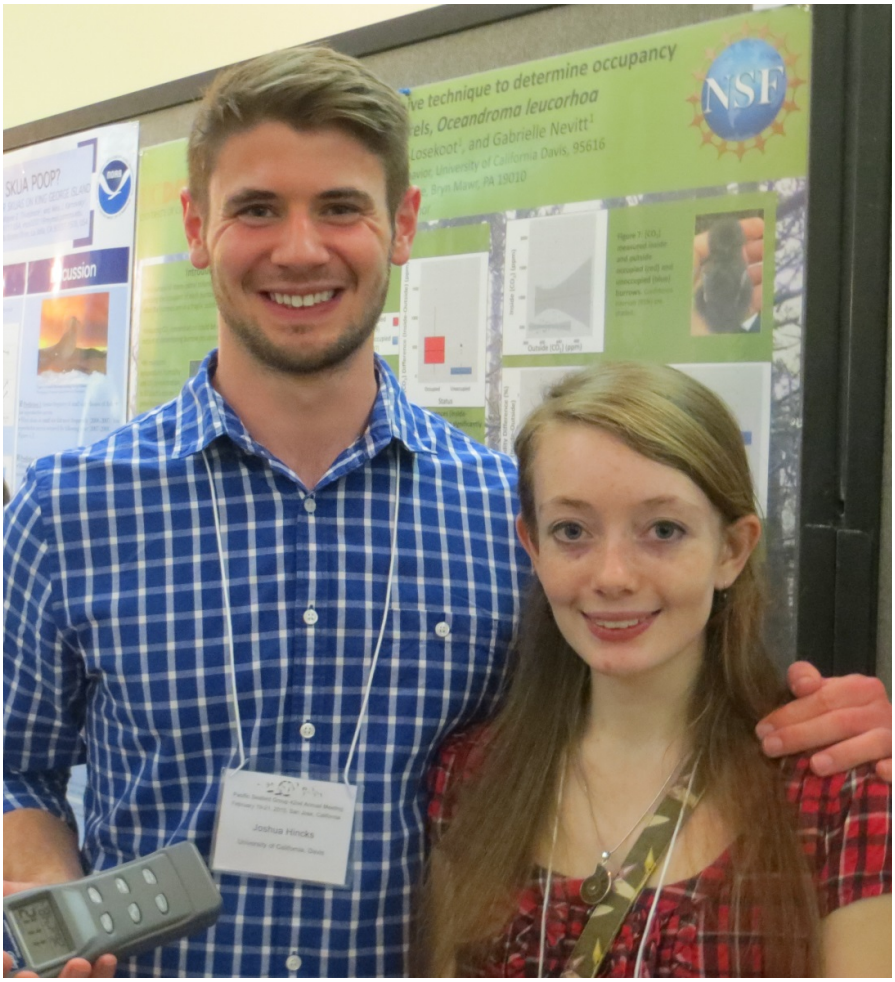
Students and mentors enjoy the Poster Session at the 2015 PSG meeting at San Jose. From left to right: Nicole McDuffie, Miranda Starr (in front), Nola Shi (in back), Kristina McComber, Nina Karnovsky (our Chair-Elect), Steve Hampton, Andrea Sartorius, Ramoncito Caleon, and Molly Shallman.

(Southwest Fisheries Science Center, Santa Cruz, California) presented "Pacific climate variations and their impacts on California Current System ecosystems", providing oceanographic background for the many of the sessions. On Friday, Vicki Friesen (Department of Biology, Queen's University at Kingston, Ontario) drew on her expertise in genetics to explore "Predicting appropriate population units for successful conservation". On Saturday, the plenary speaker was the recipient of the 2015 PSG Lifetime Achievement Award, David Ainley (H.T. Harvey & Associates Ecosystem Consultants, California). True to David's lifelong passion for the conservation of seabirds and marine ecosystems, he talked about "Following in the footsteps of Don Quixote: is arguing for the importance of top-down forcing in seabirds' food webs merely tilting at windmills?"

The contributed paper sessions had 127 oral and 47 poster presentations featured over three days. There were four Special Paper Sessions: (1) Can seabirds be used to predict impending climatic events in the Pacific?

(led by Grant Humphries); (2) Community-based seabird conservation (led by Peter Hodum); (3) Ashy Storm-petrel Range-wide Science and Conservation (led by David Ainley), and (4) Shearwaters Forever or Cause for Concern? - the Conservation and Status of Shearwaters (led by Mark Rauzon). The sessions ended with brief discussion periods, to facilitate links among biologists and managers. On the last night, the banquet honored Dr. David Ainley for his lifetime of work towards research and the conservation of seabirds, and his significant contributions to PSG over the last 42 years. We closed the meeting with some great dancing.

At the banquet, awards were presented for Best Student Talk and Best Student Poster. We thank all student participants, and congratulate the following: for best PhD oral presentation, Nobukiko Sato; best student poster was split by Caroline Poli and Amy Miles, with an honorable mention to Mizuho Nagata; best masters or under graduate oral presentation went to Joshua Hincks.



Two of the student presentation winners from PSG 2015, Joshua Hincks (best Master's or undergraduate oral presentation) and Amy Miles (best student poster, shared with Caroline Poli, not pictured)

This year, $5,250 USD was awarded to assist 13 PSG student members and $2,500 was awarded to seven non-Canadian/US scientists with their travel expenses to present a paper or poster in San Jose. These awards are yet another way that PSG supports and mentors student and international members outside USA and Canada. Student travel funds are raised annually from donations and the Silent Auction. International travel awards are raised annually from member donations and the annual meeting. The Local Committee is grateful to Melinda Nakagawa, a local artist and seabird biologist, who donated her art work for the 2015 PSG annual meeting logo (designed by Emma Kelsey) and contributed artwork to the silent auction.

The demographic profile of the attendees at this 42nd meeting indicates a strong future for PSG - 22% students, 12% early-career scientists, 36% mid-career, 29% late-career, and 1% retired. The PSG is obviously a society with a large cohort of new and emerging scientists, a high percentage of mid- to late-career professionals, and a few wise elders. Apparently no one had 'no job and lovin life!'

Assisting the Local Committee (especially Scott Shaffer and Doug Forsell) and their team of volunteers, this successful meeting was organized by the Science Program Chair-elect (Kathy Kuletz), the PSG Chair (Jo Smith), Secretary (Pat Baird), online registration expert (Lindsay Young), and website expert (Annette Henry). Rachael Orben, Corey Clatterbuck, and Liz Labunski produced the printed program and book of abstracts. From everyone involved - "Carry on - and thanks for all the fish!"

EXECUTIVE COUNCIL MINUTES

The Pacific Seabird Group's board of directors, the Executive Council (EXCO), meets at each Annual Meeting and several times a year via conference call. Minutes are available on the PSG website after they are approved at the subsequent meeting. A summary of the Annual Meeting minutes is provided in *Pacific Seabirds*. All PSG members are welcome to attend EXCO meetings and contact PSG council members if they have questions, suggestions, or concerns.

SUMMARY OF MINUTES OF THE EXECUTIVE COUNCIL MEETING

18 February 2015
42nd Annual Meeting, San Jose, California
San Jose Airport Garden Hotel

Summary of actions by EXCO, February 2014-February 2015:

- Passed a balanced FY2015 PSG operating budget
- Revised PSG bylaws to comply with the State of California non-profit law
- Organized a successful PSG Annual Meeting in San Jose for February 2015, with 319 attendees
- Sent six Conservation Letters to government agencies
- Published *Pacific Seabirds*, Volume 41, Numbers 1 & 2
- Maintained a membership of 409 members representing 20 countries
- Drafted and approved a Conflict of Interest Policy for EXCO members
- Formed an ad-hoc Code of Conduct Committee
- Approved a revised PSG Endowment Fund Policy
- Filled the vacant Membership Coordinator position
- Approved moving the PSG listserve to a new host
- Obtained member feedback on (a) future annual meetings for 2016 and 2017 and (b) changes to the format of *Pacific Seabirds*
- Provided a funds for a business manager for *Marine Ornithology*

EXECUTIVE COUNCIL REPORTS

Past Chair's Report

David Ainley received the Lifetime Achievement Award in 2015; no Special Achievement Awards were presented in 2015. Travel awards were presented to 20 students and to non-US or Canadian scientists. Thirty-one talks and 14 posters were consideration for student paper awards this year.

Chair's Report

In addition to the 13 major items (see summary of actions, above), numerous smaller workplan items were completed, including two online tools that helped streamline PSG business and incorporate member feedback in the decision-making process: Survey Monkey (Elections-Elections Committee, Future Meetings Survey, *Pacific Seabirds* Survey), and RegOnline (Annual Meeting-Local Committee). The EXCO has worked hard to generate and conserve resources but would benefit from a Strategic Plan to focus PSG's mission, vision, and direction. One of the essential financial tasks in 2014-2015 was calculating the annual operating budget for PSG to understand what was needed for annual revenue and PSG bylaws – approximately $10,000 (without publications or the annual meeting).

Vice Chair for Conservation's Report

Six Conservation letters were sent in the past year: (1) to Environment Canada re: Proposed Recovery Strategy for the Marbled Murrelet in Canada, (2) to the Pacific Fishery Management Council's Ecosystem Workgroup re: forage fish, (3) to the US Army Corps of Engineers re: the proposal to cull 16,000 Double-crested Cormorants at East Sand Island, WA, (4) to the U.S. Secretary of Agriculture re: cessation of old-growth logging in the Tongass National Forest, (5) to USFWS re: monitoring needs for Kittlitz's Murrelets and Aleutian Terns and (6) to the CA Dept. of Fish and Wildlife in support of a Marbled Murrelet habitat plan.

Treasurer's Report

Total income to-date was $166,365, total expense were $156,775. The surplus in the FY2015 budget is $4.00. Current checking account balance is $120,000 and endowment funds are at $204,000.

ANNUAL MEETING UPDATES

Based on an online survey sent to all members, ~20% of respondents planned to attend the World Seabird Conference (October 2015, Cape Town, South Africa). For the 2016 annual meeting for PSG, the top two locations were in what is considered the 'core' PSG meeting region - WA/OR/CA (~70%) while the Galapagos Islands were also of interest (~50%)Further in the future, respondents were interested in attending meetings in Vancouver, Seattle, Portland or Hawaii. Hawaii and San Diego have the largest number of people willing to volunteer on a local committee. The Chair (soon to be Past Chair) will work to confirm a local committee for 2016, pushing other interested local committees to future years (2017-2019). The International Ornithological Congress (August 2018, Vancouver BC) is an option if PSG agrees to be a sponsor.

OTHER BUSINESS

Listserve and website:

865 people are on this listserve. Hits to the PSG website have doubled in the past year.

Membership:

PSG has 409 current (paid) members, including 66 student members and 80 lifetime members, representing 20 countries. The goal for 2015-2016 is 500 members.

SUMMARY OF MINUTES OF THE EXECUTIVE COUNCIL MEETING

MOTIONS

The new 2015-2016 EXCO members:

EXCO approved Nina Karnovsky (Chair Elect), Jane Dolliver (Secretary), Yuri Albores-Barajas (Southern California, Latin America, Hawaii Representative), Stephanie Avery-Gomm (Canada Representative), Samantha Richman (United State other than west coast and Hawai'i).

Conflict of Interest form for PSG EXCO members:

EXCO approved the Conflict of Interest form, which requires EXCO members to disclose real, potential or perceived conflicts of interest and to recuse themselves from votes where they stand to benefit financially.

PSG Endowment Policy (6 Feb 2015 version): EXCO approved the Endowment Policy revisions.

Submit the bylaws document (version 8) to the membership for a vote:

Notwithstanding minor and technical changes, this document updates PSG Bylaws to comply with current practices, rules and regulations for operating as a non-profit in the State of California. EXCO approved the revised bylaws, pending requested editorial changes.

Approve $300 for a Blue Host subscription for the listserve:

EXCO approved this motion to allow PSG to move the PSG listserve from the USFWS server.

Cease hard-copy printing of *Pacific Seabirds*:

Members will receive *Pacific Seabirds* in electronic format only. An ad-hoc "Future of Pacific Seabirds Committee" will be convened to propose the future format, content, style and frequency of the publication.

Brandt's Cormorant - PSG 2015 logo, ©Melinda Nakagawa

PUBLICATIONS OF THE PACIFIC SEABIRD GROUP

The The Pacific Seabird Group publishes symposia and other works. PSG Symposia are occasionally held at Annual Meetings; those which have been published are listed below. Technical Reports prepared by PSG working groups also are listed. To order one of these PSG publications, please see instructions after each item.Abstracts of papers and posters given at PSG meetings are published annually. Abstracts for meetings of 1974 through 1993 appeared in the PSG Bulletin (Volumes 2–20); for meetings of 1994 through 2003, in *Pacific Seabirds* (Volumes 21–30); and for meetings of 1997 and later, at www.pacificseabirdgroup.org PSG publishes the on-line bulletin *Pacific Seabirds* (www.pacificseabirdgroup.org) and the journal *Marine Ornithology* (www.marineornithology.org). Current and past issues of both journals are available online or by subscription. Back issues may be obtained online.

SYMPOSIA

SHOREBIRDS IN MARINE ENVIRONMENTS. Frank A. Pitelka (Editor). Proceedings of an International Symposium of the Pacific Seabird Group. Asilomar, California, January 1977. Published June 1979 in Studies in Avian Biology, Number 2. ***Available free of charge at*** http://elibrary.unm.edu/sora/Condor/cooper/sab.php

TROPICAL SEABIRD BIOLOGY. Ralph W. Schreiber (Editor). Proceedings of an International Symposium of the Pacific Seabird Group, Honolulu, Hawaii, December 1982. Published February 1984 in Studies in Avian Biology, Number 8. ***Available free of charge at*** http://elibrary.unm.edu/sora/Condor/cooper/sab.php

MARINE BIRDS: THEIR FEEDING ECOLOGY AND COMMERCIAL FISHERIES RELATIONSHIPS. David N. Nettleship, Gerald A. Sanger, and Paul F. Springer (Editors). Proceedings of an International Symposium of the Pacific Seabird Group, Seattle, Washington, January 1982. Published 1984 as Canadian Wildlife Service, Special Publication. *Out of print;* ***available free of charge at*** www.pacificseabirdgroup.org

THE USE OF NATURAL VS. MAN-MODIFIED WETLANDS BY SHOREBIRDS AND WATERBIRDS. R. Michael Erwin, Malcolm C. Coulter, and Howard L. Cogswell (Editors). Proceedings of an International Symposium at the first joint meeting of the Colonial Waterbird Society and the Pacific Seabird Group, San Francisco, California, December 1985. Colonial Waterbirds 9(2), 1986. $12.00. ***Order from:*** Ornithological Societies of North America, PO Box 1897, Lawrence, Kansas 66044; phone (800) 627-0629; no online orders.

ECOLOGY AND BEHAVIOR OF GULLS. Judith L. Hand, William E. Southern, and Kees Vermeer (Editors). Proceedings of an International Symposium of the Colonial Waterbird Society and the Pacific Seabird Group, San Francisco, California, December 1985. Published June 1987 in Studies in Avian Biology, Number 10. $18.50. ***Available free of charge at*** http://elibrary.unm.edu/sora/Condor/cooper/sab.php

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BIOLOGY AND CONSERVATION OF XANTUS'S MURRELET. Harry R. Carter, Spencer G. Sealy, Esther E. Burkett, and John F. Piatt (editors). Proceedings of a symposium of the Pacific Seabird Group, Portland, Oregon, January 2005. Published 2005 in *Marine Ornithology* 33(2):81-159. ***Available free of charge at*** www.marineornithology.org

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Information on presenting symposia: Pacific Seabird Group Symposia or Paper Sessions may be arranged by any member who is interested in a particular topic. Before planning a special session, refer to Meetings/Symposia Guidelines at www.pacificseabirdgroup.org; also contact the Scientific Program Chair for the annual meeting.

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PUBLICATIONS OF THE PACIFIC SEABIRD GROUP

TECHNICAL PUBLICATIONS

EXXON VALDEZ OIL SPILL SEABIRD RESTORATION WORKSHOP. Kenneth I. Warheit, Craig S. Harrison, and George J. Divoky (editors). Exxon Valdez Restoration Project Final Report, Restoration Project 95038. PSG Technical Publication Number 1. 1997. ***Available free of charge at*** www.pacificseabirdgroup.org

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Members receive *Pacific Seabirds*, announcements of meetings, reduced rates on conferences and some publications, subscription to the PSG listserv, and most importantly, the knowledge of contributing to the study and conservation of Pacific seabirds wherever they occur. Annual membership is for one calendar year and expires each year on December 31.

MEMBERSHIP RATES

Individual membership: $40
Student membership: $30
Life membership: $1,200 (can be divided into 5 annual payments of $240)

All Life member contributions are dedicated to PSG's Endowment Fund, a fund to support the publications of the PSG, principally *Marine Ornithology*.

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To join the Pacific Group or renew your membership, please go to: https://www.regonline.com/psgmembership

To edit information on an existing membership, please follow the link above and login using the e-mail address that you used to renew your membership (which may be different from your mailing-list e-mail address). If you have any questions, please notify our Membership Coordinator: membership@pacificseabirdgroup.org

The Membership Coordinator is responsible for maintaining the membership database, assisting members with updating their information, sending new member information to the list serve coordinator, etc.

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