Fall 2016

Point Blue Quarterly

Conservation science for a healthy planet.

It Takes an Ecosystem: Advancing Conservation Science Through Community

CALER NO. 1942



Ellie M. Cohen, PRESIDENT AND CEO OF POINT BLUE CONSERVATION SCIENCE

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A Perfect Storm Nature-based Solutions to Secure our Future

About 45 minutes into my flight home from Dublin in July, I glanced out the window to see a freeway of enormous icebergs floating in the ocean. A few minutes later we reached the southeast coast of Greenland. Dark craggy peaks pierced the sky with giant rivers of murky snowmelt pouring out to the sea, like veins of a severely ill patient.

No longer a sheet of white snow and ice stretching to its pelagic edge, Greenland is now the poster child for climate change and humanity's growing impacts on our biosphere.

Fortunately there is hope. A "perfect storm" of new laws and statutes on naturebased solutions—globally, nationally, and regionally—presents opportunities for Point Blue and our partners to develop and assess natural infrastructure demonstration projects that provide multiple benefits to society and wildlife.

The historic Paris climate accord, signed by every nation in the world, officially went into effect in early November. It includes a global commitment to sustaining healthy ecosystems to help sequester greenhouse gas (GHG) pollution and reduce the impacts of increasing extremes such as drought, heatwaves, storms, and sea-level rise.

Two new California laws require state agencies, counties, and cities to incorporate natural infrastructure into their climate adaptation efforts. Another pioneering California law allows for payments for ecosystem services, recognizing source watersheds (including meadows, streams, and upland habitat) as water infrastructure and opening the door to public-works dollars for habitat restoration.

And, Senate Bill 32, signed into law by Governor Brown in September, extends California's climate law by requiring a reduction in GHGs to 40% below 1990 levels by 2030. This means reducing the state's emissions by about 100 million metric tons per year more than called for under current policies. Nature-based solutions will be essential to achieving this urgent outcome for people and wildlife.

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Sierra Nevada meadow. Photo: David R. Ferry.

Left: Castor canadensis. Photo: NWLpixs.

Center: Adélie Penguin research, Ross Sea. Photo: Grant Ballard.

Right: Osprey with catch. Photo: Tom Grey.

IT TAKES AN ECOSYSTEM

Point Blue draws from a rich and diverse community of scientists, educators, community leaders, supporters, and partners to help wildlife and human communities continue to thrive in our rapidly changing world. Taken together, these individuals, agencies, and organizations form an ecosystem that supports and advances our collaborative, climate-smart strategic approach.

In this issue, meet some of the people who are part of our interconnected community working to sustain a healthy blue planet.

Sharing Point Blue's Story

Martha Ehmann Conte, Point Blue Board Member

"My joy comes from connecting with people and spreading my passion... instilling in others excitement about our possibilities and what we can achieve as an engaged community."

So says Martha Ehmann Conte, a member of Point Blue's Board of Directors since 2009 and chair of the Board's Strategic Planning Committee.

The joy that Martha conveys when speaking about Point Blue is palpable. It's a big part of her effectiveness inspiring others about the need for and potential of Point Blue's work.

"I've become something of a classic environmentalist through my involvement with Point Blue. This has evolved from my life-long love of the outdoors and my fascination with science."

She says, "Our job is to tell the Point Blue story—connecting communities to make a difference. I've become extremely interested in how humans can positively impact the environment to sustain a balance between nature and human development."

Martha moved from New York City to San Francisco in 1995, she says, "because I was tired of concrete everywhere…and was just amazed that you could live in a city where water and nearly-wild lands are at your doorstep."

She enjoyed close contact with Bay Area nature even while working and then raising four children in San Francisco. Martha tells of taking neighborhood



walks with them as toddlers. "Going outdoors and around the block was a great discovery for a two-year-old! I would point out all the interesting flowers and bugs. During these walks I made friends with a neighbor playing outside with her three-year-old son. That neighbor was Adrienne Ladd, who introduced me to Jack Ladd, a former Board chair and long-time Point Blue volunteer. He noticed my interest in science, boating, and the outdoors and introduced me to this organization." "I learned more about Point Blue at several gatherings where I heard some of the biologists speak. Then I had the opportunity to volunteer on the Farallon Islands National Wildlife Refuge. That was when I met President and CEO Ellie Cohen. Her vision, her brilliance, and her entrepreneurial, can-do spirit made a huge impression on me—and still do! Ellie embodies the scientist's view of the world at Point Blue, where the tiniest thing can spark the most interesting questions, the most productive thinking." **Left:** Martha Ehmann Conte and daughter Sophie plant trees at a Point Blue restoration event. **Photo:** Lonnie Bowling.

Soon Martha became directly involved at Point Blue by making a major commitment to serve on the Board of Directors. "I had just begun to have the time and energy to be engaged philanthropically."

Martha has helped raise funds for Point Blue programs, notably our long-term research on Southeast Farallon Island in cooperation with US Fish and Wildlife Service. At present she sees her mission as generating ways to effectively tell the Point Blue story.

"We need to build community—to share information and passion for the organization and help people understand what it is that we do uniquely. I want to make other people into champions who will go out and bring a great many more members into our Point Blue community!"

At the heart of Martha Conte's message about Point Blue: "Today there are so many ways that humans can live well and also serve nature very effectively. Our challenge is to share this information and inspiration widely—to make a positive difference." "I'm so fortunate to be part of a team that is passionate about birds and conservation. Every day I feel challenged, motivated, and—most importantly inspired."

These are the words of Maria Chavez, an intern field biologist at Point Blue. During the summer of 2016 she learned to find and monitor the nests of Wrentits, Song Sparrows, and other breeding birds on one of the gridded study plots at our Palomarin Field Station. Maria was one of the season's four "gridders."

That experience awakened her sense of herself as a scientist. Maria says, "My bachelor's degree is in Genetics, and I've found myself posing research questions here while in the field. It's incredible to witness and be involved with such a long-running study. One of the more impactful experiences I had while monitoring nests was banding the chicks before they fledged. For the close-knit Wrentit population we study, I can imagine probing the wealth of data at Palomarin for insights about potential loss of genetic diversity."

Like many Point Blue interns, Maria chose to deepen her experience here. She applied for a second internship as a bird bander this fall. She now helps in research that involves safely capturing birds in mist nets, recording detailed data before releasing them, and educating visitors.

"In the banding lab we may meet with a wide range of people, from very experienced birders and bird-banders, to visitors to Point Reyes National



The Next Generation Maria Chavez, Point Blue Intern

Seashore who wander in not knowing what to expect, to school groups—young children learning about climate-smart conservation science and the scientific method for the first time."

Maria is finding this experience and her interactions with Point Blue staff, fellow interns, and research associates rewarding and inspiring.

"Often in the field of conservation science, it's easy to feel disheartened by the world's progress and prospects. Women of color, especially, tend to see discouraging statistics when it comes to work equality and their roles in STEM [science, technology, engineering, and math] jobs. I've faced my own set of obstacles as a minority, but here at Palo-

Biologists at Point Blue's Palomarin Field Station have been studying birds and their habitats since 1966. Our longterm observations help conservationists understand change—both natural and human-created—to guide conservation action. marin I can see that I'm being valued for my work ethic and willingness to learn. Being taken seriously as a young scientist by my supervisors shows that they're truly invested in my future. Many of them, being former interns themselves, know the challenges as well as the rewards that come from living and working here."

How does Maria imagine her life direction? She says, "I love communicating with other people about science, so a role in science-based advocacy appeals to me. I envision developing programs to communicate conservation science in ways that can involve everyone. One of my goals is also to make sure that the science we're communicating produces change in policy and public perception."

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Create your own conservation legacy! Visit pointblue. plannedgiving.org to learn more.

Opposite, top: Maria Chavez helps band birds at Point Blue's Palomarin Field Station. **Photo:** Point Blue.

Opposite, bottom: Taking finch measurements at Palomarin. **Photo:** Martin Kane.

Left: STRAW teacher and Point Blue donor Ro Rigney. **Photo:** Courtesy Ro Rigney.

young people in going out into the community where they make such a positive difference, planting native plants and pulling non-native ones, helping ranchers, and restoring habitat."

Ro Rigney's own connection with the environment sprouted during her childhood. "I grew up in Honolulu. In the Hawaiian culture the winds, volcanoes, ocean, and land have a strong presence. I was exposed to that in school and gained a deep appreciation for nature. A love of the environment was planted in me."

"I will always love the ocean and land that is directly affected by water. I'm inspired to keep finding ways to translate that into a gift to future generations."

For Ro this includes making Point Blue a beneficiary in her living trust. She says, "It feels so good to be thoughtful about what I cherish—the people who have made such a difference in my life and my life work. Writing a trust has been an opportunity to reflect on all this: who do I want to help sustain and continue the work they're doing?" A bequest to support STRAW was a natural choice.

While caring about the future, Ro Rigney dwells full-time in the present. "In the classroom I want to be responsible for creating a great day, every day. You never know what to expect when those kids walk in the door, but I can decide to make the day valuable by my attitude. I can reach out to every child and make a heart connection. That revitalizes me and makes my life feel fresh every day."

Seeding the Future

Ro Rigney, Point Blue Donor and STRAW Teacher

Ro Rigney has chosen to help seed the future, literally and figuratively. A teacher with deep roots in Point Blue's STRAW Program (Students and Teachers Restoring A Watershed), Ro has helped students restore watersheds for 18 years. And as part of her personal conservation legacy, Ro has made a gift in her estate plans to ensure that future generations can continue to connect with nature through STRAW.

STRAW gives elementary school teachers like Ro the opportunity to partner with Point Blue educators and ecologists to engage their students in hands-on climate-smart restorations of their local watersheds. The children's ultimate experience is a day outdoors, planting trees and shrubs along the banks of a stream or the margins of a tidal marsh.

Ro became part of STRAW soon after the program originated under Laurette Rogers' vision and leadership. As a first-grade teacher at Park School in Mill Valley, California, Ro nourishes her students' connection with the stream ecosystem on their school grounds through restoration projects with Point Blue.

She reflects: "I value teaching young children to respect the environment to connect with it and become stewards. My students make connections with the larger Mill Valley watershed, where they've restored portions of several streams, including in the park near their school. They know this place and care about it. They can watch the growth of plants they have planted over the years. Their hands-on experience here has made them into caring, engaged environmentalists!"

And, typical of Ro, there's another dimension to this. "Awareness of the environment is a great vehicle for growth in all directions. It connects with one's internal environment, bringing out gentleness and also consideration for other people. And such a wonderful idea is at the heart of STRAW—to involve 8

MEET THE TEAM

Fayvor Love

Director of Informatics at Point Blue

Thinking like an ecosystem is what makes Fayvor Love's work in the field of information technology vibrant and vital.

Fayvor joined Point Blue's staff in early 2015 to lead our creative team that develops computer-based systems and applications. These are the tools that empower both scientists and the many Point Blue partners who need sound information as the basis for conservation plans, policies, and practices.

Fayvor says, "My role at Point Blue is to help create innovative tools that are built from data drawn from diverse sources. The purpose for these end products makes my work here much different from my prior livelihood. After graduating from college with a bachelor's degree in Ecology and Evolutionary Biology, I earned my living mostly in Silicon Valley and the digital music industry developing computer applications. Along with the 'pipes' that carry information, I'm interested in what flows through them."

What flows through complex pipelines at Point Blue is information about living

systems and landscapes. Fayvor says, "Our Informatics group manages a number of datasets from wildlife population surveys and

climate models. We design and develop web-based visualization and scenario planning tools for ecologists, educators, and land managers. For example, we maintain the infrastructure for the California Avian Data Center, a huge resource that supports the Avian Knowledge Network."

What are the origins of Fayvor's passion for information systems that are wedded to living systems?

"I grew up in New Hampshire, in a family of seven siblings (who all played music together), on a small organic farm. I experienced patterns in nature from an early age. Later, my love for mathematics and for the richness and texture of biological imagery led me to study ecology." Fayvor attended Princeton University where he was deeply influenced by holistic biology and systems thinking.



The California Avian Data Center (CADC), hosted by Point Blue, is a regional node of the Avian Knowledge Network (AKN). This online tool makes more than 50 million observations accessible to habitat managers, conservation practitioners, scientists, and the public to improve conservation outcomes today and in the future.

Red-breasted Nuthatch. Photo: Ryan DiGaudio.



Fayvor Love and son Nikko. **Photo:** Courtesy Fayvor Love.

"Coming to work at Point Blue—and moving with my wife and son (who's nearly three) to Petaluma—felt like a return to life qualities that I knew and loved."

In considering how his work at Point Blue reflects his values, Fayvor explains his guiding beliefs, including:

Duty—Take responsibility for human impacts. Life is a privilege.

Curiosity—Be a good observer. See beneath the surface. Seek a deeper understanding.

Creativity—Find new methods. Revive old methods for work on new problems.

Community—Share what you've learned. Socialize your ideas. Enable others to do good work.

Humility—Respect natural systems. You are one part of a whole. Dialogue over dominion.

Balance—Take the long view, the middle path. Seek the optimum, not the maximum. Endurance requires patience.

These values are reflected in Fayvor's mindful and caring way of applying information technology.



SGS PARTNERSHIP

Climate and Community

Juliette Finzi Hart, CoSMoS Director of Outreach, USGS

Climate change is already creating significant disruptions to coastlines around the world. Rising seas and increasing storm frequency and intensity lead to more erosion and flooding, which impact both natural and human communities. While these challenges are daunting, Point Blue's scientists find value and inspiration in a community of partners working to protect our coasts and prompt others to action. One such partner is Juliette Finzi Hart, PhD, Director of Outreach at US Geological Survey (USGS) for the Coastal Storm Modeling System (CoSMoS).

Developed by USGS, CoSMoS is the modeling system used to project sealevel rise and storm scenarios for Our Coast Our Future (OCOF), an online tool jointly developed by USGS, Point Blue, and other partners. OCOF provides city planners, resource managers, and coastal decision-makers with the ability to assess a range of future sea-level rise and storm outcomes to make the best decisions for today and into a rapidly changing future.

Juliette's task is to translate the complex scientific information generated by the sea-level rise and storm modeling into language that resonates with decision-makers, local government officials, educators, advocacy groups, and local citizens. She credits her ability to do effective outreach to her dual background in science and the arts. "While my graduate work and training provided me with my understanding of physical sciences, it's my interest and previous work in the humanities that helps me do the (much harder!) work of stakeholder engagement and education," she says.

She also emphasizes the importance of collaboration in making climate data relevant to varied audiences. "Everything that I say and talk about comes from being a part of the larger community. I hope to serve as a voice that does justice to our work."

"We've found a kindred spirit in Juliette," says Maya Hayden, PhD, Point Blue's Coastal Adaptation Program



Left: Sandbags line a stretch of Southern California beach vulnerable to coastal flooding. Photo: Aspen Rock.

Above: Juliette Finzi Hart, PhD. Photo: Courtesy Juliette Finzi Hart.

Leader. "We've especially benefited with the addition of Juliette as we expand the coastal adaptation work into Southern California,



where she has already laid so much of the groundwork and established relationships with communities planning for sea-level rise."

Expanding OCOF to Southern California has brought additional opportunities for partnership. "I learn a tremendous amount from the OCOF scientists," says Juliette. "I draw heavily from their experiences conducting outreach in the Bay Area to shape my messaging and strategies."

Perhaps the greatest challenge in bringing climate science to the community, says Juliette, is communicating in a way that "inspires rather than immobilizes." The first obstacle is helping non-science audiences understand a complex subject. The second? "It's hard not to feel overwhelmed by the challenges we face," she says. "But the greatest joy I receive in my work is when I find a way to make this complex and daunting information personal and relevant to someone. With every connection I make, I feel I am contributing my part to the greater and larger conversation we need to have. Engaging with and as a community is a way to achieve our climate-smart goals." 🕥

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STUDY SITES

Thinking Like a Beaver in the Sierra Nevada

The Sierra Nevada Mountains provide a number of vital ecosystem services. Point Blue's Sierra Nevada group and our partners conduct research and monitoring to improve conservation outcomes for wildlife and people across this ecologically complex landscape. Tucked within the majestic conifer forests of the Sierra Nevada and southern Cascades are meadows sparingly sprinkled emerald jewels with a beauty that belies important ecological functions. While they comprise no more than 2% of the 10 million-plus acre Sierra Nevada ecosystem, their importance to wildlife and people is as immense as the largest giant sequoia. Meadows support wildlife, store carbon, and purify and store water.

But more than a century of abuse has rendered the majority of meadows less capable of performing these critical duties. With the magnitude of natural benefits they provide, their degraded status, and their limited number, meadows are a primary focus of Point Blue's work in the Sierra Nevada.

A Coalition to Restore

These challenges present an incredible opportunity to make a significant, positive impact through meadow restoration. Point Blue is part of a coalition of more than 20 organizations, agencies, and universities joining forces to restore 30,000 acres of meadow by 2030. We bring nearly 20 years' experience closely observing Sierra meadow birds and their habitat, developing rigorous indicators of restoration success, and partnering with a diverse range of stakeholders to ensure the coalition achieves its goal.

Although it's an ambitious goal, simply restoring 30,000 acres will not be enough. We must use climate-smart restoration design and management plans so that meadows will be able to provide their benefits well beyond 2030, when the full brunt of climate change is expected to be felt. To succeed we must innovate new ways to restore meadows that are both resilient and cost-effective.

How to Restore a Meadow: Be a Beaver

In the shadows of Brokeoff Mountain, the jagged dormant remains of the once mighty Mount Tehama, Gurnsey Creek forges a sinuous path through Childs Meadow. Here, at our longest continuous study site in the northern Sierra Nevada, we have monitored the composition and abundance of meadow birds, quantified how long they live, and documented the number of young they produce every year since 1997. We've come to know birds as individuals, such as MacGillivray's Warbler #478, which we captured 48 times between 2004 and 2013 (the oldest of this species ever recorded)!

We expanded our work upstream on Gurnsey Creek to Childs Meadow continued

Beavers were once prevalent throughout most of California, including the entire San Francisco Bay Area. These "ecosystem engineers" help keep water on the land as a resource for many species.





Opposite: Childs Meadow restoration site.

Above, top: Wooden posts, willow branches, dirt, rock, and straw are used to construct a beaver dam analogue.

Above, bottom: The team at work. Photos: Ryan Burnett.





STUDY SITES continued

Above: MacGillivray's Warbler #478, captured 48 times between 2004 and 2013. **Photo:** Ryan Burnett.



Ryan Burnett Sierra Nevada Group Director

Ryan and his team work with a diverse group of partners to understand and protect the Sierra Nevada ecosystem, using birds as indicators to guide conservation decisions. in 2010, after it was acquired by The Nature Conservancy. We are now part of a research team working to restore Childs Meadow, testing an innovative new approach to meadow restoration.

Aldo Leopold once espoused the virtue of thinking like a mountain, but here in the Sierra meadows we are also thinking like a beaver. Incised stream channels have dewatered many meadows and unraveled the ecological benefits they provide. Beaver dams bring water flow back up to the meadow surface, where it can spill out onto the floodplain and trigger a cascade of positive ecological effects. In the absence of beavers, we need beaver dam analogues, and we work with The Nature Conservancy, US Forest Service, the Natural Resource Conservation Service, and UC Davis to create these by weaving willows, rock, soil, and straw around vertical

posts pounded into the ground. This restoration technique has been piloted on streams in Oregon, but never before in a Sierra Nevada meadow.

We've recently expanded our study of another meadow restoration technique, called pond and plug (think giant earthen beaver dams constructed with tractors). We've conducted bird surveys and catalogued the habitat conditionsincluding the composition of the vegetation, stream bank condition, and moisture of the soil. This winter we will analyze the data and publish our findings to produce a comprehensive evaluation of this restoration technique's effects on wildlife and vegetation. Using science to guide and evaluate approaches to restoring these precious wetlands lies at the core of our climatesmart conservation strategy. 🚺

Conservation Victory

ROSS SEA DESIGNATED AS MARINE PROTECTED AREA

Great news! Thanks in part to Point Blue's scientific contributions, the 24-nation Commission for the Conservation of Antarctic Marine Living Resources unanimously agreed in October to establish the Ross Sea as the world's largest marine protected area.

The agreement permits certain human activities, such as commercial fishing for the long-lived Antarctic toothfish, within a designated zone. The vast remainder of the world's last near-pristine ocean will be protected to meet conservation goals that Point Blue helped establish.

Congratulations to the Point Blue scientists who contributed to this significant milestone for conservation! For more on our work in Antarctica on Adélie Penguins and environmental change, search "Point Blue Antarctic Research."

Below: Adélie Penguins march in the fog. Photo: Viola Toniolo.



POINT BLUE CALENDAR

MEMBER EVENTS

Point Blue offers visits to our field sites where members can learn about our cutting-edge studies. Explore online at **www.pointblue.org/walks**. To sign up, contact Shannon Wesley at 707.781.2555 ext. 387 or swesley@pointblue.org.

WETLAND AND RIPARIAN BIRDS AND HABITAT DEC. 11, 2016 BOLINAS LAGOON, BOLINAS, CA See science in action and songbirds up close as we join Point Blue biologists for bird banding in the riparian zone. Then venture closer to the edge of the lagoon with spotting scopes to explore waterbirds.

WINTER WATERBIRDS OF THE SACRAMENTO-SAN JOAQUIN RIVER DELTA FEB. 4, 2017 MEETING LOCATION TBA

MARCH 7-9, 2017

UC DAVIS

Join Point Blue ecologists in the San Francisco Bay Delta at Staten Island and the Cosumnes River Preserve to learn about our long-term monitoring and habitat management guidance. *Sign up by Tuesday, 1/31/17.*

SCIENCE EVENTS

BEYOND THE GOLDEN GATE RESEARCH SYMPOSIUM DEC. 1, 2016 TIBURON, CA	Point Blue will participate in this day of presentations by researchers studying the extraordinary marine life, oceanography, and geology of the San Francisco Bay and ocean region.
100TH ANNUAL CONVENTION OF THE CALIFORNIA CATTLEMEN'S ASSOCIATION & CALIFORNIA CATTLEWOMEN, INC. DEC. 1-3, 2016 SPARKS, NEVADA	Staff ecologists will present about our partnership with the Natural Resources Conservation Service, ranchers, and others to enhance wildlife and water on working lands.
CALIFORNIA COUNCIL OF LAND TRUSTS 2017 CALIFORNIA LAND CONSERVATION CONFERENCE	President and CEO Ellie Cohen will be a plenary speaker on accelerating the implementation of climate- smart, nature-based solutions

through innovative land

management.

focus

Ospreys, like eagles, are literally and figuratively the poster birds for world wilderness. They are also magnificent living verification that restoration of habitats, protection from alien harm, and environmental clean-up can correct and repair global human-caused damage.

It is hard to believe, but ever since Europeans arrived in North America in the 1500s, these awe-inspiring birds have been battered and bashed until both eagle species and the Osprey hit rockbottom population levels in the 1960s.

Populations of Osprey and Bald Eagle birds that are top-level predators in aquatic food chains—crashed in the 1950s and 1960s, because herbicides, especially DDT, were liberally sprayed on the land and later washed into creeks, rivers, lakes deltas, bays, and oceans.

Osprey photos by Tom Grey.





That and other forms of damage are behind us, at least for now. Through various levels of protection from gunfire and poison, population resurrection has occurred. So recently rare, Ospreys are now common, thriving, and increasing annually.

Ospreys that nest in the northern states and Canada are migratory, flying towards or past the tropics in winter. At the latitude of San Francisco Bay region, about 10% of the population remain to winter. At least some of these are older, more dominant individuals that are standing on their nests in the best territories when the first migrants return in January! Young birds do not return to their nesting areas until their third calendar year, when they become of breeding age.

Fish lovers

Ospreys are so attached to fish that many carry one (or part of one) during migration, especially over dry land! They pack their lunch!

Special adaptations for handling slippery things are the Osprey's tools. The outer toe (of three forward) is reversible to form an X of claws, for a more even grasp with symmetrical strength. The soles of the feet are covered with slimebuster spicules for non-slip grip. Fish are carried head-first to cut down on wind resistance, and the Osprey has grooves on its hallux nail (its talon) for traction.

Still, some birds try for fish that are simply too big or of the wrong sort, rarely causing an Osprey to drown. One bird off Florida was seen to repeatedly dive on and catch a blowfish, or pufferfish. Four times in a row, the fish became bigger and rounder, and it soon burst from the flying predator's grasp.

Ospreys are now such a routine feature of the coast itself that many humans, even some birders, barely give them a glance. Some of us, however, have taken the opportunity to not only look hard at every bird but attempt to identify the species of fish it is carrying. My list so far is top smelt, rubber-lipped sea perch, Pacific sand dab, starry flounder, steelhead, plainfin midshipman, China rockfish, and—at Pyramid Lake, Nevada—the rare and sacred Cui-ui.

Ospreys are truly magnificent birds. Let us not take them for granted: not long ago they had practically vanished. 📎

Rich Stallcup (1944–2012) was a Point Blue co-founder and our naturalist extraordinaire. His knowledge continues to deepen our appreciation of all things wild. Read the entire Focus archive online at **pointblue.org.**

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Point Blue is deeply grateful to Point Reyes

National Seashore, the Farallon National Wildlife Refuge, Cordell Bank and Greater Farallones National Marine Sanctuaries, and TomKat Ranch

Educational Foundation for providing facilities and

We gratefully acknowledge all our generous

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FARALLON PATROL Our Farallon Islands Program relies upon the skills and generosity of volunteer skippers in the Farallon Patrol for year-round transportation between the mainland and our research station at the Farallon National Wildlife Refuge. We acknowledge all Patrol skippers in our Annual Report, and we thank those who made runs during each calendar year in the winter Point Blue Quarterly. Briana Schnelle Corey Shake Carrie Wendt Kelly Weintraub Suzie Winquist

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INTERNS

(October 1 to December 31, 2016 Emily Burke Elliott Casper Maria Chavez Jessie Ditmore Preston Duncan Lila Fried Ryan Hartnett Kaylin Ingman Katleyn Maley Elizabeth Max Erica Meier Alessandra Moyer Laura Robison Corrine Ross Savannah Smith

field stations where we work.

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Below: Point Blue ACCESS (Applied California Current Ecosystem Studies) crew. Photo: Dru Devlin.





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