Spring 2023

Point Blue Quarterly

Conservation science for a healthy planet.



Planting Seeds

Conservation Impact Grows from Point Blue's Early Career Training Programs

FROM THE CEO
Planting Seeds

Back in 2013, Point Blue undertook a rigorous exercise to identify its "superpowers." Applied conservation science, of course, rose to the top. But another one that immediately stood out was "long-term vision." Our scientists, educators, and restorationists are used to looking at things on an ecological time scale. We rely on datasets that we've been maintaining for decades to observe changes in the natural world, and then make recommendations to resource managers about what they can do in the face of the changes we're seeing. And we know that when we implement a restoration project on degraded lands, it could take years to fully realize the benefits.

But some of the most powerful examples of our long-term vision are Point Blue's early career training opportunities for those just setting out in the field. It's one way we are planting seeds for future conservation impact.

In this issue, we check in with some of the individuals who spent formative career years with Point Blue. From a Palomarin apprentice who unexpectedly followed in his father's footsteps to a Marine Lab research assistant who followed her passion for conservation all the way to Australia, you'll learn how Point Blue impacted them, and what they're up to now.

Of course, we're not the only ones with long-term vision. Many of you have been supporting Point Blue since our days as a small bird observatory in West Marin. Your support has been absolutely critical in enabling us to become the conservation powerhouse we are today.

Point Blue is celebrating some major advances right now: huge awards from California's Wildlife Conservation Board to support community restoration projects—with a particular focus on equity, reaching communities historically left out from restoration efforts; a new agreement with the Department of Defense to manage their ecological data; and an opportunity to take our carbon monitoring on rangelands to the national level. And none of it would be possible without the seeds you have planted and watered over the decades. So, thank you.

And we're far from done changing and growing! We are continuing to evolve our early career training programs to make them more accessible and inclusive of a variety of communities, experiences, and perspectives. We're thrilled to have already taken big strides in this direction (read more below) and look forward to taking even more in the years to come.

Without your support, none of this would be possible. Thank you!

Sincerely,





Manuel Oliva
Chief Executive Officer

Everyone is Welcome in Conservation Science
Building Inclusion in Early Career Training at Point Blue

Point Blue has graduated more than 1,700 interns from our renowned Early Career Training Program, with approximately 80% moving on to conservation careers.

In 2020, we evaluated how our training programs could reflect our organization-wide commitment to becoming more diverse, equitable, inclusive, and just. We formed the Planned Intern Evolution team to explore a variety of issues and come up with recommendations and guidance for evolving Point Blue's previous intern model into a suite of inclusive early career training positions. The team assessed programs, created resources for mentors, and identified best practices for removing participation barriers for people not historically included in the conservation and environmental fields.



"One of Point Blue's strongest assets is our people and, while we have a strong track record of supporting intern-to-career pathways, we have not been reaching all types of young people interested in the environment," says Education and Outreach Director Melissa Pitkin. "We have a huge opportunity to build an inclusive conservation field," she continues. "Welcoming more perspectives, viewpoints, and experiences into our early career training programs will result in stronger solutions to tough environmental problems."

The result is a new, more robust Early Career Training Program, which incorporates seven

continued on page 5

Top: Point Blue CEO Mauel Oliva. Above: Former STRAW Intern Sarah Lee sorts grasses at a Petaluma, CA, restoration site. Photos by Lishka Arata/Point Blue.

Conservation by Design

Jessie Oliver, Executive Officer and PhD Student

Jessie Oliver is Executive Officer of the Australian Citizen Science Association, a community that facilitates public participation and collaboration in scientific research with the aim to increase scientific knowledge. She is also a PhD student at Queensland University of Technology. She's investigating how to design enticing citizen science technologies that can support people learning about and conserving endangered Eastern Bristlebirds by finding their calls in environmental audio recordings. We caught up with Jessie and asked her about her time as a Point Blue Marine Laboratory research assistant, her passion for engaging communities with science, and her exciting research.



Jessie Oliver (left) and Point Blue Co-Founder Rich Stallcup birding at Drake's Bay, CA, in 2010. Photo courtesy Jessie Oliver.

What inspired you to pursue a career in conservation?

I was pretty nerdy about animals growing up, and more specifically wildlife, as I got older. So it was no surprise when I went to Humboldt State University to study zoology and biology, with a marine concentration. When I was an undergraduate, I started also delving into the public communication side of things. That set my trajectory for being interested in the intersections of ecology and public engagement.

What brought you to Point Blue, and how did your experience impact you?

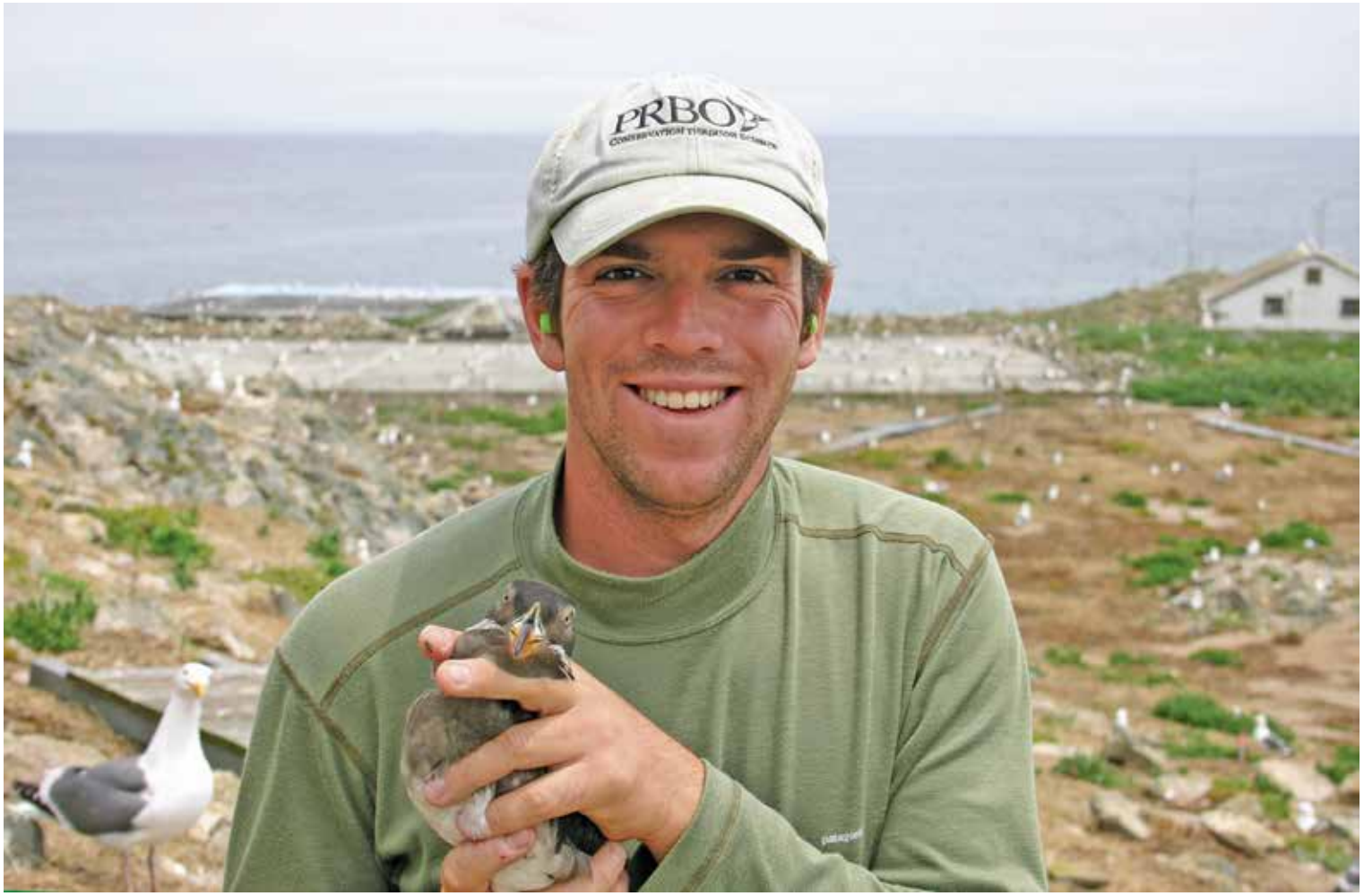
After graduating in 2005, I took many different roles that were at the intersections of ecology, conservation, and environmental education. A few examples of organizations I had the pleasure of working with include AmeriCorps Watershed Stewards Program, the US Fish and Wildlife Service, the University of Queensland, and the Cornell Lab of Ornithology. One of those roles was my time at Point Blue, from 2010-11. I worked in the Marine Lab because I have a long-standing fascination with marine and avian ecology—especially food web stuff.

I spent many hours in the lab dissecting regurgitated pellets of seabirds, which are smelly! But when you start to realize the conservation potential for understanding food web ecology, it's really intriguing and interesting. I was amazed by the fact that you can approximate the size of a fish that a Brandt's Cormorant has eaten by measuring the size of a fish's otolith. An otolith is a fish ear bone that is eroded a bit by the bird's digestive tract but isn't entirely digested.

I was lucky to meet [Point Blue co-founder] Rich Stallcup. I'll never forget the time he brought in a bird specimen and asked me: *Do you want to see something beautiful?* He was delighted that I knew my birds and could identify it as a Red-shafted Flicker. He said, *I think we'll be good friends*. He made everything a learning opportunity—the passion was clear, and that was incredibly inspiring. And I learned a huge amount from Meredith Elliott [senior Point Blue scientist, ACCESS Program leader] about identifying those otoliths, as well as squid beaks, krill, and amphipods. She also introduced me to the emerging understanding of how fluctuations of the birds, their nesting success rates, and fishes they ingest are all interconnected to broader environmental variables such as ocean current and temperature shifts. I had the pleasure of joining Meredith on a trip to Alcatraz and got to see where some of the Brandt's Cormorant nest and leave their pellets I had been scouring through! I also enjoyed joining a research cruise to see how the krill and other marine invertebrates were collected. And taking part in Bird-A-Thon as a member of the Marine Lab team remains quite a cherished memory!

One of the biggest impacts that Point Blue left on me was the duration of their scientific datasets and the power of what you can learn from people doing things in a consistent way over a long period of time. On a more personal note, the year I was with Point Blue

continued on page 6



From Lighthouse Hill to Capitol Hill

Brett Hartl, Environmental Attorney

Brett Hartl may have traded the boisterous seabird colonies of Southeast Farallon Island for a different type of discord—the national political scene—but his work as an environmental attorney is still very much informed by his early career field work with his beloved seabirds.

"I'm a wildlife person," reflects Brett. "I've always loved watching animals." The idea that he could parlay that joy into a career was first kindled in high school, when Brett spent a month performing trail maintenance in Zion and Grand Teton National Parks with a student conservation association. That flicker of interest grew as a college student, when Brett had the opportunity to spend time at Prescott College's Sea of Cortez field station. It was the seabirds—Heermann's Gulls, Cassin's Auklets, Black Storm-petrels and more—that immediately captured his imagination. "I was amazed," he says. "Seabirds have a ton of character. They are long-lived, smart, cunning, and have interesting life histories. Plus, the fact that you don't see them from land makes them rare and fascinating."

Deciding that he wanted to try an applied science career involving seabirds, Brett found his way to Point Blue in 2004. As a volunteer research associate, he was based at our Farallon Islands National Wildlife Refuge field station from April-August—the busy seabird breeding and nesting season. "It is a unique place with a lot of attributes not found elsewhere," he says of Southeast Farallon Island. Brett particularly enjoyed the collaborative community of fellow biologists and research associates. "At that time, there was no internet on the island and we had one shared, analog cell phone, so there weren't many distractions, other than observing nature." The intensive field work included monitoring plots of breeding Western Gulls, counting Common Murre fledglings from behind the blind on Shubrick Point, and documenting whale sightings and shark attacks from atop Lighthouse Hill, among other duties.

A seabird species that made a lasting impression was the Ashy Storm-petrel. "It's difficult to appreciate Storm-petrels unless you've had a close experience with them," says Brett. "They are difficult to see, their burrows hard to find, and they are tricky to catch and band," he explains. Brett recalls a particularly memorable individual—a recapture that was first banded in 1972



by David Ainley, Point Blue Research Associate and one of the world's leading experts on seabirds. "I looked at records and was astounded to see that the bird was already an adult at the time it was initially banded, making it at least 40 years old. It was incredible that it was still coming back to breed on the island." Aside from their longevity and tenacity, there was another Ashy Storm-petrel characteristic that struck Brett. "Anyone who has held one knows they have a particular smell that you never encounter with any other bird," he says. "It's a musky, deep, fish smell... oddly pleasant!"

After completing undergratuate studies, Brett spent 5 years working in different field jobs and with a variety of species before ultimately deciding that pursuing environmental law would allow him to make the most significant personal impact for the health of the planet. His field biology experience has turned out to be quite a career asset. "Surprisingly few attorneys in my field have a background in applied science," says Brett. "Knowing species' life histories and being comfortable reading scientific papers is useful. I understand the important role that science plays in informing policy decisions," he says. "I do find it is still very helpful to have a specific background in seabirds, especially with cases involving marine species or environments." And his Farallones work helped him win a prestigious Sea Grant Knauss Fellowship, a NOAA-backed opportunity which matches highly qualified graduate students with "hosts" in the legislative and executive branches of government.

But perhaps the most meaningful takeaway of Brett's early-career fieldwork is his ability to appreciate the high stakes of the conservation issues he litigates. "Point Blue helped me learn what the real-world challenges are that the oceans face," he explains. "For me, it is not abstract. From the Farallones, I saw first-hand environmental threats that have real consequences on wildlife—sea lions entangled in fishing line, oiled birds, whales hit by tanker ships. What inspired me to go to law school was that I wanted to fix those problems."

Now as Government Affairs Director for the Center for Biological Diversity, Brett tackles federal legislative issues that affect endangered species, public lands, oceans, climate, and energy. "The things that happen in congress and the decisions of federal agencies make a huge difference to species everywhere," he says. "If things don't go well, wildlife suffer the consequences." A key part of the Center's mission is to leverage the legal system to advocate for and protect the environment. "The law gives us a fair amount of ability to challenge and to hold those accountable who are not complying with it or breaking it," explains Brett.

Inspired by the writings of Aldo Leopold and the nature photography of Michael Sewell, Brett believes that, as a society, we have a moral imperative to protect the biodiversity of our planet. "It's the right thing to do," he says. "Powerful people can do things that are harmful to conservation, and the reality is that even wildlife refuges can't fully protect nature because there are threats all around." Fortunately, Brett and his colleagues are available to safeguard natural resources from detrimental policies and collaborate with Congress and the Executive Branch to enhance the ability of federal agencies to manage our environment responsibly and develop more protective policies. "I think highly of the Center for Biological Diversity's willingness to confront the difficult systemic challenges we face," he says. "Conservation progress is great when we make it, and I'm here to make sure past progress doesn't get undercut."

by Stacey Atchley-Manzer, Editor

Above: Brett Hartl with former NOAA Under Secretary of Commerce for Oceans and Atmosphere and Administrator Dr. Jane Lubchenco in 2011. Photo courtesy NOAA. Opposite: Brett Hartl holds a Rhinoceros Auklet on Southeast Farallon Island as a Point Blue volunteer research associate in 2004. Photo courtesy Brett Hartl.

continued from page 2

different tracks: academic internships for students enrolled in college, apprenticeships for college graduates who are early on in a career journey, fellowships, and more. We also pioneered a new career pathway to staff positions in our Students and Teachers Restoring A Watershed Program for People of Color participating in our Community College Conservation Intern Program. Following that track, last year our summer interns had the opportunity to advance to become field assistants and then to become apprentices.

Other improvements include compensating apprentices with a prevailing wage and benefits, restructuring our recruitment and hiring process to reach a wider audience, changing our application and interview process to reduce bias, and making the application process more transparent. The changes are helping break down barriers to entering the conservation field, which has a track record of low-paying internships and often favors applicants with previous conservation connections. Participants in our Apprentice Program are considered employees of Point Blue and are paid for their time learning. Wages are based on the living wage rate for Petaluma, CA, regardless of geographic location, and housing is often offered at a subsidized rate at some sites. This makes these career "on-ramp" positions more accessible to individuals new to, or early on in, the conservation field, many of whom cannot afford to take an unpaid or low-paid internship or volunteer position.

"I have heard from apprentices that they appreciate being welcomed into our organization through our Community College Conservation Internship Program," Melissa says. "If not for that intentional effort to welcome young Black, Indigenous, and People of Color to explore careers with us, they wouldn't have considered Point Blue a place where they could work," she says. "I am proud that we are making these changes to improve our early career training efforts."

by Stacey Atchley-Manzer, Editor

continued from page 3

was a challenging one for me for a myriad of reasons, including quite an unexpected and serious health issue arising. The support the Point Blue team showed while I was hospitalized and recovering provided me much-needed inspiration at the time, and gratitude that has lasted to this day!

How did your time at Point Blue help bring your professional conservation interests into focus?

I liked the real-world context of Point Blue's work and its applicability. I left even more curious and with lots of questions: *What can we do? How can we make a difference?* It piqued my curiosity in many different ways. I think that, in general, the more you gain experience with complex projects and problems, the more you take with you as you move forward.

Tell us about the Australian Citizen Science Association, and your work to help community members play a meaningful role in science, both nationally and globally.

Our mission is to advance citizen science through sharing of knowledge, collaboration, capacity building, and accuracy. One of the ways we do that is by helping people discover and connect with all different types of citizen science opportunities throughout Australia.

I've worked on some big projects, such as developing a strategy for the state government of New South Wales to engage landholders with citizen science to support wildlife and habitat conservation. I've worked a lot at exploring how citizen science could integrate with global initiatives, such as the United Nations Sustainable Development Goals metrics. We've also given input in support of UNESCO's Open Science Recommendation [to make the scientific process more transparent, inclusive, and democratic].



Jessie Oliver at work in Point Blue's Marine Laboratory in 2010. Photo courtesy Jessie Oliver.

What inspired your PhD research, and what has surprised you in the process?

It was working at Cornell and showing people how to use eBird—an application that lets birdwatchers share their lists of visual and auditory bird observations with each other and with scientists—that gave me my first exposure to how technology can empower people. By sharing their observations, birders are helping to develop a scientific understanding of birds that we would not have had otherwise. That made me curious to think more about how technology influences what we do.

I began doing design research to try and figure out how we can make technologies that help people learn about nature sounds, the plight of Eastern Bristlebirds, and calls of the species (with the intent to inform science and then inform conservation actions). Designs in the future need to be not only useful and usable, but also compelling and enticing. The Eastern Bristlebird is a very rare, ancient passerine, or songbird, that is virtually flightless, lives in really tall grass, and is super sneaky—so the way to find them is through sound. But so few people know their sounds, and that's a major barrier to who can find them and how.

A team of colleagues working along the Queensland-New South Wales border had been using a detector dog that had been trained to smell for them. And I thought, *Wouldn't it be cool if we chucked out some acoustic recorders to try and capture calls to validate the dog's indication that the birds were present?* I was fairly naïve in the challenges that my ideas represented, because there aren't a lot of systems that feature an enticing way to review long-duration environmental audio recordings that also support people in learning the different calls. I thought I'd be deploying a citizen science project, but I realized there needed to be a ton of research around understanding how people make sense of bird calls in audio, and how we can support them doing that by the way we design the technology.

The thing I didn't expect to learn is that design research is social research. There are some



The endangered Eastern Bristlebird is the focus of Jessie Oliver's research at the nexus of acoustic technology and community science. Photo by David Cook.

instances of design being quantitative, but the vast majority of it is quite the opposite. You're not trying to gain data in order to generalize an understanding of trends. You're actually trying to understand the nitty gritty and the particular habits of people to inform how to design technologies that would support them. So I accepted the challenge to view the world in a very different way than I was accustomed to, after over 15 years of training and experiences focused on the scientific way of knowing about the world.

What about the future of conservation excites you the most?

It's exciting to increase public awareness regarding imperiled species and simultaneously offer people opportunities to take action. A lot of people are recording huge amounts of audio, which increases the potential for us to learn and take action more rapidly. It would be amazing if we could get a platform designed specifically to pique people's curiosity playfully in learning not only about birds, but also the vocal repertoire of species. Then, people who don't regularly engage in activities like birding may take more notice of birds around them and grow to care more about our feathered friends. Also—because the more people contribute, the more machines can learn, and vice versa—the faster we can inform artificial intelligence with people in that loop of helping to identify calls, the more questions we can answer and ask. And that's what I'm really excited by: the opportunities for people to learn and contribute, whether they're trained scientists or not.

Life (and Birding) Comes Full Circle

Alex Wang, Wildlife Biologist

I grew up in the 90s watching Captain Planet, and thus developed an interest in environmentalism and conservation from an early age. When I entered college, I thought I would pursue a career in environmental policy, and I started down that route, enrolling in an environmental studies program at UC Santa Cruz. That is, until the summer of my junior year when I took a Natural History of Birds class with professor Breck Tyler—it turned my world upside down. Instead of dry policy discussions inside a classroom, I spent a summer kayaking around Elkhorn Slough, learning the birds, and opening my eyes to all the amazing wildlife right in my backyard, including Hooded Oriole and Green Herons.



It seemed that I had a knack for learning the birds quickly, which is likely because my father is a bird watcher, though I had no interest in it growing up. He took my sister and I bird watching as kids, much to our chagrin. I remember one time my friends and I were in the car on the way to soccer practice, when my dad stopped to look at a bird he saw. I was so annoyed that this was why we were going to be late! But I must have internalized it somewhat subconsciously. I remember a classmate in my college bird course trying to look up a species we had just seen. I had no idea even where in the bird book to begin taxonomically, but I said, "try looking up 'Wrentit.'" And sure enough, that was the species in question.

After college, I decided to look for internships working with birds rather than environmental policy. After moving back home, my dad suggested I look up Point Blue, since he in fact worked as de facto biologist at the then-Point Reyes Bird Observatory during the summer of 1966 before switching tack and earning a law degree. As a first-generation Chinese kid, it was unusual in that era for my dad to be a biologist, but he happened to be neighbors and make friends with another kid—[Point Blue co-founder] Rich Stallcup—who got him into birding at an early age. So, I applied to be an intern [now "apprentice"] and got to be a *gridder* at Point Blue's Palomarin Field Station, working on "Grid 2."

Nest-searching at Palo and the connections I made there got me to where I am today. After learning to nest-search for birds, I worked a job for Chris McCreedy [former Point Blue desert ecologist and research associate] doing bird surveys and nest searching in the desert southwest. And through one of the other interns at Palo, I took a volunteer gig banding albatross on Tern Island in the Papahānaumokuākea National Monument. I then did a number of seasonal jobs across the state of Hawai'i, and I now use all those skills of nest-searching, bird surveys, and bird banding as a Wildlife Biologist for the Hawai'i Division of Forestry and Wildlife. Hawai'i's conservation needs are much greater than those on the mainland due to the unique island ecosystems, and it has been an honor to work on bringing Alalā back to the wild, translocating the endangered Palila to try and create a second population, and leading my own crew now to set up a long-term banding station and the largest rodent-predator control grid in the state. And when I'm not doing bird management and conservation for work, I'm still out there birding!

by Alex Wang





Clockwise from top: Alex Wang bands a Wilson's Warbler at Point Blue's Palomarin Field Station in 2009. Point Blue photo. The Alalā is a critically endangered corvid native to the Hawaiian Islands. They are a culturally- and ecologically-important bird, helping to disperse the seeds of native fruit. Considered extinct in the wild since 2002, Alalā have been preserved only through conservation and reintroduction efforts. Photo by Lainie Berry. Alex (left) and his father, Art Wang, in 2009 with Mauna Loa erupting in the background. Photo by Syd Zoll.

"One of the most gratifying experiences associated with working with early-career biologists—and there are many!—is encountering these talented individuals in future years and learning where their path led them after their training at Point Blue. Last fall, Avian Ecologist Renée Cormier and I were invited by Alex Wang (read his story below) to co-lead a banding training workshop in Hawai'i. It was wonderful to reconnect with Alex professionally. I was inspired to see how impactful his and his colleagues' work in the Hawaii Islands is, and to learn about the needs of Hawaii's unique and threatened avifauna and the work his team is doing to protect them. Plus, three others at the workshop were also Point Blue alumni!"

Diana Humple, Point Blue Avian Ecologist & Banding Coordinator

Point Blue
Conservation science
for a healthy planet.

Point Blue Conservation Science
3820 Cypress Drive, Suite 11
Petaluma, CA 94954
707.781.2555 | pointblue@pointblue.org
pointblue.org

Non-Profit
Organization
US Postage
PAID
Permit #644
San Francisco, CA

take action today to start your
CONSERVATION LEGACY

Make a gift that equips conservation-leaders-in-training with the skills to safeguard nature for wildlife and people. Start building your conservation legacy today by making a planned gift to Point Blue!
pointblue.plannedgiving.org



Point Blue

Have you already included Point Blue in your will? Let us know so we can thank you for your commitment and welcome you to the Tern Society! If you'd like more information about making a planned gift, please contact Nancy Gamble at (707) 781-2554 or ngamble@pointblue.org or. Visit pointblue.plannedgiving.org to explore more ways to start your conservation legacy.

Above: STRAW Restoration Technicians and former Community College Conservation Interns (L to R) Julie Marco, Patrick Espinosa, and Dante Khan harvesting snowberry cuttings for use in STRAW restorations. Cover: Wildlife Biologist and former Palomarin Apprentice Alex Wang holds a Kiwikiu, also known as the Maui Parrotbill, while sampling for avian malaria as part of a collaborative study with The Nature Conservancy, the Hawai'i Division of Forestry and Wildlife, and the Maui Forest Bird Recovery Project.