Point Blue Quarterly

Conservation science
for a healthy planet.

Issue 1 / Spring 2013 / www.pointblue.org

Left: Ellie M. Gohen. **Photo by:** Miki Goralsky.

Below: Cassin's Auklet. **Photo by:** Peter LaTourrette

Ellie M. Cohen

PRESIDENT AND CEO OF POINT BLUE CONSERVATION SCIENCE

Ellie has led Point Blue for 14 years, guiding significant growth in the organization's capacity and achievements. She is an active leader in multiple Point Blue conservation partnerships and was recognized as an Environmental Hero by Bay Nature Magazine in 2012.

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CONSERVATION SCIENCE FOR A HEALTHY, BLUE PLANET

From Point Reyes to Point Blue

Welcome to the new **Point Blue Quarterly**! Our first issue provides a glimpse into our pioneering efforts to reduce human-driven impacts on nature, building on our decades of bird ecology expertise.

Following our founding in 1965 as Point Reyes Bird Observatory, the primary focus of our first 25 years was on just that—studying and monitoring bird populations at Point Reyes National Seashore, the Farallon National Wildlife Refuge, and Bolinas Lagoon, among other locations.

By the late 1980s, we began to use our long-term data to understand how both natural and human-caused changes affected birds and their habitats. We hired our first "statistical ecologist," and this, along with the world-changing addition of desktop computers, took us to the next level of bird conservation – analyzing vast amounts of data to reveal hidden conservation insights. Around the same time, The Nature Conservancy of California and the US Fish and Wildlife Service invited us to assess a major restoration project along the Sacramento River, using birds as indicators.

Reflecting on this growth in purpose and work, in 1991 the Board of Directors changed our name to the acronym 'PRBO' with the tagline 'Conservation through Science.' By the early 2000s, studying birds as indicators in the context of entire ecosystems became central to our work. This was reflected in our 2002 name change to 'PRBO Conservation Science' and our member-approved new mission that continues to this day.

In this simplified history, our third phase began in 2005 and 2006. We documented complete breeding failure of Cassin's Auklets for the first time in nearly 40 years of daily studies at the Farallon National Wildlife Refuge. Highly unusual ocean conditions and a sudden absence of food caused this unprecedented event. A year later, during the longest drought on record to date, we found that birds in the desert Southwest were not even attempting to breed. Our science was detecting the signals of climate change and extreme events.

At the same time, we grew our information technology expertise. We began making our data, as well as data from partners across the country and the world, readily usable by habitat and wildlife managers. With the recent addition of STRAW (Students and Teachers Restoring a Watershed) and our initiative to "re-water" California's rangelands, in partnership with the Natural Resources Conservation Service, we have added community-based restoration and management to our powerful conservation science toolbox.

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Releasing a Dunlin, in a study to learn where shorebirds winter in the Central Valley. **Photo by:** Cory Gregory.

◂ **Left:** Changing weather. **Center:** A river benefits people and wildlife. **Photos by:** Ryan DiGaudio. **Right:** High waves threaten the coast. **Photo by:** King Tides project.

Tom Gardali
Director, Pacific Coast and Central Valley Group

Tom has led work on evaluating large- and small-scale river restoration projects. He now works to modify restoration practices with an eye toward preparedness for the consequences of climate change.

The Conservation Science in Point Blue

We are on a mission. A mission to advance the conservation of birds, other wildlife, and ecosystems. And we carry out this mission primarily through science – conservation science. But what exactly *is* conservation science?

Concerned with preserving biodiversity and ecosystems from human-caused threats, our field of science is a "crisis discipline." One analog is medical research – and the search for a cure for cancer. Crisis disciplines aim to fix problems and are mission-driven.

Hatched just over 30 years ago, conservation science by necessity has been an eclectic mix of disciplines – ecology, social sciences, genetics, public policy, education, environmental monitoring, and natural resource management, just to name a few. Conservation scientists believe that the most fruitful and lasting environmental solutions require a range of expertise, focused on a common goal. At the same time, we recognize that decisions often must be made without full knowledge of the facts. In crisis situations, time is of the essence.

Our planet is in crisis. Climate change has upped the environmental ante, and we are "all in." Point Blue is betting that our conservation science, together with the work of our partners, will help avert major catastrophes and ensure a healthy future. Already, conservation science has shown that there is reason to be hopeful: lands once denuded now support myriad wildlife, concrete-capped streams have seen the light of day, once-polluted waters now flow clean, and some endangered species are making a comeback. Bulldozers that once cleared land of native vegetation are now employed to remove levees, reconnect floodplains, and sow native plants.

The conservation science in Point Blue includes avian ecology – the core of what we do – but also other disciplines, both in-house and in-collaboration. Our work is distinguished by the excellence of our field observers, a long-term perspective, and strong capabilities in data management, analysis, and tools to aid conservation decisions.

We have a long and illustrious history of bringing the science of bird conservation to bear on a range of important topics, from advancing understanding of marine food webs to directly influencing environmental policy. Our studies of birds have given the world important insights: how long-term weather patterns influence wildlife, impacts of pollution, the promise and practice of ecological restoration, effects of natural and human-caused disturbance, how climate change is influencing the natural environment, and many others.

And we have always studied organisms other than birds, from weeds to whales. Our impressive body of work on marine mammals dates back to the 1970s.

Our work has provided the scientific basis and political impetus for major legislative, judicial, and administrative policies to better conserve birds, other wildlife, and ecosystems. For example, in the 1980s we were instrumental in providing data showing how the gill-net fishery was killing thousands of birds each year, which spurred passage of legislation protecting marine wildlife and helped forge a permanent solution acceptable to all stakeholders. A more recent example, one that we are still involved in, is in the Ross Sea, Antarctica. We work there to provide the scientific basis for establishing one of the largest Marine Protected Areas ever proposed. Stay tuned!

Building on this track record, we at Point Blue are "looking forward" – aiming to do even more to protect the environment upon which all life depends. In this inaugural Point Blue Quarterly you will discover ways that some of our current projects carry out our conservation science mission, taking on pressing environmental issues. These and many other examples reflect our brand of conservation science: they are diverse (we need many tools), highly collaborative (we need many hands), and have multiple conservation outcomes (we need smart solutions for wildlife and for people). Stories in this newsletter spotlight our ambitious climate-smart strategies for a healthy planet.

We believe that conservationists must act fast to address rapid environmental change, use information from several disciplines, experiment, take risks, and find forward-looking solutions that benefit our ecological and human communities. Point Blue is working creatively with diverse partners to turn conservation science into conservation action.

Point Blue brings outstanding abilities and expertise, developed over decades, to today's priority work of protecting and restoring natural systems into an uncertain future. Our collaborative projects are stellar examples of conservation science – and hopeful models for finding solutions in a time of crisis. ■

Left page: Point Blue biologist Alicia Young, at work in cooperation with private landowners in northeastern California.

Right page: Our priority is the health of vital systems, such as mountain meadows that can store crucial water, in a climate-changed future.

Photos by: Ryan DiGaudio / Point Blue.

CLIMATE-SMART CONSERVATION

Adapting to Change

Change defines life, and the study of change is integral to successful conservation. At Point Blue we have been studying change since our beginnings, in 1965. Using our long-term data, we identify and evaluate both natural and human-driven change over time.

In recent years, environmental change has taken on new and ominous associations – record-setting heat waves, droughts, fires, storms, disappearing sea ice, and retreating glaciers. The resulting toll in dollars and human lives is growing, with ever more dire projections into the future.

Emerging effects of climate change are unprecedented, as we recognize in part because of our long experience studying change. We also recognize the call for unprecedented action to ensure that human and wildlife communities continue to thrive in the decades to come. Point Blue's work now includes substantially increased efforts to model what the future might look like and how ecosystems might adapt to the changes still to come.

Outstanding examples of Point Blue projects designed specifically to help nature and people prepare for climate change include:

- In the San Francisco Estuary we are now prioritizing restorations based on the full range of likely sea levels and sediment availability in the future. The purpose is to best protect human infrastructure, such as highways and water treatment facilities, while also benefiting habitat for birds, fish, and other wildlife.

Left: The Adélie Penguin depends on sea ice in the Ross Sea, where our work guides management for the most pristine place on earth.

Photo by: Viola Toniolo.

- Through streamside restoration programs led by students and teachers, we are planting a wider range of species that are more drought- and flood-tolerant, and that provide food through more months of the year as the timing of wildlife migration changes.

- Across the Central Valley, we are helping public and private landowners expand floodplains and make room for the rivers (which will flood more intensely and more often), while protecting farms, cities, and wildlife.

- Across the Sierra Nevada we are engaged in multi-partner restoration efforts to ensure that mountain meadows – which act like giant sponges that store and filter water – continue to perform their life-supporting functions as we lose the permanent snowpack.

- In California's vast rangelands, we are working with ranchers to implement innovative practices to dramatically increase natural water storage, sequester soil carbon, and bring back year-round creek flows, creating a buffer against extended drought and enhancing ranchers' bottom lines.

Looking Ahead

We now see new urgency and opportunities to increase our effectiveness in reducing the impacts of habitat alteration, climate change, and other threats to wildlife and people. We are redoubling our efforts and collaborating across cultural, institutional, and political boundaries. Over the next five years, Point Blue will focus on implementing and assessing "climate-smart" conservation throughout California, and on disseminating the approach to a global network of collaborators. As society transitions to clean energy and efficient energy use, we must ensure that climate-smart conservation of nature is an equal priority.

Climate-smart conservation addresses climate change impacts, along with other threats, by using nature-based approaches to reduce greenhouse gas emissions, enhance the benefits nature provides to humans – from clean air, fresh water, fisheries, pollination, and recreation to climate and flood control – and to improve the abilities of wildlife and people to adapt to the rapidly changing environment.

Our goal is to not only ensure that climate-smart conservation is implemented as broadly as possible but to also help natural resource decision-makers understand their choices in the face of change. We will work with them closely to ensure that plans and policies are climate-smart – maximizing nature's benefits for humans as well as wildlife.

We are excited to have you join us as we embark on this next phase of our evolution! ■

facts:

Why climate-smart conservation is urgently needed.

50% loss of Arctic sea ice in the past 20 years. A warming Arctic is driving more extreme weather.

400 ppm atmospheric carbon level. This "greenhouse gas" now at highest concentration in human history.

5 ft likely sea-level rise by 2100. As land ice melts, projections also agree a 1-ft rise is likely by 2050.

Grant Ballard, PhD
Chief Science Officer

Grant, who started as a volunteer in 1991, leads Antarctic research and scientific efforts to gain protection for the Ross Sea in Antarctica.

Michael Fitzgibbon
Chief Technology Officer

Over the past 5 years, Michael has led the design and architecture of the California Avian Data Center, as well as many of Point Blue's web applications.

Our Coast, Our Future

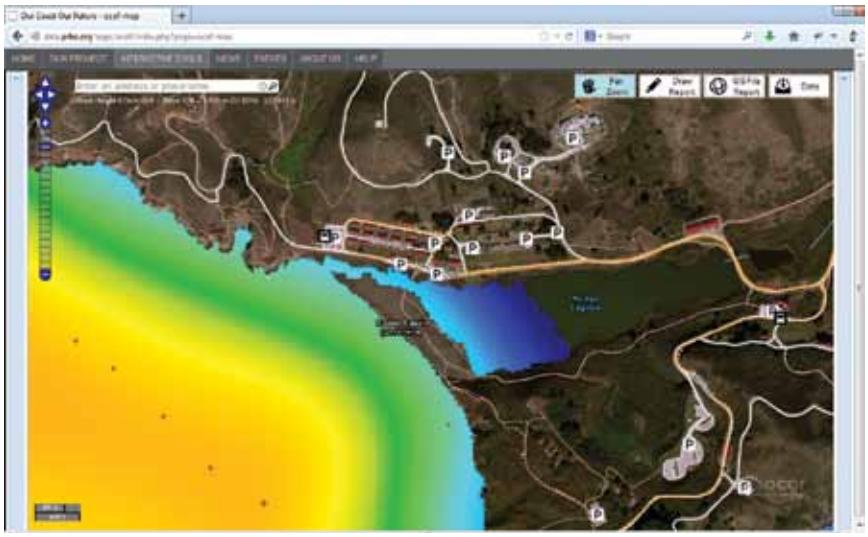
Innovative Planning

Coastal communities globally are facing the perfect storm – sea-level rise along with extremes of rainfall, wind, and waves. City planners, land managers, and others need new kinds of information to make decisions now about the likely effects of these combined forces in the future.

Point Blue is partnering with US Geological Survey, NOAA, and the National Park Service to model future scenarios of sea-level rise and storm impacts in the San Francisco Bay region – including the region's outer coast. The models are among the first to consider sea-level rise and more intense storms together. As a result, our online tools provide new levels of certainty about the future to help people choose the actions to take today.

Many stakeholders – from utility districts, regional parks, land management agencies, and more – help define what the new tools should do. The end users tell the scientists what they need for their preparedness planning for a very challenging future.

Already in use is a decision-support tool for the coast from Bodega Bay to Pigeon Point. Explore it at **http://data.prbo.org/apps/ocof**. Another will focus on all of San Francisco Bay's shoreline, especially crucial tidal marsh. Both these tools support better management actions today to help birds, wildlife, and people along our coast in the stormy times ahead. ■



A sampling of the many future scenarios for the SF Bay region's outer coast, from our new online planning tool. Here, colors represent higher storm waves at Rodeo Lagoon, Marin County.

When copious rain and snowmelt cause a river to rise and overflow its banks, water spreads over a valley floor. This natural process occurs along every river and stream. In the Great Central Valley of California, the Sacramento and San Joaquin rivers carry massive amounts of water from the mountains to the sea. Flood control in this region has made it secure for cities and agriculture (at least for now) but with only a fraction of its former wildlife habitat.

What would a 500-year flood look like here today – or in the near future, when climate change may bring about more extreme weather? Can new flood protection measures benefit birds and other wildlife as well as people? The great California flood of 1861 transformed the Central Valley into an inland sea. Much of Sacramento

A Future For Our Rivers

was under water for months, and the legislature was forced to move to San Francisco. The call to action was immediate and urgent. What followed was a massive effort to tame the Sacramento and San Joaquin rivers. With a system of dams and levees in place, the frequency of flooding in the Central Valley was dramatically reduced. Many of the forests and grasslands that once covered the floodplains were quickly converted to agriculture or urban areas.

Today, our Central Valley flood protection system is aging and in need of repair. Climate scientists project that extreme precipitation events will become more frequent and the risk of flooding greater. But the dams and levees that have protected us so well from flooding have also forced species in and near our rivers to the brink of extinction. There is a new and urgent call to action, and Point Blue is part of the response.

In perhaps the most dramatic development in flood protection in the last century, California's new Central Valley Flood Protection Plan, adopted last year, calls for projects with multiple benefits: flood management will also enhance recreation, restore habitat, preserve agriculture, and improve water quality.

This innovative process includes Point Blue in a key role – bringing knowledge of riparian bird communities to the new, multiple-benefit flood projects. For over two decades, ecologists at Point Blue have worked to understand the habitat requirements of birds along the Sacramento and San Joaquin rivers. Today this information is contributing directly to defining what a multiple-benefit project is and how we will know if it is successful.

The risk of flooding presents a serious and growing challenge for the people of California. By working together, we can find smart solutions that protect people and property while providing healthy ecosystems for birds, salmon, and other wildlife. ■

Above right: Flooding across the San Joaquin Valley in winter 2011. **Photo courtesy:** River Partners.

Nat Seavy, PhD
Research Director. Pacific Coast and Central Valley Group

Nat recently helped lead a national workshop on analyzing data from the geolocators used to track migrating songbirds (see p 16).

Left page: Alan Forkey. **Photo by:** Wendell Gilgert / Point Blue.

Right page: Lewis's Woodpecker and other wildlife benefit from healthy blue oak habitat in California foothill rangeland.

Photos by: Woodpecker, Tom Grey / www.tgreybirds.com. Foothill landscape, Wendell Gilgert / Point Blue.

PARTNERSHIP

Our Partnership column highlights the people we work with to develop conservation solutions.

Natural Resources Conservation Service – Alan Forkey

Recognized with Point Blue's 2012 Outstanding National Conservation Partner Award

With most of the open land in California under private ownership, effective conservation depends upon partnerships with private landowners — ranchers, farmers, and the owners and managers of private habitat such as wetlands.

For Point Blue, Alan Forkey has long been a key ally in linking our conservation science with practices on agricultural lands and natural habitats that ensure nature's benefits for people and wildlife alike.

Alan is the Assistant State Conservationist with Natural Resources Conservation Service (NRCS), in charge of Farm Bill programs in California. He has been instrumental in making this large, federally funded program a "conservation bill." Our partnership with Alan and NRCS, now spanning two decades, has made possible work that is central to Point Blue's mission.

According to Alan: "It has been a challenge for NRCS to fully fund conservation programs through the Farm Bill, because of the need to provide one-on-one planning and technical assistance to farmers and ranchers. Organizations like Point Blue have helped us meet this challenge. Partnerships increase our capacity to deliver high-quality assistance – and to monitor the effectiveness of conservation practices."

Ten years ago, with key support from Alan and NRCS (along with California Department of Fish and Wildlife and the US Fish and Wildlife Service), Point Blue launched our Avian Monitoring on Private Lands project.

Recently, Alan has been instrumental in the development of our Rangeland Watershed Initiative. Farm Bill Program funding administered by Alan helps

Wendell Gilgert
Director, Working Lands Program, Point Blue Emerging Programs and Parterships Group.

Wendell is spearheading our work with NRCS and private landowners to enhance crucial natural benefits and also economic viability on 1.5 million acres of agricultural land in California.

support six Point Blue partner biologists in NRCS Field Offices throughout California. By working on the ground with NRCS staff, ranchers, and farmers, we are working to "re-water" California's foothills while enhancing wildlife habitat on productive agricultural land.

Alan's conservation leadership has been vital in other ways, as well. He was among the first to press for the US Fish and Wildlife Service's Habitat Joint Ventures (JVs) to expand their focus from waterfowl to "all birds" (and all habitat).

Says Alan, "Wildlife does not have to be in conflict with agriculture. On the contrary, showing landowners how to build compatibility between wildlife habitat and agricultural operations often improves the quality and sustainability of both."

In the late 1990s, he enlisted Point Blue to bring shorebirds and riparian birds into the Central Valley JV's focus; he then supported us joining that venture. Today, Point Blue is a leader in multiple JVs regionally and nationally.

In rice lands in the Sacramento Valley, Alan and Point Blue's Catherine Hickey co-led an initiative to adjust post-harvest flooding practices to support shorebirds. Other key participants are the California Rice Commission and Migratory Bird Conservation Partnership.

This achievement, which benefits rice growers through Farm Bill program incentives and cost share, depended on modifying NRCS Conservation Practice Standards – and on Alan's leadership.

Thanks to Alan, we have ensured that private lands in California – 50% of the state's area – are part of the conservation equation, supporting birds, habitats, and functioning landscapes for people and wildlife into the future. ■

MEET THE TEAM

The Point Blue Quarterly will spotlight a member of our team in each issue.

Waterbird Ecologist Khara Strum

What is the current focus of your work?

My main responsibility is leading the Pacific Flyway Shorebird Survey, with Dr. Matt Reiter. With partners from Alaska to South America, we're surveying shorebirds in winter to learn what they need, now and in the future with habitat loss and climate change. This project takes me to Oregon, Washington, and throughout California – from Humboldt Bay to San Diego Bay on the coast and from the Sacramento Valley to the Salton Sea in the interior.

I also work on "rice and waterbirds" in the Central Valley – my original role here and an area of great interest to me. I have the privilege of working with dedicated Point Blue biologists and with our great partners at Audubon California, The Nature Conservancy, Natural Resources Conservation Service, and California Rice Commission.

Which aspects do you find particularly meaningful?

As my position at Point Blue evolves, I engage increasingly with the public. I really enjoy translating our conservation science into why we care – and how concerned citizens can help. The same goes for the private landowners who are part of our waterbirds and rice program. Communicating matters to me.

What are some foremost challenges you see ahead?

The top challenge involves educating people about why they should care and what they can do about climate change. I believe that most people – voters who can change our nation's laws – are buffered from the reality of climate change and the ways it affects us now and will continue to do so. In the field of conservation science, we need to communicate our work in meaningful ways, so that people will care enough about birds and natural systems to help protect them.

What do you find encouraging in our work?

That we're engaging the public in collecting data; and that we're enhancing private landowners' knowledge about how they can make positive differences on their land.

Also, that our data from the Pacific Flyway Shorebird Survey will guide management actions that are adaptive and climate-smart for coastal estuaries, interior wetlands, and flooded agricultural land. Members of the public can participate in long-term data collection in this project – experiencing their favorite wetland in the context of the entire flyway used by birds. ■

Left page: Khara Strum.

Photo by: Jim Morris / California Rice Commission.

Right page: (L to R) Common Murre feeds chick. Almanor Meadow in the northern Sierra Nevada. Pigeon Guillemot carries fish to nest site.

Photos by: Ron LeValley; Ryan Burnett; Peter LaTourrette.

news bites

EXTRA EARLY SEABIRD SEASON

On Southeast Farallon Island, Cassins Auklets and Common Murres produced some of the earliest nests on record. They began breeding in March – up to a month ahead of the average over the past 40-plus years.

Along with humpback whale sightings near the islands, this early season for breeding seabirds indicates that krill are plentiful in the Gulf of the Farallones. We will watch with interest to learn if the bounty translates up the food chain to also favor fish-eating seabirds, especially cormorants.

Watch our Facebook page for news from the Farallon Islands, where Point Blue works year-round in cooperation with US Fish and Wildlife Service.

MOUNTAIN STUDY

As spring advances, 17 Point Blue biologists have spread out across the Sierra Nevada, gathering a wealth of information on birds and the habitats they use.

We work with the US Forest Service to share expertise from Sierra research now spanning 16 years. Our integrated data help inform the revision of the plans guiding management of all National Forest land in the Sierra Nevada for the next 20 years.

In our expanded Sierra meadows program, we work with diverse partners to help restore and better manage these vital ecosystems. Our ability to learn about birds and their meadow habitats, on public and private land, is growing and will be critical in the face of climate change.

SEABIRDS SEND SIGNALS

This March, Point Blue presented at a major symposium reviewing the first five years of Marine Protected Areas (MPAs) in Central California. Our studies of seabirds foraging in coastal waters statewide help explain changes within MPA boundaries and help ocean resource managers know what is working and why. Learn more and view videos at **http://oceanspaces.org.**

SACRAMENTO CLIMATE TALK

Point Blue CEO Ellie M. Cohen was an invited guest speaker on climate change and nature-based solutions at the member-only Environmental Caucus of the California State Legislature in April. As Ellie said, “What a great opportunity to engage our elected leaders on climate-smart conservation!”

Hands-On Education

Many invaluable natural areas face threats such as habitat loss, pollution, and sea-level rise due to climate change. But students can be an active part of the solution – by helping restore habitat.

Restoration provides people with real-life learning opportunities to tackle environmental problems. It teaches discovery, responsibility, and hope.

This hands-on approach is a major focus of Point Blue's education program. Teaching students about science and conservation through habitat restoration is essential to conserving birds, other wildlife, and ecosystems through science, restoration, outreach, and partnerships.

Our STRAW* project – watershed education begun in 1992 by 4th-grade students and their teacher, Laurette Rogers – empowers hundreds of people, most of them quite young, to help solve problems related to habitat loss and environmental change.

One powerful example takes place in Novato, California, on the shore of northern San Francisco Bay. Students, teachers, and community members are digging in deep to turn the former Hamilton Airfield into a thriving wetland. In this two-year effort, led by the US Army Corps of Engineers and the California Coastal Conservancy, nearly 2,600 acres of landfill will become wetland habitat.

Through Point Blue's STRAW, some 150 biology students from Novato High School and almost 700 students from Novato elementary schools are creating wildlife habitat at the former airfield. They are immersed in real-world learning

Melissa Pitkin
Director, Education and Outreach Group

Along with guiding our multifaceted education and outreach efforts, Melissa generates science outreach stories for Point Blue, increasing public knowledge of our work.

*Students and Teachers Restoring a Watershed (**prbo.org/cms/192**)

Left page: At the former Hamilton Airfield near Novato CA, local high-school and elementary students together help create a large-scale restoration. **Photos by:** Michelle Stern / Novato High School.

Right page: Green Heron. **Photo by:** Tom Grey / www.tgreybirds.com.

about wetlands, ecological monitoring, and restoration.

This restoration takes place where sediment from bay dredging projects has built up subsided ground. It is only the third project in the Bay Area (and by far the largest) to reuse dredged sediment to restore wetland habitat.

The new habitat will help buffer urban areas from sea-level rise and extreme storms. It will provide tidal marsh habitat, ponds with nesting islands for birds, and a wildlife corridor of native trees and shrubs. Endangered California Clapper Rails and salt marsh harvest mice will find refuge in the upland wildlife corridor during extreme high tides.

Imagine the excitement felt by students, teachers, and community volunteers who are helping make the restoration a reality. When people know they are truly part of something big and meaningful – this is when education happens and a conservation ethic forms. ■

focus

Birds of Shollenberger Marsh

A Walk in the Park

An American Bittern stands still as stone only 20 feet away. Through our scopes we can see ourselves mirrored off the black pupil of its glaring yellow eye. It doesn't blink and doesn't move. Suddenly with a slashing jab of its dagger-like bill it snaps a wiggling mosquitofish from the water's surface between its legs.

Two moorhens paddle in the open through a family group of Pied-billed Grebes, past a muskrat, and alongside three sunning western pond turtles.

A Green Heron flies up the ditch and drops into some secret spot. We have been birding at Shollenberger Park for 45 minutes, only 200 yards from the city parking lot (and a quarter-mile from Point Blue's front door) and still have barely turned to look into the big ponds.

Various raptors hunt the weedy fields to the east, and on the tidal mudflats to the south Long-billed Curlews and Black-bellied Plovers forage for invertebrates. Several species of sparrows plus Marsh Wrens and yellowthroats work along the fence line, and a Say's Phoebe is on the wire watching for moths.

This is an amazing place to bird, for beginners and old-timers alike. Many shy and difficult-to-see species are close and still; the total list on any day of the year is large; and many rarities have been found. At this place, the unusual becomes usual. ■

Learn more at **http://petalumawetlands.org/public-wetlands/shollenberger-park**.

Rich Stallcup (1944-2012) was a PRBO co-founder and our naturalist extraordinaire. His knowledge continues to deepen our appreciation of all things wild. This essay is excerpted from his Focus column published in fall 2006. Find the complete version online at **www.prbo.org/Focus**. We plan to produce a book of Rich's collected Focus columns.

Below (L to R): Wrentit. **Photo by:** Tom Grey.

At the Palomarin Field Station, Suzanne Winquist holds a newly banded nestling. **Photo by:** Kim Kayano.

Sam Roberts and Xeronimo Castañeda, both past interns, are 2013 intern supervisors at Palomarin. **Photo by:** Diana Humple.

Diana Humple
Avian Ecologist and
Banding Coordinator

Diana's interest in migratory connectivity, which she and the Palomarin team have been exploring in songbirds, extends to seabirds and was the focus of her master's thesis on grebes.

STUDY SITES

In our Study Sites column we visit the places we do our work.

The Palomarin Field Station in Point Reyes National Seashore

Our 2013 interns have arrived from as far away as Nova Scotia. Four banders and three nest searchers ("gridders") now are immersed in learning methods for monitoring bird populations.

This is the 48th year of mist netting and weather monitoring at Palomarin and the 33rd year of nest searching and vegetation monitoring, all geared toward understanding relationships of climate, vegetation, and bird populations. Among the trends discovered: some species are in decline due to local and large-scale effects; others find changing habitat here (from coastal scrub to forest) much to their liking.

Wrentits, one of our main study species, began breeding very early this year. We found 8 nests in March (twice the norm) and the first Wrentit egg on April 1st. Only 8 previous Wrentit nests in our records produced eggs this early.

We are mapping migration! About 70 wintering Hermit Thrushes and Golden-crowned Sparrows carried tiny instruments called "geolocator tags" to their breeding grounds. The tags record sunlight data as the birds travel. When they return next fall, and we recapture them, we can determine their approximate routes and pinpoint their destinations. This represents brand new information for the conservation of migratory birds. ■

At this home to long-term songbird monitoring and a renowned Point Blue internship program, spring is a dynamic season!

Visit the Palomarin Field Station and see our research in action! For times and directions, check **prbo.org/cms/376**.

Below: Earth seen from Apollo 17, December 1972.

Photo by: NASA.

CEO's column, from p 2

WHY POINT BLUE?

Seven years after Point Reyes Bird Observatory was founded, this "blue marble" image of Earth was taken by the Apollo 17 astronauts and widely disseminated. We think of this as the original "point blue" – a pivotal moment in human history when we first understood the fragility and isolation of our home planet. It was a moment that catalyzed the modern conservation movement and fostered a shared commitment to protect the only place capable of sustaining us.

PRBO has reached its own "point blue" – a pivotal moment of realization that we must confront the largest threat to the biosphere in the history of our species – climate change.

We are changing our name to **Point Blue** to directly address climate change, together with other environmental threats, through nature-based solutions that benefit wildlife and people. We are changing our name to **Point Blue** to place our work in the context of the entire biosphere, the "blue" of our planet from afar when it is healthy, and the "blue" of clean water and Earth's atmosphere which are essential to sustaining all life. We are changing our name to **Point Blue** to better communicate our highest priorities, reach new audiences and expand our influence to achieve our urgent goals, with bird ecology still at our core.

At **Point Blue** we are working hand-in-hand with our partners, studying birds and other indicators to point the way forward to achieve the best conservation outcomes.

Thank you for joining with us to sustain a healthy, blue planet teeming with life for generations to come.

Grant Ballard, PhD, and Tom Gardali contributed to this article.

Thank You For Your Support

Point Blue is deeply grateful to Point Reyes National Seashore, the Farallon National Wildlife Refuge, and Cordell Bank and Gulf of the Farallones National Marine Sanctuaries for providing facilities and field stations where we work.

Your gifts make it possible for Point Blue Conservation Science to reduce the negative impacts of changes in land use, climate, and the ocean on birds and ecosystems.

MAJOR DONORS We are very grateful to the following supporters for gifts of $500-plus (January through March 2013):

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GIFTS HONORING We are grateful for the following memorial and honoring gifts (January through March 2013):

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Anne W. Baxter: Robert and Dorene Schiro
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Point Blue Board and Staff

Left page: On the stern of a NOAA research vessel, Jaime Jahncke, PhD (right) and crew examine a krill sample – investigating the California Current ecosystem. **Photo by:** Dru Devlin / NOAA.

Right page: Members of the Point Blue Emerging Programs and Partnerships staff. Left to right: Geoff Geupel, Director; Kelly Weintraub and Alissa Fogg, Partner Biologists. **Photo by:** Melany Aten / Point Blue.

For providing essential links with our Farallon Island field station, we thank the skippers of the Farallon Patrol. These skilled and dedicated volunteers carry Point Blue personnel and supplies to and from the mainland year-round.

POINT BLUE CALENDAR

SCIENCE EVENTS

BIOLOGY SYMPOSIUM
JULY 15–19
BARCELONA

For the Scientific Committee on Antarctic Research, presenting on Adélie Penguin foraging.

CLIMATE-SMART PLANNING
JULY 15-19
W. VIRGINIA

National training course, co-led by Point Blue's Dr. Sam Veloz. Sponsored by Department of Interior.

PARTNERS IN FLIGHT
AUG 28–30
SNOWBIRD UT

Point Blue is active in this international coalition to protect bird populations and habitats.

FORAGE FISH SYMPOSIUM
SEPT 9-13
PETALUMA CA

We will co-lead this science synthesis workshop to make recommendations for fisheries management plans and future research priorities.

MEMBERS EVENTS

Complete information at **pointblue.org**.
Or contact Lishka Arata: larata@pointblue.org or 707-781-2555 x 354.

NORTHERN SIERRA RIPARIAN CONSERVATION
JULY 13

Join Point Blue's Ryan Burnett near Mt. Lassen. Learn how information on birds guides future forest management actions across the Sierra Nevada.

FARMING FOR SHOREBIRDS
AUG 4

In the Central Valley, near Davis, join Khara Strum to learn how rice fields support numerous birds!

Point Blue

Conservation science
for a healthy planet.

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Your first issue of the **Point Blue Quarterly**—formerly the PRBO Observer

Humpback whale by Sophie Webb. Black-backed Woodpecker and Long-billed Dowitchers by Tom Grey. Adélie Penguin by Viola Toniolo.

12 of Point Blue's main study areas

With notes on the featured photos

1. Palomarin Field Station (Point Reyes National Seashore)
2. Farallon Islands National Wildlife Refuge (field station)
3. San Francisco Bay Area
4. TomKat Ranch (near Pescadero)
5. Great Central Valley (Sacramento and San Joaquin valleys)
6. Northern Sierra Nevada Managing for habitat diversity in the conifer sea.
7. Sierra Foothills Enhancing nature's benefits in partnership with landowners.
8. Central California Coast Helping evaluate California's Marine Protected Areas.
9. California Current (National Marine Sanctuaries) Documenting biodiversity "hot spots" in the ocean.
10. Sonoran Desert region (including parts of Mexico)
11. Pacific Flyway (Alaska to South America) Surveys of migratory shorebirds in their vital habitats.
12. Ross Sea/Antarctica Earth's last pristine ocean.

Point Blue advances conservation of birds, other wildlife and ecosystems through science, restoration, outreach and partnership's. Our highest priority is to reduce the impacts of climate change, habitat loss and other environmental threats while promoting nature-based solutions for wildlife and people.