

# Observer

▼ Notes from the Field

## Day of the Rail

Hildie Spautz

June 12, 2000. Today started out just like any other day in the field. There were nests to check, young to color-band, and of course nests to *find*. To understand how tidal marshes support healthy bird populations, our primary objective is always to find as many nests as possible. Our sample size of tidal marsh Song Sparrow nests is large, but we only find a few Common Yellowthroat and Black Rail nests every year. These birds are less common in the marsh, and their nests are more difficult to find.

Arriving at the broad salt marsh on Black John Slough, on the Petaluma River in Novato, I jumped across the tidal channel leading to the main part of my study plot, landing on my knees but managing to get only one handful of mud. I checked a Yellowthroat nest, earlier parasitized by a Brown-headed Cowbird, and found it abandoned. I color-banded a Song Sparrow chick that had a big fat cowbird nestmate. I checked another Yellowthroat nest, planning to color-band the young, but they were gone. The nest had been taken by one of our unidentified predators that left it completely empty but intact, without any clue as to who had visited for dinner.

Next it was off to the far northern end of the marsh to check my Black Rail nest. The eggs had been incubated for almost three weeks by now and should have been ready to hatch. I slowly pulled back a branch of the *Grindelia* (gumplant) bush in order to see down into the nest, expecting to find it empty. But instead, the parent was sitting on her nest, tilting her head sideways to look up at me with her bright red eye! I had the feeling this bird did not realize she was actually being seen: she was so well camouflaged that other animals had probably looked at her and seen nothing but a patch of brown, a patch of black with white speckles, and two glowing red dots moving through shadows on the marsh mud.

You can work in a tidal marsh for years without catching more than a momentary glimpse of a Black Rail as it flies out of the pickleweed on short stubby wings and drops into a clump of *Scirpus maritimus* (alkali bulrush) ten meters away. You can hear them calling "ki-ki-kerr" at maddeningly close distances, right at your feet, but always under the pickleweed, always invisible. But now, here I was looking one in the eye. She would not budge, and something told me she was protecting her nest. What if the eggs were hatching? Very few Black Rail nests have been studied on the West Coast, and it is



Hildie Spautz at Black John Slough marsh.

Since 1996, PRBO has been studying populations of several species of tidal marsh birds, many of them uniquely adapted to the salt marshes of the San Francisco Bay Estuary. Because about 80% of historical tidal marsh habitat has been lost or severely degraded, many species dependent upon it are considered threatened, endangered, or at least of great management concern. Our study is both intensive (as described here) and extensive—we are now studying over 45 marshes, from the South Bay to San Pablo and Suisun Bays in the north. Recently, PRBO has developed the ambitious San Francisco Bay Habitat Project (see *Observer* 118, Fall 1999), integrating our work on shorebirds, songbirds, and rails found in salt ponds and tidal mudflats as well as salt marshes. The project is now expanding to include seabirds (see page 3) and also riparian birds that rely on creeks flowing into the Bay. Our findings will help guide habitat restoration in the internationally vital habitats of San Francisco Bay.—Nadav Nur, PhD, PRBO Population Ecology Director

The daily sweat (or chill...) of our dedicated biologists is paying off!

▼ *Natural feedback: managing for biodiversity*

## PRBO On the Ground

**Ellie M. Cohen**

**T**hey sleep on mats in tents or borrowed floor space for months at a time, from the Sacramento River to the sagebrush steppe of eastern Oregon; they work in dangerously hot temperatures in the Eastern Sierra and at the Salton Sea; they endure long hours in the cold wind and dripping fog from San Clemente Island off San Diego to Año Nuevo and the Farallones near San Francisco; they search endlessly to discover the meticulously disguised locations of newly created nests in coastal woods; they work all night banding chicks to avoid aggressive predators; they follow strict government protocols to protect every single threatened or endangered bird; they are joyous when new generations fledge... and they are disheartened when eggs or chicks do not survive.

Prbo biologists have been gathering baseline bird population data for 35 years—species by species, from courtship to nest building to fledging the young, year after year. They also

collect data on a multitude of other habitat features including vegetation, physical processes, and other wildlife.

Our biologists often endure less than ideal conditions to conduct these studies, but their systematic work produces valuable results. They learn about the complex processes that support diverse and stable wildlife populations. They identify trends or norms and develop statistical models so that when natural or human change occurs, scientists can begin to predict effects on bird populations and other wildlife. They develop recommendations for habitat managers and policy makers based on our scientific studies, enhancing restoration and protection efforts.

Ongoing monitoring, frequent biological evaluation, long-term data collection—these provide the foundation for understanding how habitats function and what is required to sustain biodiversity. Yet large sums of public and private funds are being invested in habitat acquisition, restoration and



Ellie Cohen

management without the guidance of regular, on-the-ground data collection.

Fortunately, the daily sweat (or chill...) of our dedicated biologists is paying off. In

collaboration with our visionary partners and using birds as indicators of ecosystem health, prbo is providing regular scientific feedback to habitat and wildlife managers, with positive results.

Enormous challenges remain, however, throughout the vast ranges of the birds we study and hope to conserve. As you read this, prbo staff and volunteers are working in a wide array of habitats, methodically piecing together intricate parts of nature's puzzle. And every day they are weaving bird conservation science into wildlife and habitat management to achieve our ultimate vision: healthy ecosystems that will support stable, diverse communities of birds and other wildlife.



Ellie M. Cohen is PRBO's Executive Director.

### Rail Day *from page 1*

rare to see adult birds, much less young. The chicks leave the nest soon after hatching.

I was torn between trying to see what the rail was hiding and leaving her in peace to do her job—sitting. So I slowly lowered my hand until it was within inches of the nest. I wanted her to flush but not to startle her. I softly spoke. Without a sound, she slipped off the nest and onto nearby vegetation. There in the nest were three unhatched eggs and one tiny, black fluffy hatchling! The parent reached into the nest with her bill and nudged her baby onto the rim, trying to urge it out and away from danger. The nestling was slow and awkward on spindly little legs, and it wavered, not quite ready to jump.



There was complete silence. I could barely breathe. It was a precious moment, one I will never forget. But I left quickly, before the chick was out of the nest, worried that its chances of survival would be lowered if it left the nest before its time.

Soon after, another unexpected surprise: a pair of Song Sparrows were

exhibiting distress, as if they had a nest, so I looked into the area from which the female had flushed and found instead another Black Rail nest, piled high with seven pinkish eggs speckled with grey, built in a clump of alkali bulrush!

The finale to this unusual field day took place as I walked the long levee back to my car. From the thick stand of alkali bulrush that runs the length of the adjacent channel, I heard the punctuated "kek!" call of a nearby Clapper Rail. This was a truly unforgettable "day of the rail."



Hildie Spautz is a PRBO staff biologist who has supervised the tidal marsh component of our San Francisco Bay Habitat Project since 1999.

What keeps us braving the harsh uv rays is the great density of seabirds...

▼ *Bird biologists of Alcatraz*

## Seabirds in the Bay

**Ben Saenz**

It's approaching 9:00 am as I climb the rusty steps through a dark concrete passageway to the cell house roof on Alcatraz Island. I'm about to relieve prbo marine biologist Julie Thayer from a three-hour watch for seabird feeding flock activity.

As I emerge from the unlit stairwell I am temporarily blinded by the brilliance of two suns. Because the roof is painted reflective silver, the sun shining overhead produces the effect of another one shining up underfoot. After my eyes adjust, I have to chuckle at Julie's appearance as she cranes out over the roof edge looking for diving birds in San Francisco Bay.

We learned the hard way that, even with generous applications of spf 30 sunblock, exposed skin can burn in as little as 15 minutes on the roof. So we adopt amusing work attire to cover every square inch of skin: long pants and sleeves, a full-brimmed hat, fingerless gloves, a ski mask, and sunglasses. Basically we look like terrorists up here with our spotting scopes—at least that's what Alcatraz tourists believe when they report suspicious-looking figures on the roof to the park administration!

After I don my own ski mask and Julie briefs me on the morning's activity, I settle into the routine. We look for marine feeding flocks containing diving birds, which in San Francisco Bay most often include some mix of cormorants (Brandt's, Pelagic, and

Seen directly below PRBO's Alcatraz observation blind, a Brandt's Cormorant adult tends three large chicks on a man-made ledge.



Double-crested), Pigeon Guillemots, Common Murres, Western Grebes, Caspian Terns, Brown Pelicans, and ubiquitous Western Gulls. An arsenal of binoculars, an optical range-finder, and a Questar spotting scope allow us to scan for and count species assemblages and numbers as far away as the Golden Gate Bridge.

What keeps us braving the harsh uv rays is the great density of seabirds that breed and feed inside San Francisco Bay. Thousands of Double-crested Cormorants breed on the Oakland Bay Bridge and Richmond-San Rafael Bridge. The waters are frequented by flocks of Common Murres in the hundreds and of Western Grebes in the thousands. Alcatraz Island supports some 700 breeding pairs of Western Gulls, 250 pairs of Brandt's Cormorants, 20 pairs of Pelagic Cormorants, and approximately 25 pairs of Pigeon Guillemots. Each of these species relies to some extent upon the waters surrounding the island for food, showing the bay to be an extremely productive marine ecosystem.

Of particular interest to us are Brandt's Cormorants. While this species has exhibited declines of up to 50% throughout its range, it has actually colonized Alcatraz recently—in 1991. Not only are the birds breeding successfully here, but their numbers are increasing, even amid extremely heavy boat and air traffic, intense dredging activity, and 4000 visiting tourists



Julie Thayer sports sunproof apparel for rooftop seabird monitoring.

per day. Identifying the characteristics of San Francisco Bay that allow Brandt's Cormorants to thrive here will be useful in identifying critical habitat elsewhere in their range, as well as providing key clues about how their marine and pelagic ecosystems function.

Our data collection consists of tracking flocks from inception to dispersal—recording flock size, position and density, plus general notes concerning behavior.

Later, we will use these and other data to look for correlations between variables such as flock position, currents, tides, feeding time, ocean upwelling, and numbers and species of feeding birds.

For now, the field season continues, and after three hours in the hot bright sun, I'm glad to be relieved in turn by Julie. As I retrace my steps down through the cell house, I inadvertently cause one more scare before I take off my ski mask and gloves. A small boy on a tour watches me appear beyond the jail cell door. His eyes grow to enormous size as he takes in my appearance, and Hollywood images of Alcatraz undoubtedly flood his mind. Seeing that I have the key to release myself from behind the bars, his curiosity reaches its limit, and he tears off to rejoin his family.

**Ben Saenz** recently joined the staff of our Marine Sciences Division.

Alcatraz Island receives some 1.5 million visitors annually, exploring its famed cultural resources. Many are unaware that the island also supports breeding seabirds, including (since 1991) the only nest site for Brandt's Cormorants in San Francisco Bay! In 1996, PRBO biologists began intensive seabird monitoring on Alcatraz in cooperation with Golden Gate National Recreation Area. This year our study has expanded to focus on the Brandt's Cormorants' foraging ecology, a key to the puzzle of their Alcatraz breeding success. Cormorants depend exclusively on the marine environment for food and are thought to be reliable ecosystem indicators, so our studies will also contribute to evaluating the overall health of San Francisco Bay.—**Julie Thayer**, PRBO Biologist

## The ultimate goal: improving management of sagebrush steppe for all wildlife.

### ▼ High-desert peregrination

# Sagebrush Season

**Aaron Holmes**

This morning I awoke at dawn to the full moon setting in the southwest. As the sun rose on the opposite side of the sky, a Western Meadowlark perched on a nearby sagebrush belted out its song. Immediately, two other meadowlarks with adjacent territories responded in kind. They are the front row in the dawn chorus that covers this rolling landscape like a patchwork quilt. Several Brewer's Sparrows joined in, each one with its own version of the same tune. A Sage Thrasher, the jazz musician of the shrubsteppe, sang from the north... or was it the west?—it was both, I realized, as the two of them continued for over 90 seconds in an erratic duet.

I am camped with David Lains, my partner on this week-long trip, between two of the 80 study plots PRBO has established in sagebrush habitats of eastern Oregon and Washington. These are among the most threatened habitats in the West and are extremely important to nesting birds, especially the 'sagebrush obligates'—species that nest nowhere else. David and I are part of a team that has spent the past six weeks conducting point count censuses and gathering information on vegetation and habitat condition.

The area where we are working today is managed by the Bureau of

**Aaron Holmes**



Land Management's Vale District and is one of the highest quality sites we have come across in our high-desert peregrinations. Basque herders once roamed

these hills with large bands of sheep, and cattle are occasionally grazed here. The vegetation has largely recovered, but the biological soil crust (a fragile microfloral community) remains only in fragments, and soil erosion is widespread. While this study site is not pristine, it is as close as one

can find, especially at this scale of several thousand acres. It's one of a dozen reference sites we have established. Data gathered here and at other similar sites will enable us to make comparisons with bird communities in altered habitats and landscapes.

Others of our sites have little or no perennial understory due to over a century of livestock grazing, or they have been seeded with crested wheatgrass—an exotic species that has been widely planted on western lands. We hope to learn how understory conversion affects bird communities, with the ultimate goal of improving the management of sagebrush steppe for all wildlife.

Sage Sparrows are abundant here, and some were feeding recent fledglings this morning. There were three pairs of Loggerhead Shrikes with nests, Lark Sparrows, and of course the ubiquitous Brewer's Sparrow. Several pronghorn antelope accompanying a fawn announced my presence to each other with their gruff alarm call.



In a sagebrush study plot, PRBO biologists analyze the vegetation as one important component of habitat for nesting birds.

The vegetation is equally fascinating. Here and there I came across exceptionally large bluebunch wheatgrass bunches, some five feet in diameter. These old-growth bunchgrasses (which overgrazing can eradicate) must have been seedlings near the turn of the last century.

It is time for us now to pack up our cots, put away the pots and pans, and head to the next site on our list. There we will spend the entire day sampling vegetation, sleep under the stars again, and wake up before sunrise for another morning of point counts. Everywhere we go, the pungent odor of sagebrush permeates the air, and each morning we wake to a dawn chorus of songbirds—a pleasant reminder of the importance of our work in this threatened ecosystem.



**Aaron Holmes**, a biologist in PRBO's Terrestrial Program, first worked in eastern Oregon in 1995, when our project there began, and he has since led its expansion.

This year a PRBO research team began a major field effort in most of the shrub-steppe habitat of Oregon and Washington. Due to the invasion of exotic grasses, and related catastrophic fires that permanently destroy shrub cover, this habitat type is considered the most threatened in the West. With funding from key partners, notably The National Fish and Wildlife Foundation and Bureau of Land Management, PRBO findings will help identify important areas for conservation and assess the status of shrub-steppe dependent birds. Results to date are being used by Partners in Flight in Washington and Oregon in developing guidelines for landowners and habitat conservation plans for shrub-steppe, modeled on the Riparian Bird Conservation Plan for California.—**Geoff Geupel**, Terrestrial Program Director

The same course is followed every season, to monitor the health of the ocean.

▼ Documenting seabird distribution and abundance

## Pelagic Perspective

**Natalia Collier**

My day starts as soon as there is enough dawn light to identify birds. Grabbing a few crackers and some ginger tea for seasickness, I climb the stairs to the top of the boat. When seas are heavy, simply walking the decks becomes comical. Sometimes we look like we are dancing with imaginary partners, one step forward, one step back, perhaps a side step—like a waltz.

The *David Starr Jordan* is an excellent research vessel with a full complement of scientists and crew aboard. Eight days into our month-long cruise, I am used to the rhythms of ship-board life and data collection.

This morning several Black-footed Albatross greet me as the sun rises over the ocean. Otherwise there is nothing but water, stretching and rolling to the horizon in all directions, uniform and simple, unlike any view on land.

I start up the palmtop computer into which observations are entered—all birds within 300 meters while the boat is underway. Every two to four

hours we stop at specified stations along a set course, and I head below to help out. Oceanographers collect sea water samples at various depths and plankton samples in tow nets.

There is one cruise such as this

each season, and the same course is followed, to monitor the health of the ocean. This particular trip will take us from San Diego to Point Arena in northern California.

Though seabird sightings in outer waters are relatively scarce, the common species we encounter are the albatross, Leach's Storm-petrel, Cook's Petrel, phalaropes, and Sooty Shearwaters. Less common are Laysan Albatross, jaegers, Arctic Tern, Northern Fulmar, Black-vented Shearwater, Fork-tailed Storm-petrel, and Red-billed Tropicbird. Closer to shore, the higher numbers of birds—gulls, cormorants, murrelets, auklets, pelicans, terns and more—often keep me busy, especially if the boat passes a feeding flock.

At sunset, I waltz along the deck to go below for the night. Knowing that albatrosses are still out there, hidden among the folds of the ocean, I consider



A Black-footed Albatross demonstrates its distinctive wing span.

how much we cannot see in this realm—how mysterious and how precious the ocean will always be.



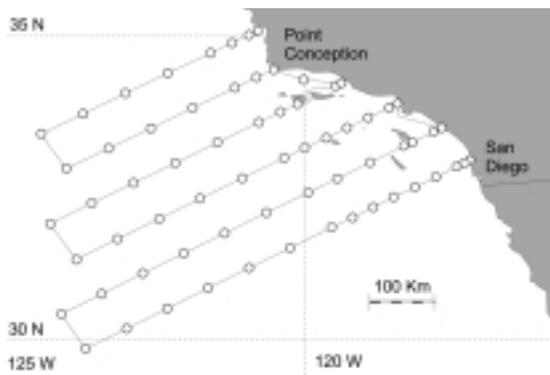
**Natalia Collier** is a staff biologist in PRBO's Marine Sciences Division.

### Farallon Patrol Log

Skippers who volunteer their time and vessels in the Farallon Patrol keep prbo's island field station equipped year-round. Thanks!

Jun 26	Tom Charkins	<i>Kumbaya</i>
Jun 10	Burt McChesney	<i>La Astoria</i>
Jun 17	Mick Meningoz	<i>New Superfish</i>
Jun 24	Doug Engelke	<i>Wonderful Life</i>
Jun 28	Tom Charkins	<i>Kumbaya</i>
Jul 1	Tom Charron	<i>Mi Vida</i>
Jul 15	Al DiVittorio	<i>Solbritt</i>
Jul 29	Mick Meningoz	<i>New Superfish</i>

Research cruises by CalCOFI sample points off the California coast over time.



Recently, PRBO has become involved in one of the most exciting oceanographic research programs in the world—the California Cooperative Oceanic Fisheries Investigation (CalCOFI). A joint effort of the National Marine Fisheries Service, California Department of Fish and Game, and Scripps Institution of Oceanography, the long-term (now in its 51st year), multi-disciplinary CalCOFI is designed to monitor and evaluate environmental and biological changes of the California Current marine ecosystem. The CalCOFI avian ecology program has demonstrated a remarkable 90% decrease in the abundance of Sooty Shearwaters over the past 13 years and other significant changes in California's marine bird populations. Together with Richard Veit (University of Staten Island) and K. David Hyrenbach (Scripps), PRBO's Marine Science Division will participate in seagoing expeditions for the foreseeable future. We thank the National Fish and Wildlife Foundation for a recent grant that makes this work possible.—**Bill Sydeman**, PhD, PRBO Director of Marine Sciences

## Songbirds and waterways pay no mind to barbed-wire fences or map legends.

▼ *Songbird enhancement east of the Sierra*

# Great Basin Riparian

**S**acha Heath

Beginning at the western edge of the Owens Valley floor, I meander up an alluvial fan of the eastern Sierra escarpment, my path guided by Independence Creek. Shaded by water birch, black cottonwood, black oak and Jeffrey pine, this creek snakes its way through a seemingly endless sea of bitterbrush, big sage, buckwheat and Mormon tea. Morning light creeps over the White Mountains, casting a pink glow on the Sierra Nevada. Point by point, my data sheet reflects the breeding inhabitants of this riparian (or streamside) oasis: Spotted Towhee, Western Tanager, Bushtit, Western Wood-pewee and Black-chinned Hummingbird.

For the past three years, I have similarly made my way along the eastern Sierra Nevada, from Olancho in Inyo County north to Bridgeport in Mono County. I cover a long stretch of the study area—230 kilometers in all—establishing indices of songbird abundance, diversity and species richness, and confirming breeding status. To complement my point counts, two crews of dedicated prbo biologists join me along the way. The hours they spend searching for and monitoring nests, banding birds, and assessing vegetation lead to estimates of survival and productivity, and the factors that influence these—habitat quality, predation and brood parasitism to name a few.

Our work is supported by seven federal, state and private land management entities that create the political mosaic of land ownership in the region. Contributions by three non-profit



Sacha Heath records birds inhabiting streamside willows within a Mono Basin landscape

groups reflect strong local support for conservation and education.

The collaborative nature of the project is essential. Songbirds and riparian waterways pay no mind to barbed-wire fences or map legends. But management practices do influence songbirds and their habitats. By conducting standardized monitoring on a bioregional and watershed scale, we develop and provide songbird-enhancing recommendations to the largest landholders and managers in the region.

Prbo provides data to the Mono Lake Committee's web-based Restoration Clearinghouse, a tool to guide restoration efforts on Mono Basin's recovering creeks. Our results have been used by the Bureau of Land Management to propose seasonal changes to a year-round grazing allotment, and by Inyo National Forest to recommend appropriate timing for prescribed burning. To encourage the use of prbo's standardized methods, California Department of Fish and Game is coor-

inating songbird monitoring efforts throughout the Owens Valley. These are just a few of the ways that prbo participates in protecting Great Basin habitats.

Having left one field crew in the heat of the Owens Valley, I meet up with another, in the higher Mono Basin. Here water birch remains, but a mixture of willow species is more common. Jeffrey pines are joined by lodgepole, and black cottonwood mixes with quaking aspen. The next morning, my point count data forms are filled with singing Yellow Warblers, Song Sparrows, Dusky Flycatchers, and Green-tailed Towhees.

The look and sounds of riparian habitat are very different here than west of the Sierra. But as our fieldwork is showing, there is one key similarity—its importance to nesting songbirds.



**Sacha Heath**, PRBO staff biologist, has taken the lead in developing the Eastern Sierra Riparian Songbird component of our Great Basin Project.

PRBO's Great Basin Project, including Eastern Sierra Riparian Songbird Conservation, is modeled on our work in California's Central Valley. Our goal is to research and provide management recommendations to ensure the greatest diversity, productivity and abundance of birds in the rich and varied Great Basin habitats. Partners include federal agencies, California Department of Fish and Game, the City of Los Angeles, consulting firms, the Mono Lake Committee, and many others. PRBO efforts within the Great Basin Project include: using songbird productivity to evaluate restoration of streams running into Mono Lake after decades of water diversion; making management recommendations to the U.S. Forest Service and Bureau of Land Management to enhance songbird habitat; working with forest managers to reduce songbird predators near campgrounds; and protecting threatened Snowy Plovers nesting on dry Owens Lake as restoration efforts begin there.—  
**Ellie M. Cohen**, PRBO Executive Director, and **Grant Ballard**, PRBO Biologist

Our efforts are adding to the pool of scientific knowledge about these penguins.

▼ *Oil spill response on a foreign shore*

## African Penguin Rescue

**Michelle Hester**

**C**ape Town, 24 July: We have been here nearly a week now, working with African Penguins threatened by a recent oil spill. PRBO biologists Diana Humple, Josh Adams, Hannah Nevins and I are part of a huge international response. Dr. Les Underhill and his co-workers from the University of Cape Town's Avian Demography Unit (adu) greeted us upon arrival on 18 July. The same day, by coincidence, 10,000 newly-made penguin bands also arrived. We immediately joined a team led by Meredith Thornton of adu, to tackle the immense task of banding 20,000 birds!

On our first day we banded 300 first-year birds ready to be released from the Salt River Rehab Center—an enormous converted railway warehouse holding 18,000 relocated penguins! At a second site, the converted backyard of a private rehabilitator, with a saltwater tank for unoiled penguins to swim in, we banded another 250 first-years.

Amazingly, this is the third oil spill rehabilitation some of these birds have been through! Studies by the adu have shown adult survival rates of rehabilitated birds after the 1994 *Apollo Sea* spill did not differ from that of unoiled birds. Our banding efforts are adding to the pool of knowledge about the success of penguin rehabilitation, as well as population demographic information on the species in general.



Left: heavily oiled African Penguin. Above: birds undergoing cleaning, rehabilitation, and flipper tagging.

The scale of the Salt River Center and the organization and extent of the human effort are impressive, with numerous national and international oil spill response and wildlife conservation agencies involved, and thousands of volunteers participating in the process. Both the penguins and the great numbers of people that care about them are incredible.

Our goal is to band 100% of adults and chicks before their release. By now, our daily banding rate is about 1,000 (we depend on volunteers to handle the birds for us). The penguins are feisty and strong: our bodies are getting steadily more bruised. Yet we feel privileged to be a part of this effort (and can't help but imagine the impacts of such a catastrophe occurring at home!).

**Michelle Hester** is a seabird biologist who has worked on PRBO's Marine Sciences staff; in Antarctica on penguins; and on California oil spill response teams. More information about the South Africa oil spill is available through PRBO's website, [www.prbo.org](http://www.prbo.org).

A generous gift through National Fish and Wildlife Foundation supported the PRBO team's travel to Cape Town. If you would like to contribute to the penguin recovery effort, contact PRBO's Development Director, Terri Miller, at (415) 868-1221, ext. 12, or by e-mail at [tmiller@prbo.org](mailto:tmiller@prbo.org).

## Remembering Dr. Baptista

**Dave Shuford**

**P**RBO lost an esteemed colleague and friend when Luis Baptista, Chairman and Curator of Ornithology and Mammalogy at California Academy of Sciences, died unexpectedly at his home in Sebastopol on June 12, 2000. Luis was internationally recognized for his studies of bird vocalization and communication, animal behavior, and the evolution of birds. He authored more than 125 scientific publications, co-authored a leading ornithology textbook, and produced a major historical review of bird sound communication. An avid conservationist, Luis also championed a program to reintroduce the Socorro Dove to its native habitat in the Revillagigedo Islands south of Baja California.

His special affinity for the White-crowned Sparrow brought Luis Baptista to PRBO's Palomarin Field Station. His keynote address at our 1997 annual meeting, typical of his engaging talks, was punctuated with vibrant, whistled imitations of the White-crowned's regional dialects and individual songs. (He also spoke five human languages!)

Luis Baptista's academic credentials were complemented by his eagerness to share an encyclopedic knowledge with the layperson. His boundless curiosity and enthusiasm carried over to all aspects of life, including music, art, and politics, and should continue to inspire those of us he left behind. We will miss him greatly.

**Dave Shuford**, a senior scientist in PRBO's Wetlands Research Program, was a colleague of Dr. Baptista at the Sierra Nevada Field Campus of San Francisco State University.

On June 24, 2000, the oil tanker *Treasure* sank off the Atlantic coast of South Africa, spilling approximately 1500 tons of fuel oil. Dassen and Robben islands near the spill are breeding grounds for about 40% of the world's population of endangered Jackass Penguins (locally called African Penguins). Twenty thousand oiled adult penguins and their chicks were brought into rehab centers. Another 20,000 non-oiled birds were evacuated from breeding colonies in an emergency effort to prevent them from entering the oily waters surrounding their nesting islands. This was the first time translocation efforts were used to prevent contamination of wild birds. Chicks were taken to various centers and several private homes to be reared by vigilant caretakers. Because of the large scale of this catastrophe, a call went out to oil-spill wildlife response agencies for international assistance. PRBO responded by sending a team of four biologists.—**Michelle Hester**

“...preparing prbo for the growth we expect in the years ahead.”

▼ PRBO staff

# Migrations

**W**e welcome to the prbo staff Bob Hunter, Director of Finance & Administration; Donna Staples, Grants and Contracts Manager; and Maria Kaymen, Development Assistant.



Donna Staples

growth we expect in the years ahead.”

Donna Staples is a writer and environmentalist who uses her skills to gain support for conservation causes. A long-time friend and neighbor of prbo (residing in Stinson Beach),



Maria Kaymen

Maria Kaymen, in her new role as Development Assistant, adds energy and enthusiasm to our development department. Maria’s background is in project management, and she brings extensive organizational skills and creativity to prbo.

Bob Hunter brings not only financial, management, and computer expertise but also a passion for the outdoors and a wonderful spirit. Bob has served as Controller for Audubon Canyon Ranch, where he redesigned accounting systems, modernized computer networking, and reduced administrative expenses. He lives with his wife and son in Bolinas.

Executive Director Ellie Cohen believes that “Bob will be a very valuable asset to us, taking our financial and administrative management to new heights and preparing prbo for the

Donna worked most recently with The Marine Mammal Center, where she helped the organization build its foundation and corporate giving programs.

Prbo is extremely fortunate to have Donna Staples on board, notes Director of Development Terri Miller, saying: “Donna brings strong fundraising skills to her role at prbo in addition to a professional background in teaching and writing. She is a creative and strategic thinker, and we are thrilled to have her on the development team!”

Says Membership Coordinator Matt Leffert, “Her energy, skills, and commitment make Maria an invaluable asset—and she’s a lot of fun to work with!”

**D**eparting prbo recently, former Controller Connie Blackstone has moved on to new interests. In addition, Landscape Ecologist Anne Black, PhD, has relocated to Colorado and will continue scientific work in her beloved intermountain West. Anne will maintain her connection with prbo as a Research Associate!



## You Can Make a Difference!

**Practical Guidelines in Science-based Conservation.** For more information, contact Education Coordinator Melissa Pitkin: (415)868-1221, ext. 33; mpitkin@prbo.org.

### Did you know?

### How you can help:

Even native predators and parasites such as ravens, jays and cowbirds—sustained at higher than natural densities—can negatively impact bird populations.

→ Avoid feeding these birds! Choose feeders that exclude them, and discontinue feeding if you notice these birds visiting your feeder. For more information, see [www.prbo.org](http://www.prbo.org).

Small boats and other watercraft often flush seabirds from their colonies, which may result in abandonment of chicks and/or predation!

→ Refrain from bringing boats, kayaks, and personalized watercraft within 100 meters of a mainland or island shoreline where seabirds are nesting or roosting.

Birds nest *everywhere*, from directly on the ground to the tops of trees.

→ Limit brush clearing, spraying, and mowing to birds’ *non-breeding season*—August until April. Minimize disturbance while birds are nesting. Walk dogs on leashes!

**Note:** The Cats Indoors Campaign (see *Observer* 119, Spring 2000) is a project of the American Bird Conservancy (ABC). Complete information is available at ABC’s web site, [www.abcbirds.org/catsindoors](http://www.abcbirds.org/catsindoors).

Please Save This Date:

**OCTOBER 16, 2000**

## OSHER SYMPOSIUM

5:00 to 7:00 PM in the Golden Gate Room at the Presidio in San Francisco

### IN HONOR OF THE BERNARD OSHER FOUNDATION

*In thanks for their support of PRBO’s internship program*

Special guest speaker **Dr. Tom Smith** will discuss “Molecular Genetic Approaches to Conserving Neotropical Migratory Songbirds.” As Director of the Center for Tropical Research, Dr. Smith oversees biodiversity research on five continents. He is a former Fulbright Scholar and a PRBO board member.

“We strongly believe in the work that prbo is...”

▼ *Gifts that keep on giving*

## Taking the Long-term View

This year, Steve Thal, a new member of prbo's Board of Directors, helped establish our Planned Giving Committee. To inform *Observer* readers about the importance of making long-range plans for the charities you support, Steve recently spoke with Development Director Terri Miller.

**Terri:** Steve, tell me why you first became involved with prbo.

**Steve:** It was out of my concern for our environment and my love of birds and the outdoors. The research that prbo has been doing for more than 35 years is crucial to understanding key environmental issues. Prbo focuses on studying birds as indicator species of ecosystem health—critical to us all.

**Terri:** You joined prbo's Board last year with a real interest in helping the organization start a planned giving program. Tell me a little about your background with planned giving and why you think it's so important for prbo.

**Steve:** I've been involved as a volunteer, helping to generate planned gifts for other organizations, for about 15 years now. Planned gifts are an integral part of any fundraising program and are so important for groups like prbo. Planned gifts allow an organization to build an endowment whereby a percentage of annual income earned can fund operating costs yet the principal is reserved. In essence, the endowment is like a gift in perpetuity.

**Terri:** As a result of your leadership, prbo just established a Planned Giving Committee. What do you want our members and donors to know?

**Steve:** Planned giving can be a win-win situation for everyone. There are some excellent tax advantages for the donor in addition to the personal reward you have in knowing that you've made



Britt and Steve Thal

plans for how prbo's work will continue when you are no longer here. There are so many vehicles for planned gifts, such as wills, charitable remainder trusts, and ira's.

**Terri:** Tell me about your own decision to make provisions for prbo in your will.

**Steve:** My wife Britt grew up in Sweden and has always had a very close connection to the environment. Over the course of our 25-year marriage, we have continued to develop our love of nature and wildlife. We strongly believe in the work that prbo is doing to protect wildlife and the natural habitats we all depend on. We want to be sure that work will continue long after we are gone.

For us personally, it made good sense to designate prbo as one of the beneficiaries of our ira. Most people don't realize that while ira's are a great vehicle for accumulating wealth, they are not so good for distributing wealth. When we learned that our ira would be taxed nearly 75% if we left the assets to friends or relatives—but a

non-profit organization would pay no tax at all—we knew that we wanted to designate our favorite charities as the beneficiaries of our ira!

Everyone's circumstances are different, which is why it's so important to talk to a financial advisor about what makes most sense for your situation. Prbo has hired a Planned Giving Specialist, who will be conducting educational seminars for us and will be happy to meet with our donors on a one-on-one basis to explain the different planned giving vehicles and how their tax benefits may differ. Once you understand the options, it is then best to sit down with your own advisor to determine what will best meet your charitable and estate planning objectives.

**Terri:** Any last thoughts for our readers?

**Steve:** Nobody likes to think about his or her own mortality, but the reality is that we won't be here forever. It is important to make plans for the organizations that are important to you, so you can know that their good work will continue for many years to come. 

*If you would like more information or would like to schedule an appointment with our Planned Giving specialist, please contact Development Director Terri Miller at (415) 868-1221, ext. 12, or via e-mail at [tmiller@prbo.org](mailto:tmiller@prbo.org).*

## Thanks, Judith Ciani Smith

After fulfilling two terms on prbo's Board of Directors, most recently as Co-Vice Chair, Judith Ciani Smith has stepped down. We gratefully acknowledge her commitment, service and support. Thank you, Judith! 

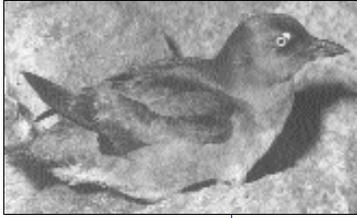
## Findings: scientific questions, methods, results

### ▼ Predation or ocean warming?

# Explaining Cassin's Auklet Declines

**Peter Pyle**

Conservation biologists use several methods to determine if a population of animals is increasing or decreasing. The most common method involves standardized censusing from year to year. On Southeast Farallon Island (sefi), prbo has numerous permanent study plots in which we have counted nine species of breeding seabirds every year, but our censuses provide no explanations for the observed population trends. For example, breeding Cassin's Auklets have



been declining on sefi since at least the early 1970s, but we don't know if this is related to increased adult mortality (caused by increased Peregrine Falcon and Western Gull predation), decreased productivity (caused by changes in food availability), or both.

To answer questions like this, biologists are using increasingly sophisticated models that examine productivity indices, survivorship estimates based on

mark-recapture analyses, and other parameters. But sometimes we get lucky and find a clue where we least expect it. Since 1987, we have been studying "known-age" Cassin's Auklets in 446 breeding boxes on sefi.

The number (and thus density) of breeding auklets using these boxes has declined during this period (Figure 1). While examining variation in the age of first breeding (afb) for birds in this

correlated with reduced competition for nest sites and food resources and a greater availability of experienced mates—situations that arise due to decreased survival of breeding adults. A similar relationship in Cassin's Auklet might be expected if predation on breeding adults was the primary factor causing the decline. Instead, the increase in afb with decreased density in Cassin's Auklets suggests that increased stress on the entire population, such as that caused by decreasing food availability, may be preventing younger birds from attaining breeding condition at an early age.

Thus, our findings on afb support other data suggesting that decreased food caused by ocean warming, rather than predation by Peregrines or gulls, is the primary factor in declines of Cassin's Auklets and other planktivorous alcids in the north Pacific Ocean. With global and ocean warming such a preminent future concern, we will be sure to continue to seek such correlations with seabird declines on sefi—anywhere we can find them.

*Peter Pyle, a staff biologist in PRBO's Marine Sciences Division, spends part of every year working on Southeast Farallon Island.*

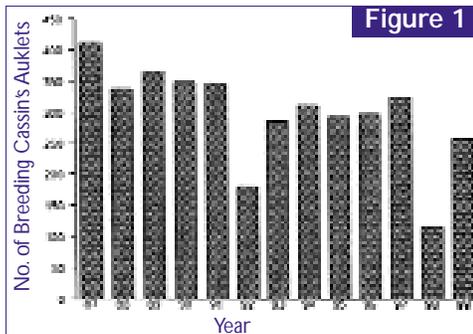


Figure 1

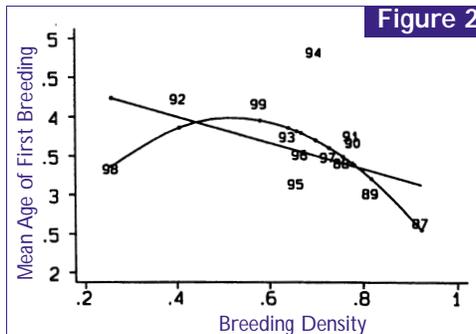


Figure 2

sample, I discovered a significant negative correlation between afb and density. The lower the breeding density, the greater the afb of birds recruiting (joining the breeding population) that year (Figure 2).

Other studies of afb in long-lived birds (albatross, grouse, gulls, and puffins) have shown the opposite result. Decreased afb with decreased population density in these species has been

## Science Achievements Spring and Summer 2000

At the April 2000 meetings of the Cooper Ornithological Society in Riverside, California, the following prbo biologists presented papers (space is insufficient here to list coauthors). Sue Guers: "Migration of landbirds through desert riparian habitats of the Salton Sea and its environs." Nadav Nur: "The statistical analysis of nesting success...an example using Loggerhead Shrikes." Tom Gardali: "Spring arrival dates and physical condition in a declining population of Warbling Vireos" (poster). Dave Shuford: "Patterns of shorebird use of the Salton Sea, California."

At the June 2000 meetings of California Partners in Flight and Riparian Habitat Joint Venture, hosted by prbo with California Audubon, the focus was on riparian habitat restoration and methods for avian demographic monitoring. Eleven prbo biologists attended and led presentations and workshops.

In the *USFWS Endangered Species Update*, marine notes by prbo scientists will include: "Conservation biology of Rhinoceros Auklets" (Julie Thayer, Michelle Hester & W.J. Sydeman); "Xantus' Murrelet, status and conservation" (Jennifer

Roth & Sydeman); "Xantus' Murrelet, assessment of listing status" (Sydeman & Nadav Nur); and "Conservation of Ashy Storm-petrels" (Kyra Mills).

Newly published in *The Birds of North America*, No. 493 is the species account for Long-billed Dowitcher (*Limnodromus scolopaceus*), authored by John Takekawa (USGS) and Nils Warnock.

In April and June, 2000, Palomarin Field Station hosted two training courses, where 21 participants from the public and governmental agencies learned to collect and

utilize avian monitoring data. Also, in April, prbo held a workshop for 20 volunteers in the Central Coast Bird Conservation Project, bringing the number of volunteers trained in point counts and area searches for this project to 40.

The Terrestrial Program has finalized Version 1.0 of the *Riparian Bird Conservation Plan*, copies of which are available to the public via our web page, [www.prbo.org](http://www.prbo.org). A poster about the Plan, produced by Sandy Scoggin, has been displayed at events across California.

## Memberships

Our thanks to the following new members who joined prbo from May 1 – June 30, 2000.

Roger Adamson, Catherine L Anderson, David Anderson, Gerry Lynn Argenal, Marcia Ann Astier, Nancy Bain, Bernice Bell, Benny Bennett, Christopher Bettencourt, Nicholas Biehle, Richard Bloom, Alice Bowen, Mr. & Mrs. Mike Brady, Michael Brown, Annemiek Brudie, Joana Brueckner, William Bryant, Lincoln Bynum, Herbert Callies, Eric Carson, Ann Mei Chang, Genevieve Colborn, Gregory Coniglio, Warren Cooke, Patricia Cox, Sheila Cummings, Pamela De Lencquesaing, Alice Debolt, Bill Denneen, Jane Dennis, Ed Dewees, Karma Dewitt, J. T. Dowling, Mr. & Mrs. William & Kathryn Dumas, Diana Murphy Dwyer, Kenneth W. Epley, Kathy Estey, William Evers, Elsie Flink, John J. Flood Sr., Raymond Fontaine, Lee Franks, Melvin Gabel, Linda Gaede, Andrew Gilcrest, Mr. & Mrs. R. Donald Gill, Margie Gissible, Dr. Jeff Goddard, Eleanor Greenfield, Cindy Guinn, Richard Gunn, Howard Gurevitz, Susan Haas, Faith Harrison, John Heimann, Mr. & Mrs. Mark Homrighausen, Eric Horvath, Emile Houle Jr., Karen Jacobsen, Hermia James, Mr. & Mrs. Morris Jerome, Mr. & Mrs. David Johnson, Cathy Jones, Carol Kashiwagi, Claire Kimmel, Howard King, Mary Koepf, Pamela Kromer, Roberta Lagomarsini, Maen Laham, Edith Long, Nancy Lovejoy, Dr. J. Winthrop Macy, Molly Martindale, Thomas Martindale, Mr. & Mrs. Randy McCowan, Rita McIntyre, Dennis Miller, Anita Mills, Jim & Julie Monson, David Moody, Deirdre Moy, Elizabeth Moy, Abigail Myers, Michael Newman, Tony Niilus, Patricia O'Hanley, Christian Ogilvie, George Ogura, Karl Ott, Phyllis Paxton, Oscar Payne, Noel Peattie, Carol Pecot, Doug Plummer, Mark Poteet, Doris E. Procter, Celia Reyes, Aryan Roest, Marguerite A. Ryan, Sherri Sandberg Ransom, John S. Schumann, Kea Scofield, Patricia Scofield, Cheryl L. Scott, Joy W. Scott, Nettie & Howard Shuken, Meg Simonds, Stanislaus Audubon Society, Inc., Dr. Karl Stecher Jr., Pamela J Stevens, James D Stokes, Steve Tenbroeck, Jullie Vasquez, Frances von Mertens, Jeff Wall, Linda Walter, Mr. & Mrs. Arthur T Weaver, Ellen Widess, Beverly Womack, Mr. Michael Yates & Kathleen Hughes, Mr. & Mrs. Steve York, David Zippin.

## PRBO Field Biologists

May through July, 2000: Sue Abbott, Andrew Ackerman, Keith Barnes, Daniel Barton, Johanne Berthiaume, Linsey Blake, Russ Bradley, Elizabeth Brusati, Sarah Bryant, Dan Calvert, Phil Capitolo, Sean Casto, Jeff Caudill, Roy Churchwell, David Cowell, Bobbie Davis, Caroline Fournier, David Gardner, Joanne Gilchrist, Stephanie Grossman, Jill Harley, Veera Harnal, Justin Hite, Sherry Hudson, Russ Japuntich, Else Jensen, Vinay Kapoor, Sara Krause, Kristen Kusic, David Lains, Gena Lasko, Verne Marr, Cody Martz, Chris McCreeley, Sharon McDougal, Bert McKee, Brennan Mulrooney, Kristie Nelson, Marcy Okada, Jon Phillipsborn, Mark Pollock, Devii Rao, Matt Ricketts, Chris Rintoul, Rachael Roberts, Madeline Schickle, Zach Smith, Valerie Steen, Shawn Stevens, Nik Tatarnic, Dan Taylor, Charmian Traynor, Peter Warzybok, Crow White, Melissa Wipf, Jason Yakich.

## Contributions

We are grateful to the following contributors of gifts of \$250 or more (May 1 – June 28, 2000)., Mr. & Mrs. Peter Avenali, Deutsche Bank Americas Foundation, Thomas C. Benet, Robert F. Boehm, Bernard A. Osher Foundation, Gabilan Foundation, Charles Brownold, Ann Cavanaugh, Mary Ann Cobb, Dr. Jean W. Cohn, Pamela A. Cook, Preston Cook, Demetrios Dimitriou, Burr Heneman, Shirley Hicklin Estate, Dorothy Houston, Mrs. Dorothy B. Hunt, Stuart Jacobson, Philip A. Lathrap, Park Loughlin, Anne Macpherson Estate, Mrs. Linda O'Neill, Pacific Gas & Electric, Dr. & Mrs. Benjamin D. Parmeter, Helen Pratt, Mr. & Mrs. W. J. Price, Rintels Charitable Trust, Stephen R. Schulz, Dr. & Mrs. Stuart Stephens, Adolph Suehsdorf, Mr. & Mrs. Stephen A. Thal, Tides Foundation.

## Friends of the Farallones

The following prbo friends direct their support to our projects in the Farallon Island National Wildlife Refuge. Many thanks!

Abbey Party Rents, George & Ruth Bradford Foundation, Rev. Bruce G. C. Bayne, Mr. & Mrs. Robert Bransten, Peter & Mimi Buckley, Susie Tompkins Buell, Henry Corning, Thomas R. Davis & Ellen Bush, Theodore L. Eliot, ExxonMobil Corporation, Mr. & Mrs. William S. Foss, Mr. & Mrs. Robert Friend, Launce E. Gamble, Nancy Hult Ganis, Arthur & Susan Kern, Mr. & Mrs. Jack W. Ladd, Charles & Mimi Lowrey, Ewan & Suzanne Macdonald, Jeffery W. Meyer, Dr. Harold Nathan & Gail Seneca, The Nathan M. Ohrbach Foundation, Bernard A. Osher Foundation, Ann Stone, Jack & Jane Stuppin, Mr. & Mrs. Stephen A. Thal.

## In-Kind Donations

We are grateful to the following individuals for donations to prbo (May 1 – June 28, 2000):

Hal Nathan for a Compaq 1te Elite 4/75c laptop computer. Mike Dondero for 50 hours of labor uploading, editing, and downloading video for the Farallon Intern Orientation video. Peg Schrader for 50 hours of labor videotaping, script writing, editing and producing for the Farallon Intern Orientation video.

*PRBO needs donated office & field equipment. Please call Melissa Frakes: (415) 868-1221, ext. 11.*

## Belated Thanks

Prbo appreciates a generous gift of stock from Judith Ciani Smith, received in December 1999, which, to our regret, was not acknowledged in our 1999 Annual Report. We are most grateful for all such contributions: they enable prbo to carry out our independent research public outreach for conservation.

## Institution Giving

Our many foundation and corporate supporters help prbo realize our mission to conserve birds and their ecosystems through science and outreach. We are grateful to all of you! Grants received during the past several months include those listed below.

The **George and Ruth Bradford Foundation** has made another generous gift in support of prbo's work on the Farallon Islands. Prbo has amassed the longest data set—almost three continuous decades—on seabirds and marine mammals in the U.S. With support from the Bradford Foundation, Friends of the Farallones and others, prbo has provided insights into long-term natural and human changes in the California marine ecosystem, including seabird population response to El Niño.

Many thanks to the **Dean Witter Foundation** for a significant grant in support of our k-12 Conservation Education Program. Our program goal is to educate and motivate young people about avian conservation biology, scientific research and responsible environmental stewardship through hands-on experience in the classroom and at field sites. With Dean Witter's support, we will also expand our geographic scope, further developing our education partnerships and develop educational exhibits.

We are most grateful to the many individuals and organizations supporting the renovation of our Visitor's Center at the Palomarin Field Station, including another generous contribution from the **Compton Foundation** and major gifts from **Pacific Gas and Electric Company** and **Rintels Charitable Trust**.

**Swift Instruments**, the **Winifred and Harry B. Allen Foundation**, **Deutsche Bank Americas Foundation** (matching gift) and two **anonymous** donors also made contributions recently in support of our Snowy Plover Protection Project, Bird-a-Thon 2000, and the prbo general fund. Thanks to all!



*As always, PRBO is deeply grateful to Audubon Canyon Ranch, Point Reyes National Seashore, and the U.S. Fish & Wildlife Service for providing facilities and field stations where we work.*

## PRBO Bird-A-Thon 2000



◆ Join us for a great day of birding that supports PRBO research, conservation and outreach. ◆ Help us surpass the \$100,000 mark this year! ◆ For information, contact Matt Leffert at (415) 868-

1221, ext. 10,

or e-mail us at [birdathon@prbo.org](mailto:birdathon@prbo.org).  
Also see our website [www.prbo.org](http://www.prbo.org).

**Please Mark Your Calendar!** 



### PRBO MEMBERS' EVENTS

**MONTHLY BIRD WALKS** Usually held the first Sunday of each month in the Point Reyes National Seashore area. Walks begin at 9:00 AM and last 2 to 3 hours. Cost: free to PRBO members, \$5/person non-members. For information, call 415/868-0655.

September 9 ■ **Snowy Plovers & the Conservation of Coastal Habitats.** Learn about attempts under way to save the threatened Snowy Plover and its habitat—and how you can be involved. Led by prbo Snowy Plover biologists.

October 1 ■ **Birds of No Fixed Address.** On a visit to the outer point of Point Reyes—a world-renowned birding hotspot, where vagrant migrants occur in the fall—investigate bird migration!

November 5 ■ **Winter Birds of Bear Valley.** Explore a wooded valley, the winter season, and a different suite of birds—Varied Thrush, Kinglets, Golden-crowned Sparrow, Red-breasted Sapsucker, and more.

PRBO online :: WEB SITE [www.prbo.org](http://www.prbo.org) :: E-MAIL [prbo@prbo.org](mailto:prbo@prbo.org)

*PRBO — working to conserve birds, other wildlife and their ecosystems through objective, innovative scientific research and outreach.*

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Point Reyes Bird Observatory is a non-profit (501-C-3) organization with headquarters at Stinson Beach, California. All memberships and contributions are tax-deductible to the extent allowed by law. Annual memberships are as follows:

Benefactor: \$1,000 & more	Family: \$50
Sponsor: \$500	Regular: \$35
Sustaining: \$250	Student & Senior: \$20
Contributing: \$100	

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