Oaks

FALL/WINTER 2022 CALIFORNIA OAKS

Listening to the birds: What songbirds can tell us about conservation and stewardship of California's oaks

by Libby Porzig, PhD, Working Lands Director, Point Blue Conservation Science, and Ryan DiGaudio, Senior Ecologist and California Partners in Flight Coordinator, Point Blue Conservation Science

On an early May morning, a biologist arrives at a cattle ranch in Colusa County. She hikes in before sunrise to a hillside surrounded by blue oaks, and as the sun rises, writes down all of the species of birds singing in the dawn chorus: Ash-throated Flycatcher, Oak Titmouse, Lark Sparrow, Acorn Woodpecker, Western Bluebird, and more. As the morning proceeds, she hikes across thousands of acres, pausing at survey locations to record the bird community. This simple survey and hundreds like it every year are a critical tool in the work to conserve California's oaks. These data on the presence of focal bird species in oak woodlands are a centerpiece of partnerships between ranchers, conservation groups, and government agencies. The data and partnerships are helping to inform adaptive stewardship of California's working landscapes.

Oaks are among the keystones of California's most iconic landscapes, but due to rapid habitat loss and degradation, they are also among our most at-risk ecological communities. With 80% of oak woodlands and savannas in California in private ownership, and much of this land in agricultural production, the story of oak conservation in California is in large part the story of stewardship of private working lands.

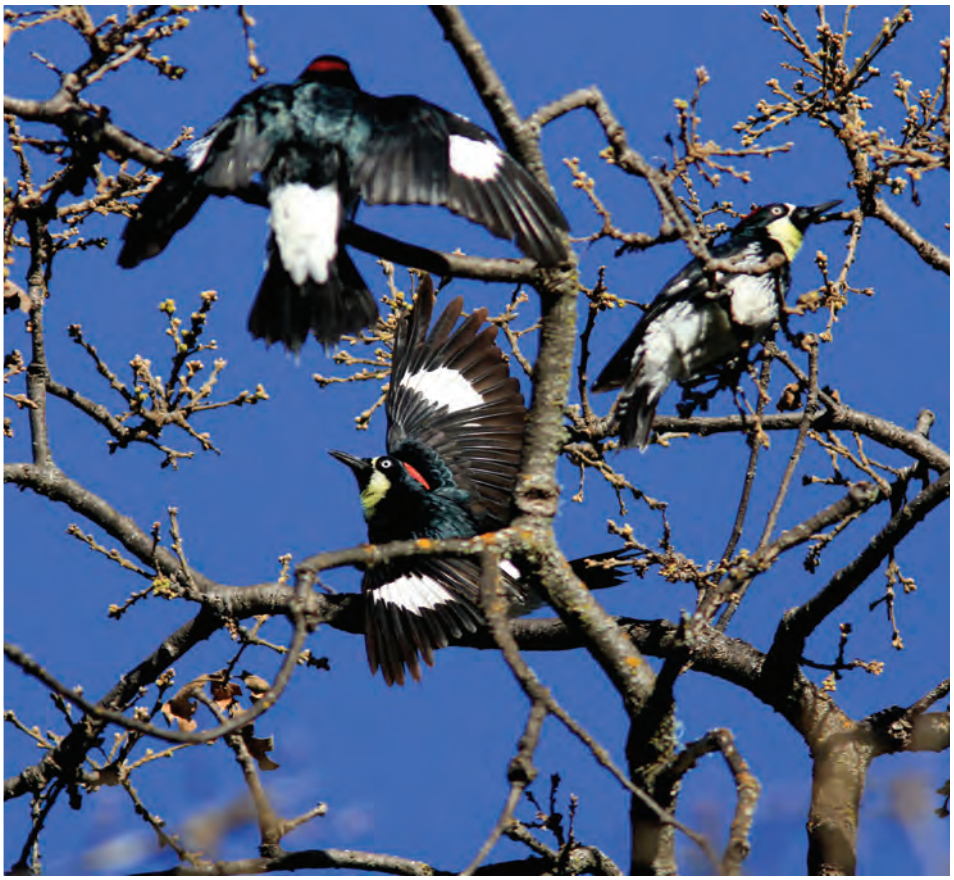


Photo courtesy of © Ryan DiGaudio, Point Blue Conservation Science

Acorn Woodpeckers in an oak tree

Point Blue Conservation Science's partner biologists work in collaboration with the U.S. Department of Agriculture's Natural Resources Conservation Service, Resource Conservation Districts, California Department of Food and Agriculture, and many farmers, ranchers, and other partners to plan, monitor, and evaluate conservation practices that benefit oaks and the ecosystems that support them.

Birds guide the partners in this broad alliance by acting as focal species in the conservation and stewardship of oak woodlands. Focal species are groups of animals or plants that require distinct habitat and resource elements, and are predictably linked to habitat conditions. The evolution and ecology of birds tie them to their habitats such that the type and abundance of birds found in a specific place reflect the structure and composition of its plant community.

Focal species can include keystone and at-risk species; for example, Acorn Woodpecker is considered a keystone oak woodland species, and Yellow-billed Cuckoo (*Coccyzus americanus*) is a riparian focal species that is protected as endangered in California (and the Western Yellow-billed Cuckoo [*Coccyzus americanus occidentalis*] subspecies—the only one that breeds in California—is federally threatened). Some relatively common species, such as Oak Titmouse, are easily monitored and thus serve as useful indicators. By managing habitat such that it supports healthy pop-

— continued on page 8

Inside

Partnerships and perseverance are essential for protecting California's primary old growth resource

Photo courtesy of © Ryan DiGaudio Point Blue Conservation Science

Acorn Woodpecker in oak tree at Cache Creek

The Oak Woodland Bird Conservation Plan—A Strategy for Protecting and Managing Oak Woodland Habitats and Associated Birds in California, a project of California Partners in Flight and Point Reyes Bird Observatory (now Point Blue Conservation Science), was published by California Oak Foundation (now California Oaks) in 2002. Since then, the plan has become a cornerstone of Point Blue's Working Lands Program, which provides practical conservation actions with benefits for oaks, birds, and landowners (page 1). It is exciting that the collaborative effort, which generated the plan two decades ago, has produced positive, on-the-ground impacts across the state. Innovative work to protect and perpetuate oaks on working landscapes is vital to reaching California's biodiversity and climate goals.

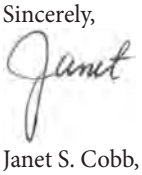
Community members' struggle to protect Clover Valley is another multidecade effort that is bearing fruit (page 3). Placer County's recognition of the site's cultural and ecological significance, as well as its investment in the valley's protection, is a testament to the ongoing efforts of Clover Valley Foundation and the dedicated leadership of its board member Marilyn Jasper. The county's actions are also a reflection of the capabilities of Placer Land Trust, and its Executive Director Jeff Darlington, a long-time California Wildlife Foundation/California Oaks partner. It is important to the region and the state that this endeavor to protect this unique and sacred site is successful.

Progress made by the Oaks of the Californias effort to perpetuate six imperiled oak species speaks to the power of collaboration (page 4). The plural "Californias" refers to the distribution of these oaks beyond the border of California to the Mexican states of Baja California Sur and Baja California Norte. Many collaborators are lending their expertise to this effort. In addition to sharing information, California Oaks provided an in-depth review of the *Oaks of the Californias Action Plan*. Our organization is also making introductions to agencies, California Oaks Coalition organizations, and other partners to identify location data for these species, explore the applicability of conservation planning tools, and connect with tribal and other restoration and conservation initiatives. California Oaks will also reach out to state management agencies with responsibility for land use planning to remind them of language instructing them to uphold Engelmann and other oak protections articulated in California Senate Concurrent Resolution No. 17—Relative to Oak Woodlands.

California Wildlife Foundation/California Oaks has also partnered with a member of California Oaks Coalition to pursue legal action to secure groundwater protections, which will protect oaks and the biological communities that they support. The article on groundwater (page 5) describes this multiyear effort.

We must use all available tools and resources to strengthen inclusive partnerships to keep California's oaks standing.

Sincerely,



Janet S. Cobb, Executive Officer
California Wildlife Foundation/California Oaks

California Oaks Coalition

California Oaks Coalition brings together international, national, Tribal, state, regional, and local organizations to conserve and perpetuate the state's primary old growth resource. Members of California Oaks Coalition are united by the vital role of oaks in sequestering carbon, maintaining healthy watersheds, providing habitat, and sustaining cultural values.

- Amah Mutsun Land Trust
- American River Conservancy
- American River Watershed Institute
- AquAlliance
- Banning Ranch Conservancy
- Butte Environmental Council
- California Institute for Biodiversity (CIB)
- California Invasive Plant Council (Cal-IPC)
- California Native Plant Society (CNPS), including Dorothy King Young Chapter, San Diego Restoration Committee, Sanhedrin Chapter, and Yerba Buena Chapter
- California Rangeland Trust
- California State University Chico Ecological Reserves
- California Water Impact Network (C-WIN)
- California Wilderness Coalition (CalWild)
- Californians for Western Wilderness (CalUWild)
- Canopy
- Center for Biological Diversity (CBD)
- Central Coast Heritage Tree Foundation
- Chimineas Ranch Foundation
- Clover Valley Foundation
- Conejo Oak Tree Advocates
- Confluence West
- Dumbarton Oaks Park Conservancy
- Earth Discovery Institute
- Elder Creek Oak Sanctuary
- Endangered Habitats Conservancy
- Endangered Habitats League
- Environmental Defense Center
- Environmental Protection Information Center (EPIC)
- Environmental Water Caucus
- Foothill Conservancy
- Forests Forever
- Friends of Harbors, Beaches and Parks
- Friends of the Richmond Hills
- Friends of Spenceville
- Global Conservation Consortium for Oak (GCCO)

- Hills For Everyone
- Laguna de Santa Rosa Foundation
- Lomakatsi Restoration Project
- Los Padres ForestWatch
- Lower Kings River Association
- Northern California Regional Land Trust
- Placer Land Trust
- Planning and Conservation League
- Redbud Audubon Society–Lake County
- Redlands Conservancy
- Resource Conservation District of Santa Monica Mountains
- River Partners
- River Ridge Institute
- Rural Communities United
- Sacramento Tree Foundation
- Santa Clarita Organization for Planning and the Environment (SCOPE)
- Save Lafayette Trees
- Save Napa Valley
- Sequoia Riverlands Trust
- Shasta Environmental Alliance
- Sierra Club Northern California Forest Committee–Oak Woodland Subcommittee
- Sierra Club Placer Group
- Sierra Foothill Conservancy
- Tejon Ranch Conservancy
- Tending the Ancient Shoreline Hill
- Tuleyome
- Tuolumne River Trust
- Universidade de Trás-os-Montes e Alto Douro, Department of Forest and Landscape (Vila Real, Portugal)
- University of California, Los Angeles, Mildred E. Mathias Botanical Garden
- Woodland Tree Foundation

California Oaks provides four areas of support for coalition members:

1) Research and advocacy updates.

2) Information to educate and engage the public.

3) Tools for participating in planning processes and educating opinion leaders.

4) Materials to inform local, regional, and state governmental agencies of the opportunities for and benefits of protecting oak woodlands.

For more information, please contact Oaks Network Manager Angela Moskow, amoskow@californiaoaks.org.

Conservation plan proposed for 487 acres of Clover Valley

by Angela Moskow, California Oaks, and Marilyn Jasper, Clover Valley Foundation

Clover Valley is a culturally significant, steep-sloped site that includes expanses of oak woodland, grassland, and riparian habitat, as well as wetlands that support California Black Rail (*Laterallus jamaicensis coturniculus*), a California threatened bird species. This imperiled landscape with ridges 200 feet above the valley floor, is located in Rocklin and adjacent to Lincoln and Loomis in Placer County. It contains 34 tribal sites, critical foraging habitat for Swainson's Hawk (*Buteo swainsoni*, a California threatened species), diverse wildlife, and the perennial Clover Valley Creek. The creek, which supported salmonids until 1985, is part of the Dry Creek watershed, critical habitat for the federally threatened Central Valley steelhead trout (*Oncorhynchus mykiss irideus*, population 11).[1]

> *Clover Valley represents one of the most significant conservation opportunities of our generation. We have a long way to go but are thrilled to have the opportunity to work with the county, William Jessup University, the landowner, and other partners to protect this treasured landscape for current and future generations.*
> — Jeff Darlington, Executive Director, Placer Land Trust

Clover Valley Foundation (https://clovervalleyfoundation.org), a member of California Oaks Coalition, has been leading efforts to protect and restore the 622-acre site for 23 years. Clover Valley has been approved for development with entitlements for approximately 558 single-family homes and a roadway across the valley floor, both of which have been challenged by Clover Valley Foundation.

An alternate use for part of the property gained traction on June 14, when Placer County's Board of Supervisors approved a funding agreement for up to $1 million to assist in the purchase and acquisition of a conservation easement of approximately 487 acres in Clover Valley. The easement, to be jointly held by the county and Placer Land Trust (a member California Oaks Coalition), would be established in conjunction with a fee title purchase of the land by William Jessup University at an estimated cost of $18 million. The agreement with Placer County requires that the purchase of the property and the conservation easement be recorded within two years of the agreement being executed.

William Jessup University and Placer Land Trust are proposing to "protect, preserve and restore the biological diversity of Clover Valley; to protect in perpetuity the significant cultural resources of the valley; to provide experiential learning opportunities for William Jessup University students and other local schools and colleges; and to provide educational and recreational opportunities for the residents of Rocklin and Placer County." For more information, go to: https://placerlandtrust.org/placer-takes-action-to-preserve-clover-valley.

Clover Valley Foundation enthusiastically supports the proposed 487-acre Clover Valley Preserve, while also continuing to pursue permanent protection for the valley's remaining 135 acres located on ridgetops. "While we are grateful that the 487 acres are slated for protection, if the ridges are developed those impacts would compromise the valley's magnificent resources and wildlife viewing opportunities," said Marilyn Jasper, Clover Valley Foundation Board member.

[1] *Population 11* refers to the California Central Valley Evolutionarily Significant Unit of steelhead trout.

Photo courtesy of © Phil Robertson

California Black Rail photographed at Placer Land Trust's Doty Ravine Preserve in Lincoln, CA.

Oaks of the Californias

© Tony Gurnoe, Director of Conservation Horticulture, San Diego Botanic Garden, and participant in the Oaks of the Californias effort

Cedros Island oak (*Quercus cedrosensis*) photographed at Otay Mountain, where erosion from border wall construction is one of many threats to this imperiled species.

by Amy Byrne, Global Tree Conservation Coordinator, Oak Consortium, The Morton Arboretum

In December 2019, the Global Conservation Consortium for Oak (GCCO), a member of California Oaks Coalition, was launched to establish a network for implementing comprehensive conservation strategies to prevent extinction of the world's oak species. Led by The Morton Arboretum, in collaboration with Botanic Gardens Conservation International, GCCO has developed a growing U.S. network based on priority species distribution.

The network is organized into Eastern, Texas/Southwest, and Western subregions. Within the Western subregion, which focuses on the conservation of 10 priority oak species, a smaller working group is addressing species that occur on the Channel Islands (U.S.) and México's Guadalupe and Cedros islands: Cedros Island oak *(Quercus cedrosensis*), Nuttall's scrub oak (*Q. dumosa*), Engelmann oak (*Q. engelmannii*), island scrub oak (*Q. pacifica*), Santa Cruz Island oak (*Q. parvula*), and island oak (*Q. tomentella*).

GCCO partnered with San Diego Zoo Wildlife Alliance to lead the development of the *Oaks of the Californias Action Plan* for these six priority oak species, building on baseline information in the *Conservation Gap Analysis of Native US Oaks* (Beckman et al., 2019). A two-day conservation planning workshop was held in December 2021, utilizing principles and steps developed by the International Union for the Conservation of Nature Conservation Planning Specialist Group, and with the generous support of the Association of Zoological Horticulture and the Disney Conservation Fund.

The workshop and subsequent virtual meetings generated the plan, which includes natural history, habitat, distribution, threats, current conservation efforts, strategic goals, and priority goals for the six species. The plan focuses on conservation and data gaps, challenges, and steps to conserve, manage, and recover these important oak species. Action-oriented tables outline unique threats, goals, and activities to address threats and challenges to recovering the species. Visit www.globalconservationconsortia.org/2022/08/16/oaks-of-the-californias-conservation-planning-2/ to download the plan and learn more, and email abyrne@mortonarboretum.org to get involved with the plan's implementation.

Opportunities for engagement

Great progress has been made in broadening the effort to engage the public about these imperiled oak species. For example, an iNaturalist OakWatch project (www.inaturalist.org/projects/california-oakwatch) was created in collaboration with California Native Plant Society (a member of California Oaks Coalition) to gather more up-to-date and accurate occurrence data as well as information on regeneration and seedling survival for each species. Please consider joining and contributing to the project as you can! To further support this project, additional identification training webinars and iNaturalist challenges (such as identifying the most occurrences in a month), will be shared soon. Additionally, more surveying and collecting efforts will take place later this year, and more conservation groves are being established for these priority oaks.

Janet S. Cobb receives International Oak Society Special Service Award

California Wildlife Foundation/California Oaks Executive Officer Janet Cobb was presented with a Special Service Award on September 1, 2022, at the 10th International Oak Society conference, which was held in Las Cruces, New Mexico. The award recognizes her contribution to the advancement of International Oak Society (www.internationaloaksociety.org/) goals. It honors her work to preserve oak woodland habitat in California, acknowledging her efforts to convince county, city, and state agencies to back appropriate conservation measures, while limiting commercial development that would otherwise have destroyed thousands of acres of oak woodlands.

Cobb's remarks (below) to the International Oak Society were delivered by Angela Moskow, who was in attendance at the conference to present the report on oak habitat for listed and candidate vertebrate, plant, and invertebrate species and subspecies from the Spring-Summer 2021 issue of *Oaks*:

> Thank you to the International Oak Society Board of Directors for this honor. Of course, no one does any of this work alone.
>
> I accept this award on behalf of California Oaks' Board of Directors, members, present and past staff, agency representatives, lawyers, and nonprofit organizations that have worked with us over many years to inform citizens of the important contributions that oaks—California's primary old growth resource—make to climate stability, sustainable wildlife habitat, healthy soils, and plentiful, clean water, while enhancing the beauty and cultural richness of California's landscape. Many thanks to each of your members for speaking up and taking action on behalf of oaks in their states and countries. The real honor is working with like-minded people to save what we can for the long-term health of our planet. Let us pick up the pace!

Photo courtesy of © Lucy Montgomery

Angela Moskow presenting at the International Oak Society conference.

RESOURCES

RESOURCES ON BIRDS AND OAKS

The Rangeland Monitoring Network Handbook, V2.1, authored by Porzig, E., N.E. Seavy, R. T. DiGaudio, C. Henneman, and T. Gardali, is a publication of Point Blue Conservation Science that provides Rangeland Monitoring Network protocols for sampling soil, vegetation, and wildlife on rangelands. The Rangeland Monitoring Network provides tools, data, and people that assist ranchers, researchers, and conservation planners and partners in collecting data that expands our knowledge of rangelands and ranching practices. Visit: pointblue.org/wp-content/uploads/2018/06/RMN_Handbook_v2.pdf to download the handbook.

Keeping Oak Woodlands Healthy—If the birds are there the oak woodland is healthy. Published by Natural Resources Conservation Service and Point Blue Conservation Science, this two-page handout lists 12 oak woodland focal bird species, has summary information on critical oak woodland forest layers, tips for enhancing conservation values of working landscapes, and information on Western Scrub Jay acorn planting contributions to oak woodland perpetuation. Visit www.pointblue.org/our-work/working-landscapes#rangeland-monitoring-network and click on the *Oak Woodlands* link under *Healthy Habitats Handouts* to download a copy. Also see page 7 where segments of the handout are reproduced.

Population and Habitat Objectives for Landbirds in Prairie, Oak, and Riparian Habitats of Western Oregon and Washington Version 2.0 is authored by Rockwell, S. M. and J. L. Stephens of Klamath Bird Observatory, and B. Altman of American Bird Conservancy; and prepared for Oregon-Washington Partners in Flight, Pacific Birds Habitat Joint Venture, Bureau of Land Management, and U.S. Forest Service. This document provides quantitative and multi-scaled population and habitat objectives for 26 focal and seven imperiled bird species in prairie, oak, and riparian habitats in the Puget Lowlands, Willamette Valley, and Klamath Mountains ecoregions of western Oregon and Washington. These objectives are designed to support recovery of significantly depleted populations, direct conservation for the array of desired bird-habitat conditions in the three priority habitats, and promote the long-term persistence of healthy populations of native bird species that are well-distributed across their historic range. Visit avianknowledgenorthwest.net/resources/conservation-plans/or-wa-pif-plans/or-wa-pif-western-lowlands/ to download the document.

Groundwater protections advanced by California Supreme Court decision

by Angela Moskow, California Oaks

California Water Impact Network (C-WIN), a member of California Oaks Coalition, scored a legal victory in a challenge of the County of San Luis Obispo's well-permitting procedures, on the grounds that permits for wells that meet certain thresholds must be in compliance with the California Environmental Quality Act (CEQA). In a settlement reached on April 20, 2022, San Luis Obispo County committed to reviewing future well permit applications to determine whether they trigger discretion and thus review under CEQA. The County will also post permit applications on its website so that the public will have access to them and can intervene if/when there is disagreement concerning a CEQA determination.

California Wildlife Foundation's Vesta Fund supported C-WIN's legal effort, which was led by Mark Wolfe of M.R. Wolfe & Associates, P.C., with assistance from the Law Office of Babak Naficy. As our readers may remember, the clear cutting of oaks in San Luis Obispo County in 2016 by Justin Vineyards caused a public outcry. The tree removals made way for vineyards and a reservoir. Neighboring well owners raised concerns about the potential impacts of the reservoir on their groundwater supplies. Justin Vineyards, owned by the Wonderful Company, is one of many financial interests that are placing enormous pressure on California's limited groundwater resources.

Concern that San Luis Obispo County's groundwater-dependent oaks, as well as other groundwater-dependent ecosystems and the plant and wildlife communities that they support, were not being adequately protected led to the decision by California Wildlife Foundation/California Oaks to support C-WIN's legal challenge.

A California Supreme Court ruling in a related case, Protecting Our Water & Environmental Resources (POWER) v. Stanislaus County, upheld a Fifth District Court ruling that state groundwater well-drilling standards published by the Department of Water Resources, which were incorporated into several counties' well-permitting ordinances, require local officials to exercise discretion in certain cases. Thomas Lippe of Thomas N. Lippe Law Offices represented POWER.

Following the POWER decision, C-WIN filed an appeal with the California Supreme Court of a Second District Court ruling that San Luis Obispo County well-permitting standards are purely ministerial, and thus not subject to CEQA. The settlement followed this appeal.

We thank Thomas Lippe and POWER for the important legal victory in the California Supreme Court, and Mark Wolfe and C-WIN for securing discretionary review and opportunities for public input in future well permitting decisions in San Luis Obispo County.
—Janet S. Cobb, California Wildlife Foundation/California Oaks Executive Officer

Photo courtesy of © Emily Beckman Bruns, The Morton Arboretum

Oak gall photographed during an International Oak Society conference hike to view oaks at Dripping Springs Natural Area, Las Cruces, NM.

San Francisco Bay Bird Observatory surveys increase understanding of local Phalarope species

Red-necked Phalarope photographed at Vasona Lake Park.

by Kristin Butler, San Francisco Bay Bird Observatory Outreach and Communications Director

Phalaropes are slender-necked migratory shorebirds that like salty habitats. They migrate through the Bay Area from July to early September each year, yet breed and winter in other areas. Large numbers can be found in alkaline water bodies such as Mono Lake and Utah's Great Salt Lake. Unfortunately, research shows that climate change and drought are drying these salty habitats, creating an uncertain future for these birds.

Analysis of survey data collected by San Francisco Bay Bird Observatory (SFBBO) scientists showed a decline in South Bay salt pond survey counts of Phalaropes, which suggests a decline in the number of birds using the ponds. These data were collected by SFBBO (www.sfbbo.org), which has been conducting bird surveys of the salt ponds that ring San Francisco Bay since 2005. The surveys are part of the South Bay Salt Pond Restoration Project (www.southbayrestoration.org), a 50-year effort to restore tidal marsh activity and manage ponds in the Bay for habitat, recreation, and flood management.

To better understand Phalarope populations and create strategies to support them, SFBBO scientists and South Bay Salt Pond Restoration Project managers decided to do more dedicated research focused on these species.

SFBBO has conserved birds and their habitats and raised awareness through avian research, habitat restoration, and environmental education for 40 years.

New research protocols and broadened survey frequency and geographic scope will inform research management strategies for Phalaropes. (Red-necked Phalaropes shown above.)

Thanks to funding from the San Francisco Bay Restoration Authority (www.sfbayrestore.org) via a grant to California Wildlife Foundation, SFBBO used past salt pond survey data, as well as data from the community science application eBird (ebird.org), to create a new research study on Phalarope behavior. Prior data were used to narrow down precise migration timing and identify sites inside and outside the project ponds that Phalaropes are most likely to frequent.

In 2019, SFBBO biologists and a small team of volunteers piloted the new research protocol and collected data on two Phalarope species, Wilson's and Red-necked, and later increased the number of sites and expanded survey timing to June through September. The group completed the first full survey of 24 salt ponds and seven areas outside the salt ponds in 2021.

Because Phalaropes are only in the Bay Area for a short time, it is difficult to accurately count them using the salt pond survey protocol that SFBBO uses for other species. By expanding and deliberately targeting the site locations and conducting surveys every other week, SFBBO can better understand when Phalaropes migrate through this region and their preferred habitats. This will help members of the South Bay Salt Pond Restoration Project and other conservation efforts devise resource management strategies to support them.

SFBBO is also sharing the research with the International Phalarope Working Group (www.oikonos.org/initiatives/international-phalarope-working-group), a collaboration of organizations studying these species to expand the impact of the research and increase knowledge about these birds.

The Phalarope surveys are an example of the South Bay Salt Pond Restoration Project's adaptive management approach, through which Bay Area scientists are able to contribute to a larger effort to understand imperiled species across their migration routes.

Additional resources on Phalaropes

San Francisco Bay Bird Observatory's Phalarope Research Page: www.sfbbo.org/phalaropes.html

Cornell Lab information about Wilson's Phalaropes: www.allaboutbirds.org/guide/Wilsons_Phalarope

Cornell Lab information about Red-necked Phalaropes: www.allaboutbirds.org/guide/red-necked_Phalarope

Excerpts from *Keeping Oak Woodlands Healthy—If the birds are there the oak woodland is healthy*

Photo courtesy of © Ryan DiGaudio, Point Blue Conservation Science

Ash-throated Flycatcher, an oak woodland focal species photographed at Cache Creek.

Published by Natural Resources Conservation Service and Point Blue Conservation Science, this two-page handout provides summary information on stewardship and restoration of working landscapes to optimize habitat conditions for 12 focal bird species, as exemplified by the Western Bluebird example, below. See the Resources column on page 5 for information on downloading the handout.

HOW YOU CAN HELP

- **Contact NRCS** to help create a grazing management plan that will reduce disturbance to nesting birds and other wildlife.
- **Retain a mix** of living and dead trees, especially those with cavity holes for nesting birds.
- **Protect and enhance** the shrub layer. Healthy oak woodlands should have a mix of small and large shrubs.
- **Protect young oaks**, and foster regeneration by keeping healthy forest layers.
- **Protect water resources** by enhancing access areas to reduce runoff and erosion.
- **Plant native grasses**, flowers, shrubs, and trees on your property to create habitat for nesting birds and wildlife.
- **Create habitat corridors** and plant a mixture of habitat types in your shelterbelts that include dense areas interspersed with open grasslands.

Contact your local NRCS for technical and/or financial help with these beneficial activities.

	Western Bluebird
Photo Courtesy of Tom Grey	
Tips for a Healthy Habitat	Retain cavity trees or snags. Remove non-native birds nesting in bluebird habitats.
How to Identify	7-inch bird with blue head and upper-parts with red breast and gray belly.
Nest Site Layer in Forest	Occupies empty cavity holes in trees. Usually in 20% or less canopy cover.
Feeding Forest Layers	Eats ground-dwelling insects although will catch flying insects. Relies on berries in winter.

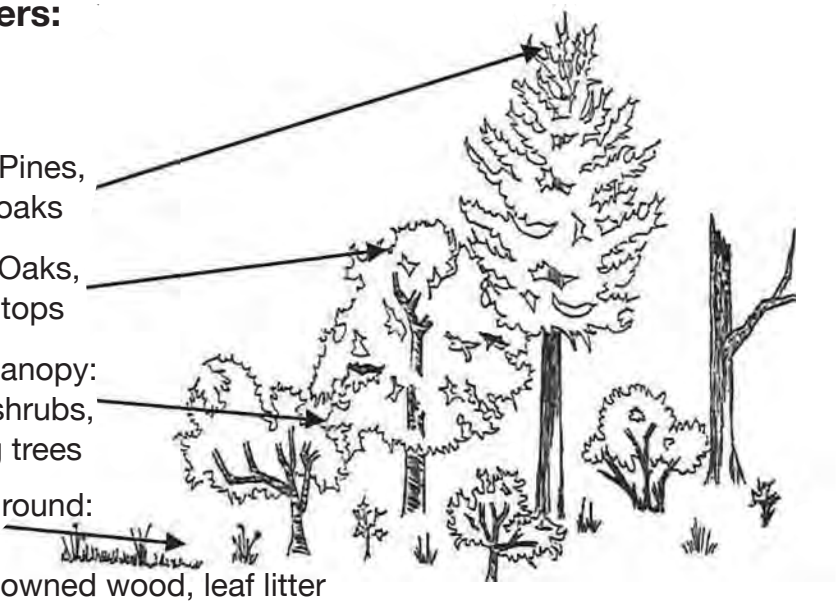
Critical Care Woodland Forest Layers:

Top Canopy: Pines, large mature oaks

Mid-canopy: Oaks, snags, shrub tops

Interior Mid-canopy: Oak interior, shrubs, cavities, snag trees

Understory/Ground: Bunch grass, low shrubs, downed wood, leaf litter



Scrub Jays Help Oak Forests Survive

The ***Western Scrub Jay*** "plants" acorns for winter food, but many are never eaten and instead grow into oak seedlings. Without jays, the oaks don't grow. The jays need shrubs amongst the trees to feed and raise their young. If shrubs are absent, Scrub Jays are too, and the next generation of trees may not be planted.

Photo courtesy of © Ryan DiGaudio, Point Blue Conservation Science

Bullock's Oriole at Pinnacles National Park (In addition to the focal species there are many other bird species that rely on oak woodland habitat in California.)

— continued from page 1

ulations of bird focal species, other plant and animal species will likely benefit as well.

Guided by the *Oak Woodland Bird Conservation Plan* (published by California Oaks in 2002), partner biologists are using bird presence data collected on ranches across California to develop conservation recommendations. Developed by California Partners in Flight and Point Blue (formerly Point Reyes Bird Observatory), the plan supports the long-term viability and recovery of native bird populations and other native species.

By viewing the landscape from the perspective of bird focal species, both ranchers and conservationists can gain a deeper understanding of the condition of the landscape and opportunities for restoration and stewardship of oak woodlands. For example, the absence of cavity-nesting birds, such as Ash-throated Flycatcher, can indicate the lack of mature trees and standing snags. The absence of shrub-nesting birds, such as California Scrub-Jay, can lead to recommendations to increase oak germination and seedling survival as well as the recruitment of associated shrub species by modifying the timing and intensity of grazing.

The conservation actions that result from this work are tied to multiple ecosystem elements that extend beyond oaks and the biodiversity they support. For example, in a time of unprecedented drought in California, stewardship actions that benefit the water cycle are more important than ever. Conserving and restoring oak trees has direct benefits to soil health, which can in turn benefit the water cycle through increased infiltration and water storage capacity.

The bird focal species concept connects land managers to biodiversity outcomes of stewardship decisions, and in doing so, builds trust across communities in these measures and inspires additional adoption of conservation practices. As threats from climate change and land use change grow, it is increasingly important to leverage broad coalitions of conservation partners. Oak woodland bird focal species offer an effective tool to understand the condition of oak woodlands and point to restoration and stewardship actions that benefit oaks and the wildlife that depend on them.

For more information, visit www.pointblue.org/tools-and-guidance/farming-ranching/ and click on "read more" under "Farm and Ranch Management Tools." Also see the Resources column on page 5, and see page 7 where sections of an oak woodland bird focal species handout are reproduced.

Acknowledgements

The **Board of Directors** supports the important conservation efforts of California Wildlife Foundation/California Oaks (CWF/CO). Members, the staff, partners, and contractors join in thanking Ellen Maldonado, Chair; Jim Lightbody, Treasurer; and Lynn Barris, Secretary, for their time and dedication to California's environment.

Special thanks to CWF/CO Advisor Janet L. Byron, who provided editorial support and guidance in development of the newsletter.

Many thanks also to CWF/CO Advisor Diane Walton, Helen Canin, and Stephanie Berger for assistance with the newsletter, and to CWF/CO's stellar volunteer, Rosemarie Aguilar, for her ongoing assistance.

Newsletter design by Darren Quin, Alpha Omega Print and Imaging.

How you can help:

- Donate to California Wildlife Foundation/California Oaks. A secure donation can be made from our website: californiaoaks.org.
- Spend time in an oak woodland or forest. Click on californiaoaks.org/resources for a partial listing of oak landscapes around the state that have public access.
- Please consider including oak conservation in your financial and estate planning efforts. Information can be found at: californiaoaks.org/donate.
- Be vigilant about threats to oak woodlands and oak-forested lands in your community and consult californiaoaks.org for guidance.
- Restore oaks to areas where they historically grew.
- Sign up for the *Oaks* e-newsletter at californiaoaks.org.
- Support local and statewide measures to protect natural resources.
- Hold decision-makers accountable for protecting green infrastructure.
- Read about "opportunities for engagement" in the Oaks of the Californias article (page 4).
- See the "How you can help" excerpt from the *Keeping Oak Woodlands Healthy* handout (page 7).

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CALIFORNIA WILDLIFE FOUNDATION
CALIFORNIA OAKS FUND

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Latin names are used for species with designated state or federal conservation status.