# THE HOOT OWL

September / October 2021 Issue 5, Volume 59

# PROGRAMS

There will be no in-person general membership meetings until Covid-19 pandemic conditions allow. In the interim, we will do our best to offer programs via Zoom or other media.

#### TUESDAY, September 14, 7:00 p.m. VIRTUAL MEETING Keith Hansen

*"Hansen's Field Guide to Birds of the Sierra Nevada"* 

Keith will be talking with us about his new book of illustrations, "Hansen's Field Guide to Birds of the Sierra Nevada." From tiniest hummingbirds to condors with nine-foot wingspans, from lower-elevation wrens to the rasping nutcrackers of the High Sierra; from urban House Sparrows to wild water-loving American Dippers, this new field guide showcases Keith's sixteen-year project to illustrate the birds of the Sierra Nevada.

Coming from a long line of artists, Keith took up illustrating birds in 1976, his senior year of high school. After extensive travel, he volunteered for the Point Reyes Bird Observatory, both at the Bolinas Palomarin Field Station, and nine adventures to the Farallon Islands. Capturing and gently handling hundreds of birds for banding studies gave him an intimate understanding of their build, anatomy, plumage and character, all crucial things for a budding bird artist. Over the years, Keith has created bird illustrations for books, scientific journals, magazines, newsletters, and logos. His workspace, The Wildlife Gallery, is located in Bolinas.

#### MONDAY, October 25, 7:00 p.m. VIRTUAL MEETING Barbara Barrigan-Parrilla

"Restore the Delta, Tunnel Update"

This is our annual ioint meeting with the Delta-Sierra chapter of the Sierra Club. Barbara will give us an update on the Tunnel project and the effect it will have on the Delta and its wildlife. San Joaquin Audubon Society San Joaquin Audubon Society



Red Fox at Lodi Lake nhoto hv Pat Paternostro

# FIELD TRIPS

# SATURDAY, September 4— Introductory Birding Field Trip

Join leader Pat Paternostro at the north end of Laurel Ave. in Lodi (on the east side of Lodi Lake Park, off of Turner Rd.) at 8:00 a.m. Birders of all skill levels are welcome, but the focus will be on birding fundamentals. Extra binoculars and field guides will be available.

## SATURDAY, September 18— Woodbridge Wilderness

Join leaders Kathy and Virginia Bonham for our monthly census of this small riparian park on the banks of the Mokelumne River. Meet at the north end of Meadowlark Lane in Woodbridge at 8:00 a.m.

## SUNDAY, September 19— Mokelumne River Fish Hatchery

Join leaders Joanne Katanic for our monthly census of this lovely little riparian area below Camanche Dam. Meet Joanne in the fish hatchery parking lot at 8:00 a.m.

#### SATURDAY, October 2— Introductory Birding Field Trip

Join leader Pat Paternostro at the north end of Laurel Ave. in Lodi (on the east side of Lodi Lake Park, off of Turner Rd.) at 8:00 a.m. Birders of all skill levels are welcome, but the focus will be on birding fundamentals. Extra binoculars and field guides will be available.

## SATURDAY, October 16- Woodbridge Wilderness

Join leaders Kathy and Virginia Bonham for our monthly census of this small riparian park on the banks of the Mokelumne River. Meet at the north end of Meadowlark Lane in Woodbridge at 8:00 a.m.

## SUNDAY, October 17- Mokelumne River Fish Hatchery

Join leaders Liz West and Joanne Katanic for our monthly census of this lovely little riparian area below Camanche Dam. Meet Liz and Joanne in the fish hatchery parking lot at 8:00 a.m.

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# In Orchards and Vineyards, Birds Outperform Pesticides



Barn Owl in young vineyard, photo by Ryan Barbour

Barn Owls love nest boxes. And around the world, many farmers love Barn Owls as a way to control pests, says Matthew Johnson, professor in the Department of Wildlife at Humboldt State University in northern California.

Johnson says farmers in South America and Africa, and palm growers in Malaysia, attract Barn Owls to control rats. Israel has a national program for installing Barn Owl nest boxes in farmlands. So Johnson's interest in Barn Owls was piqued as he drove around California wine country.

"I kept seeing these Barn Owl nest boxes in vineyards and thought those have got to be up for more than just feeling good. The farmers have put those up in hopes of trying to control rodents," he says. "But there hadn't really been a lot in terms of scientific research on the topic."

In 2015 he and his students began studying the value of Barn Owls in California vineyards, where pocket gophers and voles damage crops at the rate of \$26 to \$58 per acre. Their research, including video cameras mounted inside nest boxes, show that each chick in a brood consumes on average nearly 200 prey items—mostly gophers, voles, and mice—during the 10 weeks before it fledges from the nest box. Says Johnson, "We estimated 3,000 rodents killed over the course of the year by a single family of Barn Owls."

Beyond documenting the prodigious appetites of Barn Owls, Johnson also found that the owls showed a strong preference for boxes placed near natural cover, such as grasslands and oak savanna. That begged another question: Are the owls nesting in the vineyards hunting amid the grape vines, or do they prefer eating rodents in the nearby wild areas? So they tagged some of the owls with GPS tracking devices, which revealed that even with native habitat nearby the owls spent a third of their time hunting in cultivated land.

Johnson's advice to vineyard owners for maximizing the opportunities for getting Barn Owls in nest boxes: Leave some wild habitat near the areas where owl boxes are posted, which he says creates "an incentive for the farmers to conserve those uncultivated habitats—the riparian areas, the oak woodlands, and so on [that have] strong conservation benefits for all sorts of species, not just the Barn Owls.

Says Johnson, "I'm interested in two sides of the same coin. How can farms be good for wildlife? And on the flip side, how can some of those birds or wildlife be good for the farmers? Ecologists tend to use the term "eco-system services" to describe nature's benefits to humans, but Johnson uses a different term. "I think a better way to describe it is more like a gift economy," he says. "This is something we've learned from indigenous cultures. That is, if people do things for wildlife, wildlife will do things for people."

# In Orchards and Vineyards, Birds Outperform Pesticides

(Continued from Page 2)

In California, Western Bluebirds play a big role in eating pests because they are so easily lured to a nesting box.



Western Bluebird, photo by Kurt Mize

To estimate how many insect pests bluebirds and other insect-eating songbirds ate, Julie Jedlicka—an associate professor of biology at Missouri Western State University—set up an experiment with so-called sentinel prey. She immobilized live beet armyworms and placed them around California vineyards, some with bluebird nest boxes and some without. By recording the number of armyworms that the birds ate, she could estimate the effectiveness of bluebirds as predators of many kinds of insect larvae.

She discovered that nest boxes quadrupled the number of insectivorous birds; Western Bluebirds alone increased tenfold. In vineyards with nest boxes, the birds ate 2.4 times more of the sentinel prey than in areas without boxes.

A similar sentinel prey experiment showed the value of birds in California walnut groves. The Central Valley produces 99% of walnuts exported from the United States, "so it's a really big deal for that localized economy," says Sacha Heath, now a biodiversity postdoctoral fellow at the Living Earth Collaborative.

Heath's experiments with setting out codling moth larvae at orchards in the Sacramento Valley showed again that birds excel at pest control. Nuttall's Woodpeckers and White-breasted Nuthatches flicked off flakes of bark to get at the moth cocoons. Sapsuckers, Bushtits, Bewick's Wrens, and Northern Flickers also found the pupae. Birds ate four times as many larvae as spiders and insects. Notably, the songbirds were far more effective in orchards with a lot of natural habitat within 500 meters.

But nest boxes are only the first step. Restoring natural habitat, even just a few acres, to farms and other working landscapes is the best way to attract a range of beneficial species. While raptors and songbirds eat the pests, hummingbirds and bumblebees act as pollinators. At the same time, natural habitat sequesters carbon and soaks up runoff to keep groundwater, streams, and lakes cleaner.

#### Adapted from:

Breining, Greg. (June 25, 2021). At Orchards and Vineyards, Birds are Outperforming Pesticides. All About Birds. https://www.allaboutbirds.org/news/at-orchards-and-vineyards-birds-are-outperforming-pesticides

# **BIRD SIGHTINGS**

June 23, 2021 - August 13, 2021 (All sightings pertain to San Joaquin County) Submitted by Liz West

Virginia and Kathy Bonham found two **Bank Swallows** in amongst perched Tree Swallows at the Lodi Sewage Ponds, July 13<sup>th</sup>.

On August 9<sup>th</sup>, David Yee reported a **Solitary Sandpiper** at the Lodi Sewage ponds. It then was flushed by Swainson's Hawks and disappeared to the east.

David Yee saw an immature **Rose-breasted Grosbeak** with Black-headed Grosbeaks, August 10<sup>th</sup> on private property east of Lodi.

At the Heritage Oaks Winery feeders, David Yee found an immature Costa's Hummingbird on August 10th.

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# **Other California Birding E-mail Listserves**

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By joining the National Audubon Society you are also a member of the San Joaquin Chapter. This includes subscriptions to the award-winning quarterly *Audubon Magazine* and to the bimonthly chapter newsletter, *The Hoot Owl*. For *national membership*, send check payable to the **National Audubon Society** to the address below. • National Audubon Membership Rate: \$20

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