WHY SNAGS MATTER
by Shannon Underhill and Tim Bray

Wildlife, insects, and plants have evolved to make use of a tree in every stage of its life. Seeds, fruit and flowers during a tree’s mature years provide a cornucopia for hundreds of bird species. The coffeeberry trees along the Enchanted Trail attract locals and vagrants alike. The many species of cone-bearing trees along our coast are much beloved by resident birds such as the Chestnut-backed Chickadee and Pygmy Nuthatch and irruptive species like Red-breasted Nuthatch, Red Crossbill, and Pine Siskin. Beyond food, trees provide shelter and cover for nesting, roosting, and foraging.

As trees age, bark beetles burrow, sapsuckers drill holes in tidy rows, windstorms wreak havoc, humans make poor pruning choices, and fungus sets in. These days, either drought or extreme rains can undermine a tree’s capacity to combat infestations or recover from injury. If these pressures occur slowly over time and the tree has been able to grow to old age, then the result is what

Continued on page 2

Purple martins nesting in a snag. Photo by Shannon Underhill

Great horned owl perched atop a snag. Photo by Tim Bray
arborists call a veteran tree. It may have a small portion of living wood surrounded by snags, cavities, cankers, deadwood, broken or sagging branches, fallen limbs scattered about the base of the tree, and various scars from the past and present work of insects, birds and fungus. Trees that succumb sooner may exhibit fewer of these characteristics, but they are equally valuable to wildlife in the forest. They will all eventually become snags: dead trees that are still standing.

Dead and dying trees are often seen as eyesores, defective or even dangerous. Standing dead trees are a stark visual reminder of death, which is uncomfortable for most people, so they are often removed to make way for healthy, aesthetically pleasing green trees. This aversion manifests as public policy when CalFire directs “salvage logging” operations to remove dead trees after a forest fire. Yet researchers in the last few decades have proven what many close observers already knew: dying and dead trees are vital to a healthy forest ecosystem and an irreplaceable resource for birds and other wildlife.

A walk along the Enchanted Trail or the Lake Cleone loop trail north of Fort Bragg presents a mixed-age forestscape dotted with a collection of uniquely shaped snags. Almost every visible snag has a wide variety of cavities along its length. These cavities are usually created by wood-boring birds searching for insects or sap. Downy and Hairy woodpeckers peel away bark and excavate to find wood-boring beetles and larvae, while the occasional Pileated Woodpecker makes quick work of the decaying bark and sapwood, creating deep rectangular holes in search of carpenter ants, beetles and termites. Acorn Woodpeckers use certain snags to store acorns, drilling numerous holes in the relatively soft wood and jamming the nuts in tightly so they cannot be stolen by jays or squirrels. These trees are referred to as “granary trees” and represent a huge investment of energy and resources, often over many years.

Larger holes are drilled by woodpeckers for nest cavities, and they excavate a new one every year. The older cavities are then often occupied by other species. Western Bluebirds, Purple Martins, Violet-green Swallows, Chestnut-backed Chickadees, Pygmy Nuthatches, and Pygmy-owls, among others, nest in such cavities. In early spring, you may see intense competition among birds

Continued on page 3
Continued from page 2

for these nooks and crannies. The cavities offer warm, dry, wind-resistant and defensible nesting locations, and they require less energy to maintain than an open air nest clinging to a tree branch. These factors play a significant part in both nest retention and fledgling success.

Raptors, such as Ospreys or Eagles, may build a nest on top of an old snag with a blunt top. From this vantage point, a raptor can nest, rest, and hunt from one location. A prominent local example is the Osprey nest located at the boat ramp parking lot on the south side of Noyo River.

You have undoubtedly seen birds making use of the open structure of snags for perching. Turkey vultures spread their wings to warm in the morning sun and keep tabs on feeding opportunities with their keen sense of smell. Black Phoebes prefer people-sized snags as perches for insect hunting. The males of many species use the top of snags to show off their colors and broadcast their song. Snags allow birds with ample wingspans like Great Egrets and Great Blue Herons to land and rest. Raptors may take advantage of the unobstructed views and room for lift off to hunt other birds or mammals.

Along the coast, many of our bluff and near coast woodlands have stands of Bishop Pine. Like many trees in California, this is a closed cone, serotinous species, meaning its cone only opens when exposed to the high heat of a fire. Decades have passed since a wildfire passed through these woodlands, so many areas have a high number of snags but few young trees. At the moment, these woodlands are still mixed with a variety of mature trees and snags that maximizes biodiversity and habitat. Without fire, these Bishop Pine forests will eventually age into a stand of mostly snags, or be replaced by other tree species. This process may be accelerated by climate change as the extremes of drought and severe storms impact our coast.

If you arrive at a stand of snags in the early morning during the nesting season or Fall migration, you are likely to see a bustling avian community—locals, migrants and vagrants attracted to the foraging, resting and nesting opportunities that only snags can offer. You might see a Kingfisher perched on the last, long gray branch of a snag at the water edge. Nearby, a Mallard or Common Merganser may be half-asleep on a fallen limb from the same snag. These are not just pleasing arrangements of birds in their natural surroundings, they are opportunities for food, rest and reproduction that birds have evolved to use. Stable ecological processes produce stable bird populations, and snags are important participants in these forest ecosystems. And whether a snag is on your property, at the Mendocino Coast Botanical Gardens, or in a State Park, their presence often signals a great opportunity for birdwatching.

Next Month: Snags, Salvage Logging and Wildfire
When should a snag be removed? Perhaps a snag on your property is tilting toward your home or driveway as the rainy season sets in. Or perhaps a snag or its rotting limbs threaten a roadway or power line. This are situations when a snag might be dangerous. When an old snag is eager to become a nurse log, then you have several options available. If possible, cut the snag down to a height that won’t risk your home or driveway, but still allows birds to use the elevated perch. Leave the cut portion of the snag on your property as a nurse log, and both the nurse log and the remaining, safer snag will continue as a restaurant and condominium for wildlife. If the whole tree must come down, then find a quiet place away from wood structures to lay it down — the fungi and insects will arrive, followed by the critters that create burrows underneath its expanse, and those that feed on the busy life accumulating along the length of it. You will be rewarded for it.

**RECAP OF 2021 BLACK OYSTERCATCHER SURVEY**

*By Dave Jensen, photos by Roger Adamson*

This was the tenth year that volunteers from your chapter have joined in Audubon’s Pacific Coast Black Oystercatcher Breeding Survey. Groups from San Luis Obispo, Monterey, San Francisco Bay, Sonoma County and Oregon also participated in this year’s study.

The Mendocino study region stretched from the mouth of the Navarro River to Laguna Point and included the following eleven survey areas: MacKerricher Park, Glass Beach, the North Mill Trail and Pomo Bluffs in Fort Bragg, South Caspar, Point Cabrillo, north and south Russian Gulch, Mendocino headlands, Spring Ranch, Little River headlands, and the Navarro headlands.

Nineteen volunteers participated this year. They studied 51 nesting pairs. A total of 47 chicks were observed in 22 of the nests. Ultimately, 24 of those chicks successfully fledged. Despite the nests that were abandoned, the eggs that were lost or simply failed to hatch, the hatchlings that were lost to physical accidents or predation, this was a very successful year for the birds. In contrast, the study area that spans from Point Lobos to Pigeon Point (Monterey, Santa Cruz and San Mateo counties) reported that of the 51 nests that were monitored, 4 of them fledged only 7 chicks.

We would like to thank the following volunteers who contributed so many hours to this year’s effort:

Roger Adamson, Alison Cebula, Sue Coulter, Terra Fuller, Jim Gibson, Bill Heil, David Jensen, Dan Knowles, Jean Mann, Peggy Martin, Charlene McAllister, Tess McGuire, Art Morley, Gail Nsentip, Linda Perkins, Sonya Popow, Marcia Riwney, and Les Rohssler. A special note of thanks is given to State Parks employee Amelia Schall, who once again coordinated with the volunteers to help make this year’s effort such a success.
As most of us are well aware, the local Raven population has greatly increased, with serious implications for breeding shorebirds and unsecured garbage bags. This problem has become more evident since the City of Fort Bragg opened the coastal trails on the former GP mill site. Visitors and locals alike seem to take great pleasure in feeding the Ravens and ground squirrels, thus attracting even more of those species.

Early this year a group of chapter leaders (Becky Bowen, Terra Fuller and Tim Bray) decided that it was time to approach the City of Fort Bragg to see if something could be done to stop the indiscriminate feeding of Ravens and other wildlife along the coastal trail. In late February, Terra sent a letter of concern to the City Council. Tim Bray followed with a formal letter from the chapter in which he not only reiterated the serious problems caused by excessive feeding of wildlife but also used data from the chapter’s Save Our Shorebirds surveys and Christmas Bird Counts to document the sudden rise in the local Raven population.

A series of communications then ensued between your chapter and the City. In particular, Terra Fuller provided the City’s Associate Planner Heather Gurewitz with applicable state regulations, model ordinances passed by other communities, and other supporting information. On March 17 the City’s Health and Safety Committee discussed a possible feeding ban in their regularly scheduled meeting. The two committee members, Lindy Peters and Mayor Bernie Norvell, listened (via Zoom) to testimony from MCAS members Terra Fuller, Tim Bray, Cate Hawthorne of Liquid Fusion Kayaking, and Dave Jensen. Both committee members seemed to be supportive of the action and on April 12 the City Council instructed Ms. Gurewitz to draft an appropriate ordinance.

Tim and Terra continued to work with Heather until the draft ordinance was brought before the full City Council on September 13. After a brief discussion the Council unanimously passed the ordinance, which became effective on October 27 of this year. In short, new Chapter 7.18 of the City of Fort Bragg Municipal Code bans the feeding of Wildlife on public or private property in the City of Fort Bragg – with the following exceptions. Landscaping that provides forage for wildlife is allowed. Bird feeders are allowed on private property as long as they are suspended to prevent easy access by other wildlife, are kept clean, and do not attract rodents or other wildlife other than birds. Full text of the ordinance is available for review on the chapter’s website.

Simply passing a law does not solve a problem, so what’s next? Your chapter will help the City develop and create educational signage to be located along the City’s coastal trail, where the incidence of wildlife feeding seems to be the greatest. We will also assist with the development and delivery of press releases and other educational efforts, including outreach to local schools. We will continue those efforts next summer as tourists return, using Public Service Announcements and Facebook posts.

In next month’s newsletter we will begin to discuss how to responsibly provide supplemental feed for wintering birds in your yard. We will be presenting a series of articles on feeder types, seed selection, and disinfection as well as the pros and cons of using bird feeders in your yard.
You are cordially invited to join our Save Our Shorebirds volunteers to participate in a weekend event that celebrates shorebird conservation on six continents. The project, organized by Wader Quest, a registered charity organization headquartered in Cambridgeshire, England, invites birdwatchers to go out on Saturday and/or Sunday, November 6 and 7 to a local location to record shorebird observations. Contact Becky Bowen casparbeck@comcast.net to get a location/beach assignment, then submit your shorebird counts according to instructions in the above poster. In 2020, at this annual event, 489 participants from 53 countries and 9 flyways recorded a total of 167 species. Participants receive a detailed report that includes such species as Pin-tailed Snipe, Least Seedsnipe, and Sociable Lapwing—including our Mendocino Coast counts of Black Turnstones (rarely seen in other countries by birders who consider these turnstones “uniquely exotic.”)
We’re continuing with suggestions for us all to do our small parts in helping to reduce carbon emissions.

**Turn off the lights**

Mom’s right, again! Even if you turn off the light for just a few seconds you will save more energy than it takes for the light to start up again, regardless of what kind of light.

**Switch to LED light bulbs**

Traditional incandescent light bulbs waste 95% of the energy to heat and only 5% toward light. In production, CFL and LED bulbs give off 80% less Co2 emissions and use 75% less electricity. Unfortunately, CFL’s have a small amount of mercury in them and must be disposed of properly. The best option is LED’s and though they cost more, they should last 25 times longer!

**Unplug**

It’s estimated that 75% of the energy used to power our household electronics is consumed when they are not being used but not actually turned off. Unplug computers, printers and televisions when not in use and especially on vacation. They now have ‘smart or advanced’ power strips which will turn off electronics when not in use. Don’t charge your phone overnight, it only takes 2 hrs. Then unplug that charger!

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**LONE PACIFIC GOLDEN-PLOVER**

*By Becky Bowen*

This solitary Pacific Golden-Plover showed up on an MCAS Save Our Shorebirds survey October 16 at Inglennook Fen-Ten Mile Dunes Preserve in MacKerricher State Park. The bird pictured here is getting out of the brilliant golden plumage of breeding season during Alaskan and Siberian summers. Migration to wintering grounds takes Pacific Golden-Plovers on 2,000+-mile journeys to islands across the Pacific. Trans-ocean migration makes the bird a rare sighting here in autumn along the Mendocino Coast according to county records. Audubon members Lisa D. Walker-Roseman and Roger Adamson also reported sightings of one Pacific Golden-Plover during hikes on Virgin Creek and Ward Avenue Beach from October 12-15, 2021 – possibly the same bird.

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**CLIMATE CORNER: TURN IT OFF**

*By Pam Huntley*

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NOVEMBER EVENTS

Whitney A. Watson Presents:
CHARACTERIZING BARRED OWL DISPERSAL AT THE LEADING EDGE OF THEIR RANGE EXPANSION

Monday, November 15 at 7:00 PM
Via Zoom www.mendocinocoastaudubon.org

The range expansion of the Barred Owl (Strix varia) into western North America over the last century has emerged as a major threat to the Northern Spotted Owl (S. occidentalis caurina) and likely to the health of western forest ecosystems more broadly. A better understanding of Barred Owl natal dispersal, one of the primary driving mechanisms of range expansion, is needed for the implementation of effective management. Whitney led a team of researchers in the attachment of satellite-GPS tags to juvenile Barred Owls in the Coastal Redwood Region of northern California in order to characterize their movement, survival, and habitat selection as they disperse from natal territories. These tags allow for fully remote tracking of owls and have the potential to provide locations of owls up to 1.5 years past the date of deployment. She has been following the movements of 31 juvenile Barred Owls tagged during the summers of 2020 and 2021, and will discuss preliminary findings regarding their survival rates, dispersal distances, and habitat use during dispersal.

Whitney Watson is a master’s student in the Department of Forest and Wildlife Ecology at University of Wisconsin - Madison studying the spatial ecology and bioacoustic detectability of Barred Owls in the western U.S. She grew up in Minneapolis, MN and received a B.A. in Biology from Macalester College in Saint Paul, MN, where she developed an interest in wildlife ecology while conducting research on tent-roosting bats in Costa Rica. She worked in forestry and wildlife management in the Midwest and contributed to research on various ecological systems across the U.S. before becoming involved with Spotted Owl and Barred Owl research on the West Coast.

South Coast Raptor Trip
Saturday, November 13 from 9:00am – 4:00pm

Meet at the top of Navarro Beach Rd. just south of the Hwy.1 bridge. We will drive down Highway 1 as far as Point Arena and stop at pullouts to scan for raptors and anything else that looks interesting. These are the wintering grounds for Ferruginous Hawks, American Kestrels and White-tailed Kites. Bald Eagles are a good possibility as well as Peregrine Falcons. This is mostly a driving trip with some walking. Bring lunch, water, binoculars and good shoes. Rain cancels.
CALENDAR

Our field trips and birdwalks are open to anyone who is fully vaccinated against COVID-19. The Beginner’s Birdwalk and the Early Birdwalk at the Gardens are continuing on the regular schedule. Our monthly Chapter presentations continue via Zoom. As always, check our website for the most up-to-date information, and keep up with the postings on our Facebook page.

NOVEMBER 2021

Saturday 6 - Beginner’s Bird Walk* 9:00 a.m. - Noon
Mendocino Coast Botanical Gardens, 18220 Highway 1, Fort Bragg, CA 95437

Saturday 13 - South Coast Raptor Trip  9:00 a.m. – 4:00 p.m.
Meet at the top of Navarro Beach Rd. just south of the Hwy.1 bridge. See page 8.

Monday 15 - Audubon Society Meeting  7:00 p.m. - 8:00 p.m. via Zoom
Join us for a presentation on barred owls. More information on page 8.

Wednesday 17 - Early Bird Walk**  8:30 a.m. - Noon
Mendocino Coast Botanical Gardens, 18220 Highway 1, Fort Bragg, CA 95437

DECEMBER 2021

Saturday 4 - Beginner’s Bird Walk* 9:00 a.m. - Noon
Mendocino Coast Botanical Gardens, 18220 Highway 1, Fort Bragg, CA 95437

Wednesday 8 - Audubon Society Board Meeting  6:00 p.m.
Contact Tim Bray for more information.

Monday 13 - Audubon Society Meeting  7:00 p.m. - 8:00 p.m. via Zoom
Join us for a presentation on the Christmas Bird Count.

Wednesday 15 - Early Bird Walk**  8:30 a.m. - Noon
Mendocino Coast Botanical Gardens, 18220 Highway 1, Fort Bragg, CA 95437

Saturday 18 - Ukiah CBC

Monday 27 - Fort Bragg CBC

**Mendocino Coast Botanical Gardens (18220 Highway 1, Fort Bragg, CA )
The following safety precautions will be required:
- Leave 6 feet of space between you and others not in your party. If passing another visitor on a trail, please announce yourself and provide space for fellow guests to pass.
- Bring your own water and binoculars.

For complete and current calendar, updates, and useful links, visit:
www.mendocinocoastaudubon.org
www.facebook.com/mendocinocoastaudubon
### MCAS BOARD MEMBERS AND PROGRAM CHAIRS 2020-2021

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Mendocino Coast Audubon Society e-mail address: audubon@mcn.org

### MISSION STATEMENT

The mission of the Mendocino Coast Audubon Society is to help people appreciate and enjoy native birds, and to conserve and restore local ecosystems for the benefit of native birds and other wildlife.

### MENDOCINO COAST AUDUBON SOCIETY

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