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Bulletin of the Sequoia Audubon Society San Mateo County Volume 41, No. 6 March. 1993

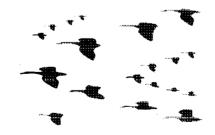


## This Month's Program Arizona Birds (with a Touch of Texas)

Jim Lomax from the Mt. Diablo Audubon Society will present a slide show on birds from Southeast Arizona. His slides include over 140 species including the common black-hawk, gray, zonetailed, Harris and white-tailed hawks; twelve hummingbird species including lucifer, buff-breasted, violet-crowned and plain-capped starthroat; nineteen species of flycatcher including vermilion, sulphurbellied, great kiskadee, northern beardless tyrannulet and five kingbirds; olive, red-faced, Grace's and Lucy's warblers; olive, Botteri's, Cassin's, rufouswinged, and five-striped sparrows; long-billed and curve-billed thrashers; as well as Mexican chickadee, black-capped vireo, and bronzed cowbird.

Jim is an avid birder and accomplished photographer who has visited these areas many times over a six year period.

The program follows the General Meeting. General Meetings are held on the second Thursday of the month at the San Mateo Garden Center, on the Alameda at Parkside. Refreshments served at 7:30 PM with the meeting following at 8:00.



Next Month's Program

The Endangered Clapper Rail - An Update

With Elaine Harding Smith, US Fish and Wildlife Service Biologist



### From Your President

#### Anne Moser

We hope that the years ahead will be known as years of service. We have so many opportunities close to home to give of our time and talents.

For example, our Nominating Committee is hard at work again looking for good officer and board candidates. You might consider volunteering for one of these offices or to work on a committee. Our organization needs new people whop are willing to get involved.

One of our responsibilities as a founding chapter of Audubon Canyon Ranch is to act as hosts during the Ranch's public season. This year, the dates for which we are responsible are March 13, 14, 20, 21, 27 and 28 and July 3, 5, 10, and 11. Hosting is an easy way to feel good and enjoy the facilities of one of the outstanding environmental education centers in the nation. All you have to do is greet the visitors and tell them about the Ranch's facilities. Please call the office (345-3724) or Rick Baird (574-1067) to volunteer.

Does anyone have a few hours free to catalogue the books and magazines in our office? This hasn't been done for a number of years and we need to bring our listing up to date. This is a job that would be very appreciated. Then we'd know what we have available and could make available to others. Call Anne



Moser (324-1718) or the office if you can help.

Outside of Audubon, the National Park Service is looking for volunteers at Alcatraz Island. Look for more information inside the NEEDLES.

It's that season again! If you're going out birding, hiking or just enjoying the outdoors you should know how to avoid Lyme Disease. If you missed Audubon Canyon Ranch's program on February 28, you'll find a helpful article inside on page seven.

We have some surplus equipment that's occupying needed space. If you have a need for any of these we would entertain any reasonable offer (and we're very reasonable.)

> Scriptomatic Addressing Machine and Supplies Compaq "Luggable" Computer - (No Hard Disk) Bell & Howell 16MM Film/Sound Projector Amplivox Microphone

If you're interested call Anne Moser (324-1718) or the office.



# The S A S Calendar March

THURSDAY, MARCH 4 - SAS BOARD MEETING. 7:30 PM at the SAS office. ALL MEMBERS ARE WELCOME. Please call ahead to be sure there will be enough room.

SATURDAY, MARCH 6 - FOSTER CITY BY BICYCLE

Enjoy the many species of Foster City birds while biking. Using bicycle paths we will make a complete circle around the city. Most winter birds should still be here - and some will we developing breeding plumage. The bikes let us cover more ground than we would by either auto or foot so we should see more species. The bikes let us cover more ground than we would by either auto or foot so we should see more species. (74 species were counted on a similar trip on January 10). We will meet - with bicycles - at the parking lot on the southeast corner of Foster City Boulevard and Beach Park Boulevard at 8:30 AM. The trip should last until noon. Limited to 8 participants. To reserve a space call the Sequoia Office at 345-3724.

**LEADERS** 

NICK COIRO AND LINDA KYPTA

#### WEDNESDAY, MARCH 10 - STERN GROVE FIELD TRIP

This little park in San Francisco was "discovered" a few years ago by local birders seeking a rare brown-crested flycatcher. To get there take 19th Avenue (Hwy. 1) north through San Francisco. From 19th Ave. you have to take a left turn onto Sloat. Unfortunately you can't take a left turn there so you have to go past it, find the first place you can take a U-turn and come back to Sloat. From Sloat take a right on Vale and go downhill into Pine Lake Park to the parking lot. We'll meet there at 9:00 AM.

**LEADERS** 

NICK COIRO AND LINDA KYPTA

THURSDAY, MARCH 11 - SAS GENERAL MEETING - THE BIRDS OF SOUTHEAST ARIZONA (with a touch of Texas) presented by Jim Lomax of Mt. Diablo Audubon. Jim is an avid birder and an accomplished wildlife photographer. His slide show of more than 140 species of Arizona and Texas rarities is sure to be one of the year's highlight programs. At the San Mateo Garden Center on the Alameda at Parkside. Social-

SATURDAY, MARCH 20 - ANO NUEVO FIELD TRIP - This trip has been cancelled.

ization and refreshments at 7:30 PM. Meeting begins at 8:00.

#### **SUNDAY, MARCH 14 - SUNNYVALE SEWAGE PONDS**

Over the last few years this has developed into one of the Peninsula's "hot spots" with wintering glaucous gulls, lost Sabine's gulls, and rare shorebirds. Let Francis introduce you to this "new" discovery. We'll meet at 9:00 AM at the entrance to the ponds. To get there take Hwy. 101 South to Hwy. 237 East. From 237 take Caribbean North to Boregas. Take a right on

(Continued on Page Three)

# News From Your Ranch Dan Murphy

XCEL - The Directors of Audubon Canyon Ranch have approved an entirely new concept in environmental education. Like so much else in ACR's history, XCEL is unprecedented, innovative and exciting. XCEL will recruit 20 high school juniors who have an interest in natural history or the environment. Their education will include natural history, environmental action, cross-cultural understanding and leadership. Educational services will be provided by XCEL staff, the staff and volunteers from ACR and the staff of the National Audubon Society's Richardson Bay Sanctuary. Following the education phase, students will help teach children who attend San Raphael summer day camp. They will also participate in teaching younger children at the Richardson Bay Sanctuary's Bay Shore Studies Program. We hope to develop a group of mentors from the environmental community and from our sponsoring Audubon chapters who will be role models and individual counselors for

Another phase of the XCEL program will be to track students toward higher education programs in biological sciences and the environment. During their senior year, students will be offered the opportunity to visit college and university campuses from Santa Cruz to Eureka. The XCEL staff will counsel students and help them apply for scholarships.

our students.

The program is the culmination of four years of work by ACR Director Eleanor Decker working with ACR staff, docents and volunteers and by Beth Hunning of the NAS Richardson Bay Sanctuary, and will be funded entirely by a grant from the Marin Community Foundation. A staff of three employees will be hired this spring so that the program may commence in the fall.

THE RANCH OPENS MARCH 13. With all the rain we've had this should be a very special season. Before January was over the first great blue herons had already investigated the heronry. March should be exciting. You'll hear the creek as it rushes through Pitcher Canyon, a rich wildflower season will spell the enc of winter, herons and egrets will be establishing nests, the trails will be fresh with scents of oak, bay, fir and redwood. As always, there is no entrance fee (although we gladly accept contributions).

**VOLUNTEER OPPORTUNITY**. March is Sequoia's month to host. But we'll need hosts on every weekend from March 13 through July 18. Hosting is fun and easy and gives you plenty of time to enjoy the Ranch yourself. Call Rick Baird (574-1067) or the Sequoia Audubon Office (345-3724) to volunteer.

**GUIDED NATURE WALKS** continue at the Bouverie Audubon Preserve. Now is the time to plan a spring visit on Mar. 13 or 27 or Apr. 3 or 17. All walks begin at 9:30 AM and end at 1:30 PM. Make reservations by calling (707) 938-4554

## Special Meeting Format In May

We are going to experiment with a new format at our May meeting. We are going to hold a special children's meeting. In order to accommodate bedtimes the meeting will start at 7:30.

The slide show will feature a special slide show of common birds found in our area and will be followed by a Saturday field trip to try and find these birds.

All of our members are being invited to bring their children (of all ages) to the May meeting for this special introduction to the birds of the bay area.



## The S. A. S. Calendar

(Continued from Page Two)

Boregas and you'll be there. Trip should last

until noon.

LEADER:

FRANCIS TOLDI

344-1919

SUNDAY, MARCH 28 - ALUM ROCK STATE PARK. It's time to revisit this exciting park on the eastern edge of San Jose. A variety of habitat can produce an exciting diversity of bird species from prairie falcons to Lawrence's goldfinch. We will meet at 9 AM in the parking lot along Penitencia Creek. This is the parking lot near the Junior Museum (Youth Science Institute) in Alum Rock Park. To get there drive south on US 101. Take the Santa Clara Ave/Alum Rock Ave. and cross over US 101 going east on Alum Rock Ave. This leads northeast about 4.5 miles to the park entrance where you will take a left and continue to the parking lot at the end of the paved road. There may be an entrance fee.

**LEADER** 

**CLIFF RICHER** 

738-9176

#### April

THURSDAY, APRIL 1 - SAS BOARD MEETING. 7:30 PM at the SAS office. ALL MEMBERS ARE WELCOME. Please call ahead to be sure there will be enough room.

#### SUNDAY, APRIL 4 - THE ECOLOGY OF PESCADERO

MARSH. Pescadero Marsh docents John and Nina Padley love "their" marsh and will share its complexities and secrets with us. This is a multi-faceted field trip which will deal with all aspects of the marsh's ecosystem. But of course, since Pescadero Marsh is one of the premier birding spots in the county birders need not worry that their interests will be overlooked. The weather may be cool or warm, depending upon fog and wind conditions, so be prepared accordingly. Boots are recommended but any walking will be relatively easy and on level grades. We will meet at 9:00 A.M. in the **first** parking lot south of the bridge over Pescadero Creek on Hwy. 1.

**LEADERS** 

Sequoia Audubon Society

JOHN AND NINA PADLEY

345-2984

THURSDAY, APRIL 8 - SAS GENERAL MEETING -

Elaine K. Harding-Smith, a wildlife biologist with the US Fish and Wildlife Service at the San Francisco Bay National Wildlife Refuge, will update on the status of and continuing dangers to the endangered California clapper rail. At the San Mateo Garden Center on the Alameda at Parkside. Socialization and refreshments at 7:30 PM. Meeting begins at 8:00.

#### SUNDAY, APRIL 11 - EDGEWOOD COUNTY PARK.

This winter's return to a more normal rainfall pattern should trigger an explosion of wildflowers in this park, that is once again being threatened by the possible development of a golf course. Our leader is not only a superb birder, but a professional landscaper who can assist us in identifying many of these plants. See next month's **NEEDLES** for time and meeting place.

LEADER:

DAN KELLER

SUNDAY, APRIL 18 - MINES ROAD FIELD TRIP. This is our annual auto caravan through an isolated valley where relict populations of birds linger on despite the destruction of their habitats in the Central and Livermore Valleys. Phainopepla, Lewis' woodpecker, Lawrence's goldfinch, golden eagle and prairie falcon are near certainty while roadrunner, wood duck, purple martin, wild turkey, Costa's and calliope hummingbirds, rufouscrowned, sage and grasshopper sparrows are likely. Yet, despite its seeming isolation, you will never be more than 45 minutes away from either Livermore or Interstate 5 so that you can break away and return to civilization at any time. This is an all-day trip, ending at dusk, so bring lunch and liquids. Weather is unpredictable, with temperatures varying between 40 and 90 degrees on this trip at this time of year; there are only two reliable restroom facilities, at lunchtime and at mid-afternoon; and a full tank of gas is recommended, so be prepared. To get there take I-580 to Livermore. Stay on 580 past Livermore to the Vasco Road exit. Take a right at the exit and follow Vasco Road to its end at Tesla Road.. Take a right and follow Tesla for a little more than 1/2 mile until you come to Mines Road on the left. We will meet at that intersection at 9 AM. Late arrivals will have no problem in catching up with the group if they continue on Mines Road.

**LEADER** 

**CLIFF RICHER** 

738-9176

SATURDAY, APRIL 24 - JASPER RIDGE BIOLOGICAL PRESERVE. Join us for a half day of birding in Stanford University's unique biological preserve. Birds seen on previous Sequoia Audubon field trips include western tanagers, blue-gray gnatcatchers, five species of flycatchers, wood ducks and even an osprey We will meet at the Jasper Ridge Main Gate (not the Whiskey Hill Gate) at 8:30 AM. Be prompt as the gate will be open only from 8:15 to 8:30 AM. From I-280 take the Sandhill Rd. exit west about 2 miles to a gate on the left. We will go rain or shine. A gate fee of \$4 per person is required. The size of the group is limited, so please call the office (345-3724) to reserve your space on this reservations-only field trip. If you need additional information, call Louise at 591-6804.

LEADERS: PETER METROPULOS & LOUISE FLETCHER

Page Three

## New Travel Agency Pledges Ongoing Support To S A S

Wild Goose Travel, a new travel agency founded by Cliff Richer, long-time Sequoia Audubon member, has pledged 5% of its gross income from commissions and fees to support non-profit conservation organizations.



Although the client may designate the organization they wish to support, Sequoia Audubon Society will receive all pledges not otherwise earmarked.

Wild Goose Travel is specializing in filling the travel needs of birders and others interested in the natural world. It is a full service travel agency with a 24 hour "hotline" and extended hours of operation. For more information or to make travel arrangements call 738-9176.

## Raptors Of The Sierra

Central Sierra Audubon Society is sponsoring an all-day symposium on the natural history, habitat, ecological considerations, rehabilitation and reintroduction of the hawks and owls of the Sierras. Speakers include biologists, falconers, foresters and raptor breeding specialists.

The symposium will be held on March 28 at the Elk Lodge on Elk Drive in Sonora from 8:30 AM to 5:30 PM. Admission is \$15 for the general public, \$12 for Audubon members and \$8 for children under 12. A \$2.00 pre-enrollment discount applies for those purchasing tickets prior to March 15. Checks should be made out to Central Sierra Audubon and mailed to C. Giordano, 20260 Gibbs, Sonora, CA 95370. For additional information call Chuck Giordano (209-533-0409) or Dale Keyser (209-532-4852).

#### California Leader Conference

The Western Regional Office of National Audubon is holding a statewide meeting of chapter leaders throughout California. The meeting will be held at the Raddisson Hotel on Lake Natoma in Folsom from March 20-22. The meeting will begin on Saturday morning with an assortment of plenary sessions and workshops. There will be a Saturday night banquet and program and more workshops and programs on Sunday. Monday the participants will travel to Sacramento to put their skills to work when they meet with their respective state legislators.

You do not need to be an elected officer to participate. Call or write Dan Taylor at the National Audubon Society, 555 Audubon Place, Sacramento, CA 95825 (916-481-5332) to register or for more information.

## Sauppe Conducting Individualized Birding Classes

Barry Sauppe, generally acknowledged as the county's #1 birder, is conducting individualized birding classes. Class hours are flexible and the subject matter is to be determined by the students' needs and wishes.

Classes are held every morning, Monday through Saturday, from 9 AM to noon in the field.

Call Barry at 726-1081 for more information or to make specific arrangements.

(Your editor wholeheartedly endorses these classes. He has learned more from a half hour in the field with Barry than from tens of hours in birding classes or by himself in the field.)

## Migratory Bird Classes

Dan Murphy, our ACR correspondent, will teach a class on migratory birds for the California Academy of Sciences. The class - entitled "Migration by the Bay" - will cover both nesting species and species in transit to more northerly nesting areas. Three class sessions and two field trips will be designed to help you identify many of these migrants.

Lectures will be held at the California Academy of Sciences in Golden Gate Park on Mondays from 7 to 9 PM, March 22, 29 and April 5. Field trips to Redwood Regional Park in Oakland and to Foster City will be on Saturday mornings March 27 and April 3. Registration is \$65 for Audubon and Academy members and \$75 for non-members. To register send your check, a stamped self-addressed envelope and a note indicating "Migration by the Bay", your name, address, zip and phone number to Adult Education, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118.

## Alcatraz I. Volunteers Needed

The National Park Service needs volunteers to conduct bird counts on Alcatraz Island. Surveys will be conducted to record the numbers and locations of all bird species found on Alcatraz. Volunteers will also be given the opportunity to learn both the natural and cultural history of the island.

Volunteers must be able to identify the common birds of the area but need not be advanced level birders. This is a new program and can be subject to change in its early stages so volunteers must be flexible and able to adjust.

If you need more information call Brett Woods, Natural Resources Coordinator for Alcatraz Island at 705-1045 or 556-1070. To volunteer call 556-0563 or write to the GGNRA, Fort Mason, Bldg. 201, San Francisco, CA 94123.



#### The Bookworm Anne Moser

Browsing at Kepler's sale I found a new guide book that is great "wish" reading. Roland H. Warner, a retired US National Parks Service

employee, has written A Visitor's Guide to the Birds of the Eastern National Parks, U.S. and Canada. He visits 37 National Parks from Canada to the Florida Keys, from the Virgin Islands to Kentucky. Each account has personal anecdotes, information about the birds to be found in that park and information about particular species, as well as general information about the park, including addresses for further information. I really enjoyed this book and recommend it for "wish" reading as well as for preparation for a trip to the east.

#### The Wandering Tattler **Anne Moser**

The rare bird tape introduced a new place for birding - the Oakland airport. I went looking for the sage thrasher but found a great area for shore birds, bay ducks and for dog walking.

Take the San Mateo Bridge and turn north on I-880, the Nimitz Freeway. Take the Davis St. exit west to Doolittle Drive (which runs along San Leandro Bay). Turn right on Doolittle Drive. There are several places to turn off and view birds. Then turn left on Harbor Drive and continue until you reach the Bay. A good path runs along the bay.

(Also try the wetlands north and east of the airport. You have to look through the fence, but these are resting places for shorebirds and - in summer and fall - for least terns ----Ed.)



BIRDER'S HANDBOOK - Ehrlich, Dobkin and Wheye BIRDING AT THE BOTTOM OF THE BAY - SCVAS BIRDING NORTHERN CALIFORNIA - Jean Richmond **ENJOYING HUMMINGBIRDS MORE - Various** MONO LAKE GUIDEBOOK - David Gaines NATIONAL GEOGRAPHIC FIELD GUIDE SPECIES IN DANGER IN OUR BACKYARD-Jamison PACIFIC COAST CHECKLISTS -Pads of 25 SAN MATEO COUNTY CHECKLISTS **ECO-SAFE STRING BAGS** "I'd Rather Be Birding" BUMPER STICKER SEQUOIA AUDUBON SOCIETY PATCH **VIDEOS FOR RENT:** 

| • | TECHNIQU | ES OF | BIRDING - | Arnold Small |
|---|----------|-------|-----------|--------------|
|   |          |       |           |              |

**VIDEO GUIDE TO BIRDS OF N.A.** - 5 Tapes

| Items Sold at SAS<br>Office or at Meetings | Items Mailed to<br>Customers |
|--|------------------------------|
| 17.50                                      | 20.00                        |
| 10.75                                      | 13.00                        |
| 10.50                                      | 13.00                        |
| 3.50                                       | 4.50                         |
| 6.00                                       | 8.50                         |
| 20.00                                      | 22.50                        |
| 5.00                                       | 6.00                         |
| 3.00                                       | 3.50                         |
| .50  | .75                          |
| 4.00                                       | 5.00                         |
| 1.50                                       | 2.00                         |
| 2.50                                       | 2.75                         |
|  |                              |

\$2.00 per week

\$5 per tape/per wk.

ALL PRICES INCLUDE SALES TAX

Please make all checks payable to: Sequoia Audubon Society 30 West 39th Avenue, Suite 202 San Mateo, CA 94403-5671

Please call to make arrangements for rental of

video tapes by mail.

#### 1993 Birdathon! 1993 Birdathon!

#### Frances Toldi

April is the traditional time for the Birdathon. As many of you know, the Birdathon is one of our most important fundraisers of the year, as well as a lot of fun!

New members may not be familiar with what happens during the Birdathon. Every April birdwatchers from all over the county go out and count as many species of birds as possible in one 24 hour period to raise money for Audubon causes. Sponsors pledge a stated amount per species, which they pay to Sequoia Audubon after the count is completed. For example, if 100 people pledge 10 cents per species, and 150 birds are counted, that would raise \$1500. One half of the money raised goes directly to Sequoia and the other half goes to two National Audubon Programs (The Mono Lake Defense Fund and the Richardson Bay Education Center.)

In the past we had a single official team, representing the entire Sequoia Audubon organization. While we still have the official team, lately we have been encouraging people to form their own teams and join in the fun. Last year we had a total of four teams: The Megaticks (the official team), the Ultimate Coot, the Huffin' Puffins and the Garbled Modwits.

Whoever you are **we need your help**. A very modest pledge to the official team would be easy to do and deeply appreciated. A generous contribution would be even better. If money is a problem we always welcome volunteers to help in the administrative effort of running the Birdathon. If you are feeling a bit more ambitious, you might want to start up a new team.

Your team can be active at whatever level you want. It can consist of just you - and spend two hours counting species in your neighborhood. You could join up with a family member or friend and spend a full day birding in your favorite area or areas. You could bird only in the city limits, or the county -- or you could do what the official team does and go all-out from 4 AM to midnight all over the Bay Area.

Please help us with this year's Birdathon! Fill out the form below and send it in to Sequoia's office or call 345-3724 for more information.

| YES, I wish to join up pledges and cond  | in. I will sign<br>duct my Birdathon on _          |              |
|--|--|--------------|
| YES, I will support<br>Audubon Society w | Sequoia with a pledge of                           | per species. |
|  | my pledge based on ar<br>fferent birds being ident |              |
| My check for \$                          | is enclosed.                                       |              |
| NAME                                     |  |              |
| ADDRESS                                  |  |              |
| CITY                                     | STATE  | ZIP          |
| TELEPHONE                                |  | rm to:       |
| -  | oia Audubon Society<br>t 39th Street, Suite 202    | 2            |

San Mateo, CA 94403

### Field Trip Reports

Hayward Shoreline - Tuesday, December 15, 1992

A dedicated group of birders went out on a cool and blustery day spotting 52 species in the intervals between storms. Good close looks were obtained of shorebirds and - as a bonus - a Eurasian wigeon.

—Al De Martini

Sharp Park Shoreline - Pacifica - Sunday, January 24

A dozen birders, including the leader, covered the shoreline south of the fishing pier and along the west side of the Sharp Park golf course. The weather was sunny but windy - keeping down the numbers of passerine species. Nevertheless the group had good views of four raptor species and all three scoter species. There were almost no ducks on Laguna Salada - the pond and marsh on the golf course - leading to speculation that the recent rains had given them plenty of feeding and resting opportunities elsewhere. The best sighting of the day was of a sea otter, far north of its normal range.

—-Judy Spitler

#### Grizzly Island - Saturday, January 30

Fourteen participants followed the tour route and checked out Van Sickle Road as well. Duck numbers seemed to be low although 11 species were identified. There were large numbers of raptors, including 5 or 6 rough-legged hawks, a merlin doing an acrobatic fly-over and a very cooperative great horned owl. Among the waders seen were 5 American bitterns and a green-backed heron. The group had good views of tule elk and one birder, who lingered after the group had dispersed, was treated to a show by a family of river otters ——Judy Spitler

The Northern Refuges - Presidents' Day Weekend - February 13, 14, 15. A dozen potential participants dwindled down to four by the time the trip began...and their participation was limited to Saturday, February 13 - a day that saw the entire Klamath Basin shrouded in deep fog. All the waterfowl and eagles were crowded along the northern side of the causeway across the Lower Klamath Lake National Wildlife Refuge - just out of visibility! You could hear swans, geese and ducks in huge numbers but would only catch an occasional glimpse of a bird flying out of the fog. One of these ghost birds flew almost directly overhead, revealing itself to be an early returning sandhill crane. A trip to the higher elevations of the Lava Beds National Monument took us out of the fog, but passerine species were rare since the ground was covered with the record-setting snowfalls that have been striking the area. Nevertheless we did get a flyover from an adult bald eagle and were treated to the sight of a rare darkmorph rough-legged hawk soaring in the distance. On Sunday and Monday, the leader continued the trip to Surprise Valley and Ash Creek where the weather was gorgeous, but the recent hard freeze and the abnormal snow cover kept the species and individual bird numbers far below normal. ---Cliff Richer

••••••

"You may be an environmental savior in your eyes...but to Mother Nature, you're just another 32 tons of garbage."

---Arthur Hoppe

## Bills, Beaks And Biodiversity Cliff Richer

Nothing tells you more about a bird than its bill. This was a significant factor in the development of the theory of evolution. Charles Darwin noted that the finches of the Galapagos were remarkably similar - except in the matter of bill shape. From this (and other factors) he deduced that all of the finches were descended from a single species and had "evolved" into separate species - each with a distinct type of bill enabling it to fit into its own food-gathering niche.

We can make our own deductions from the bills of common birds. Long, thin bills are used for probing. The hummingbird probes flowers for nectar. The dowitcher probes mud for invertebrates. A mud-prober with a straight bill uses the force of its entire body to probe (the "sewing machine" motion of dowitchers). A curved bill prober like the long-billed curlew uses its neck muscles and is more delicate in its probing motions. If the curve is more pronounced toward the bill's tip the bird is less likely to be a mud-prober than a prober into crevices, like the whimbrel, which works the tidal rocks and pools for food.

Short, conical bills are adapted for seed-eating. They are sturdy so that the birds can crush the seed hulls to get at the nutritive core. The thicker the bill, the tougher the seed of choice. Grosbeaks feed on big tough seeds with thick hulls. Goldfinches prefer grass and thistle seeds with little or no hulls.

Birds that eat flesh - including the flesh of fruits and berries - have short, powerful, hooked bills for ripping and tearing. Cedar waxwings have a very slight hook; parrots, hawks, owls and vultures very pronounced hooks.

Some species have highly specialized bills restricting either their diet or their feeding method. Woodpeckers, oystercatchers and crossbills are good examples. These species have evolved to fill an un-exploited niche in the environment. The blackbirds, jays and starlings have generalized bills. These birds are numerous and widespread because they can adapt to the available food supply and their bills are the tools of the jack-of-all-trades - good for most uses but too clumsy for specialized jobs.

Insect-eaters and fish-eaters have bills that reflect how the bird gets its food. Nighthawks and poor-wills have tiny, almost useless bills which are rarely ever used. These birds have cavernous mouths that open wide to trap flying insects. The same applies to a lesser degree for swallows and swifts. Flycatchers have wide, flat bills that give them a bigger bite when they "snap" insects on the wing. Herons' pointed bills are used for stabbing. Mergansers' bills have saw-like edges to grip fish securely. Pelicans have huge scoops with loose-fitting edges in which they can trap fish and then expel the water without losing the fish.

Bills can tell you a lot about their owners - but not always. The toucans have the most spectacular bills in bird-dom, but ornithologists still don't know why.

#### Banded Avocets & Stilts

Over 1500 avocets and black-necked stilts have been banded in California, Nevada and Utah. These birds are banded in one of three ways:

- An aluminum band and a plastic band on one leg and two plastic bands on the other.
- An aluminum band covered with tape and a plastic band on the same leg.
- An aluminum band on one leg and a plastic band on the other.

Plastic bands are white, black, green, blue, red, orange and yellow

If you spot any of these birds, please write or call Dr. Lewis W. Oring, University of Nevada, EECB/186, 1000 Valley Rd., Reno, NV 89512-0013 or call (702) 784-1157

## Lyme Disease Update

There is now some evidence that Lyme disease may be spread by migratory birds.

The main means by which the disease has become established throughout most of the country still appears to be people and



their pets - particularly hunting dogs. But East Coast bird banders are finding an increasing number of birds infested with the tiny parasites.

In one study researchers found about 2% of the ground-feeding birds - finches and juncoes in particular - seemed to be stricken. Most of the birds carried *Ix*-

odes brunneus, a bird-specific species, but a significant number were found with deer ticks - the Lyme Disease carrier.

#### This Month At The Coyote Point Museum

Saturday, March 13 - Family Activity Day celebrating science in conjunction with the Museum's annual science fair. Free with museum admission.

Sunday, March 28 - The Popular Reptile Festival features a variety of snakes, lizards, toads, iguanas and frogs for viewing and touching. Care and feeding tips will be offered by members of the Bay Area Amphibian and Reptile Society. Free with museum admission. Noon to 5 PM.



#### **GIFTS AND BEQUESTS**

Sequoia Audubon Society welcomes gifts in general or on behalf of, or in memory of relatives or friends. Such gifts may be designated for education or for the advancement of the objectives of Sequoia Audubon Society at the discretion of the Board of Directors. All gifts are tax-deductible. Please send your gift in the form of a check to the Sequoia Audubon Society, Inc. All gifts, donations and bequests will be acknowledged in Sequoia Needles and personally on behalf of Sequoia Audubon Society.



#### Perry B. Wilson

#### Susan Bernhard

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