



sequoia needles

Bulletin of the
June, 1991

Sequoia Audubon Society

San Mateo County
Vol.39,#9

THIS MONTH'S PROGRAM FROM THE PRESIDENT

Dr. Craig Benkman, an ecologist and ornithologist, will present our June potluck program. Dr. Benkman is a resident of Santa Cruz who does research under the auspices of the University of British Columbia. His program will be "The Ecology of Crossbills and Why They Come in So Many Sizes."

Craig will present (in layman's terms) information on the ecology of North American coniferous forests and two of their major avian inhabitants, the white-winged and red crossbills. The crossbills are highly variable in their size and other physical features, and have been proposed for species 'splitting.' Craig will give us some of the kinds of information that scientists use to try and decide about species status. Both bird species 'listers' and people interested in our northern forests will enjoy his slide program.

POTLUCK TIME!

This month also brings us to our annual Potluck Dinner. Please remember to bring your own utensils and plates and a paper bag in which to take them home. Those people whose last names begin with the letters **A through F should bring a DESSERT**, those whose names begin with the letters **G through M, a CASSEROLE** or other hot dish, and **N through Z should provide the SALAD**.

Bring enough to serve **FIVE** times the number in your party.

The meeting will be at the San Mateo Garden Center on the Alameda at Parkside on Thursday, June 13, with the Potluck beginning at 6:30 PM, and the General Meeting immediately thereafter.

See "THE SAS CALENDAR", beginning on Page Two for details on September's program.

Sequoia Audubon Society

Since this is the June issue of the **NEEDLES** and our thoughts are turning toward summer activities, there are two SAS events I want to especially bring to your attention.

AN OPEN HOUSE will be held on **Sunday, June 9**, between 3 and 5 PM, to welcome all of you to our new office at 30 West 39th Avenue, Suite #202, in San Mateo. It is just a few blocks south of the Hillsdale Mall and a few steps west of El Camino Real. There is both on-street parking and drive-in parking at the rear. The new and modern SAS office is much more suited for volunteer activities than our previous quarters. Please plan to be with us that afternoon. If not, come by and see our new home another time. Peter Cross, our Office Coordinator, is there Monday through Friday from 9 AM to noon.

THE SAS ANNUAL MEETING is scheduled for Thursday evening, June 13, following the delicious Potluck, at the San Mateo Garden Center. We hope for a large attendance and participation in the important SAS annual election of officers for 1991-1992. See you then!

OPERATING COSTS: At the May Board of Directors meeting Treasurer Fred Mc Elhaney reported a general increase in operating expenses. Among the more notable examples were the increased rent for the new office and the increased costs of printing and mailing the **NEEDLES**. Fund-raising was discussed and John Bryant, Cliff Richer and Fred Mc Elhaney agreed to do an analysis and come up with tentative fund-raising plans this summer. Please let them know of any ideas you may have to raise funds for SAS.

MONO LAKE: Dan Taylor, our National Audubon Society Western Regional Representative, reports that a major court ruling in the Mono Lake Case has been decided by Superior Court Justice Terrence Finney in support of the position favored by the National Audubon Society. In issuing a preliminary injunction Judge Finney guaranteed that Mono Lake shall be maintained at the minimal level recommended by NAS and the Mono Lake Committee (it is currently about 4 feet below that level). The ruling went on to grant every one of NAS's requests for action and means that Mono Lake will enjoy ironclad protection as the State Water Board continues its multi-year environmental assessments of the water needs of the Mono Basin and the water licenses of the Los Angeles Department of Water and Power. This victory brings us ever closer to the final resolution of the battle to save Mono Lake. Dan paid tribute to "the generous and abiding support of our chapters, members and friends... (without whom) ...the Mono Lake Campaign would have been impossible." If you would like more information or a copy of the decision, please call Dan at (916) 481-5332. We will obtain a copy for the SAS office.

PLANNING: The first meeting of the new Board of Directors will be a planning meeting. Interested members are encouraged to attend to help us formulate plans. It will be held on Sunday, June 21 at the Kypta residence. To attend, just give a call to the SAS Office (345-3724). Incidentally, a special thanks is due to Linda for hosting our Board meetings this past year.

The officers and Board join me in expressing our thanks for your efforts and support during the past season and look forward to continued achievements and participation in the coming year 1991-1992.

---Mary Bresler

THE SAS CALENDAR

JUNE

SATURDAY, JUNE 1

GAZOS CREEK AND BUTANO STATE PARK.

The riparian corridor of Gazos Creek is one of the finest year-round birding areas of San Mateo County. From its mouth, where resting gulls and terns roost, to its origins in the redwoods, the creek is a summer home to a large number of passerine species and a representative population of hawks and owls. For even more diversity, we will also bird Butano State Park and the grasslands between the two areas. We will meet at the intersection of Hwy. 1 and Gazos Creek Road, just south of the Pigeon Point Lighthouse at 9:00 A.M. The trip should break up at lunchtime. Our leader knows the creek intimately and is one of the best birders anywhere.

LEADER: Peter Metropulos (592-2417)

SAS FIELD TRIPS ARE OPEN TO THE GENERAL PUBLIC. BEGINNERS ARE ALWAYS WELCOME.

THURSDAY, JUNE 6

SAS BOARD MEETING, 7:30 PM at the SAS Office. ALL MEMBERS ARE WELCOME - Please contact the Sequoia Office (345-3724) for details.

THURSDAY, JUNE 13

SAS GENERAL MEETING - ANNUAL GENERAL MEETING, ELECTION OF OFFICERS AND POTLUCK featuring a program on **THE ECOLOGY OF OUR NORTHERN CONIFEROUS FORESTS** presented by Craig Benkman. At the San Mateo Garden Center on the Alameda at Parkside with the Potluck beginning at 6:30 PM, and the General Meeting immediately thereafter.

JULY

SUNDAY, JULY 21

ANNUAL PLANNING MEETING. The yearly brainstorming session in which the new officers, chairpeople, volunteers and any other interested members get together to plan activities and programs for the coming year. If you want to participate in SAS for the coming year, this is your chance. At the Kypta residence. Call the office (345-3724) or Linda (591-9053) to let her know you're going to be there.

AUGUST

WEDNESDAY, AUGUST 7

FIELD TRIP COMMITTEE MEETING. The yearly planning session in which field trip leaders and any interested members get together to plan the year's field trip schedule. Do you want to lead a trip? Have a trip you'd like to see added to the schedule? Know an area that bears investigation? Come to either or both meetings at the SAS office at 7:30 PM.

THURSDAY, AUGUST 8

SAS BOARD MEETING, 7:30 PM. At the Kypta Residence. ALL MEMBERS ARE WELCOME - Please contact the Sequoia Office (345-3724) for details.

SEPTEMBER

THURSDAY, SEPTEMBER 5

SAS BOARD MEETING, 7:30 PM at the Kypta Residence. ALL MEMBERS ARE WELCOME - Please contact the Sequoia Office (345-3724) for details.
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NEWS FROM THE RANCH

LAST CHANCE TO SEE THE RANCH: ACR's public season is coming to an end. Have you visited the Ranch lately? It's just about your last chance. The herons and egrets were very late this year, so you should still be able to find eggs and downy young in most of them. Remember, the Ranch closes July 14.

WHAT IS EVERYTHING? Well Jeopardy fans, that's what's up at Bouverie.

Ross Petersen tops our list. Carol and John Petersen (our resident biologist) are the very proud parents of Ross. John tells me he will be out on the trail long before you read this. Congratulations to Carol and John and welcome to Ross, one of the very few of us who can see the Bouverie Preserve without reservations.

After our March rains the Sonoma hills exploded with wildflowers. John Petersen told me it was one of the best years ever. Nesting turkey vultures, near the waterfall, top the list of breeding birds this year. Orange-crowned warblers and warbling vireos are everywhere. Even black-throated gray warblers seem numerous this year. The population of red-bellied, rough-skinned and California newts is booming according to our volunteer census-takers.

People too are part of the "everything" at the Bouverie Preserve. During the past year our wonderful docents led 88 classes of school children through the natural wonders of the preserve. Sadly they had to turn away an additional 58 applicants. Even in limiting applications to third and fourth grade classes; and in increasing the number of class visits; the fall program is completely booked.

The guided nature walks were a huge success too. Led by those same devoted docents, many of us were able to enjoy the beauty and wonder of Bouverie. Walks will start up again in September. Watch this space for details on those trips.

HERE'S YOUR CHANCE! Be a part of the Bouverie Audubon Preserve docent family. Yes, training will begin for another docent class in September. Interviews will be held in June and August. Call 707-938-4554 if you want to be part of our marvelous family. We have openings for 25 new docents.

AUDUBON CANYON RANCH HOSTING

Yes, we did host at ACR in March. No, we're not done with our obligation for this year. SAS is committed to hosting at the Ranch on July 4, 6, 7, 13 and 14. We need at least three hosts for each day.

Hosting is easy, it's fun and you may get a chance to see the young egrets learning to fly. Why not call Rick Baird (574-1067) or the Sequoia office (345-3724) to sign up.

Go and ask...the birds of the air to inform you, or tell the creatures that crawl to teach you, and the fishes of the sea to give you instruction. Job 12:7-8.

WHY RICE IS GOOD FOR WATERFOWL

In the morality play of the state's water crisis, agriculture has been cast as the irredeemable villain.

Farmers after all, use about 90 percent of state and federal water project water in California, and they get it at heavily subsidized rates. Salmon fisheries perish and suburban vegetable gardens die so that Central Valley farmers can reap bumper crops of rice, cotton and alfalfa. Right? Well, not quite.

True, our anadromous fisheries are verging on extinction because of water diversions, and the production of cotton and alfalfa in the San Joaquin Valley benefits few save corporate growers. But rice is another matter.

In the Sacramento Valley, the rice crop provides food and shelter for millions of wintering waterfowl. Water used to grow the grain is recycled north to south through refuges and duck clubs, creating a network of seasonal wetlands that benefits a tremendous variety of avian species. In short, water taken from rice farmers is water taken from ducks -- and geese, herons, egrets, curlews, northern harriers and sandhill cranes.

Some environmentalists recommend complete deregulation of the water market, freeing farmers to sell their water rights to municipalities and the state. This could help increase flows down the Sacramento/San Joaquin Delta and obviate drastic urban water rationing.

But deregulation could also spur rampant growth -- which ultimately would make the situation even grimmer than it is now. It's also likely that many rice farmers will elect not to grow crops in a deregulated environment, preferring to sell their water allotments. The area from Colusa to Chico could be transformed from a vast wetland teeming with birds to hard-packed earth dotted with tumbleweeds, supporting little save jackrabbits.

Deregulation may be an idea whose time has come but Sacramento rice is not San Joaquin cotton. It behooves hunters, anglers and birders to discern the difference between the two. We don't have to sacrifice ducks to save salmon -- but that may happen if care is not taken in addressing the water conundrum. ---Glen Martin

(Glen Martin is an outdoor writer and columnist for the San Francisco Chronicle. This article first appeared as part of Mr. Martin's column "In the Field" in the April 8 Chronicle and is reproduced with his permission.)

BIRD SEED SALE TO BE REPEATED

We will be repeating the Bird Seed Sale this fall. Look for details in the September **NEEDLES**.

We're currently planning on a mid-October delivery date and are looking to establish pick-up points on the Coast and in the North and South county areas.

If you have a garage or shed we could borrow for a day or two to use as a pickup point, give us a call at 345-3724.

THE SAS CALENDAR

(Continued from Page Two)
SEPTEMBER

THURSDAY, SEPTEMBER 12

SAS GENERAL MEETING. OUR ANNUAL DO-IT-YOURSELF NIGHT. Bring up to 25 of your own slides and tell us about them. They can be on any subject that might be of interest to your fellow members.

SUNDAY, SEPTEMBER 15

POINT REYES FIELD TRIP. A search through the "warbler traps" of Point Reyes can yield almost anything at this time of year. We'll be looking for inland and eastern vagrants but can expect migrants and some early arriving winter residents as well. Walking will be minimal but sturdy shoes are recommended. Clothing should be layered since the weather on Pt. Reyes is extremely changeable. We will meet at the Point Reyes National Seashore Headquarters building at 9:00 AM. The trip will take place rain or shine. Bring lunch. The trip normally lasts until 2 PM.

LEADER: Cliff Richer (355-4058)

LANDFILL MYTHS

The Garbage Project at the University of Arizona has literally unearthed some startling facts about landfills and garbage.

Fast food packaging is less than one-quarter of 1% of volume in a landfill. Polystyrene foam is less than 1%. Disposable diapers are less than 1%. Glass is only 1%.

Replacing polystyrene cups with coated paper ones doesn't help. They don't biodegrade either.

In fact, almost nothing biodegrades in a landfill. Seventeen year old newspapers were still readable. Magazines lasted even longer. Air and water are needed for degradation. Landfills are tightly compacted and moisture is avoided since leachates can be disastrous to ground water supplies.

Metal goods are about 6% of the total.

Plastics represent about 10% of the total volume - a figure that has remained unchanged for twenty years. There are more plastic items today - but they're thinner and smaller.

Organic material is about 13% and does degrade - but slowly. Hot dogs and ears of corn are recognizable after 20 years. The last 10 health-conscious years have seen a reduction in high fat beef and pork garbage...but an increase in higher fat sausage and luncheon meat leavings.

Construction debris accounts for 15% of the volume.

Paper now accounts for almost 50% of landfill contents. The market for recycling newsprint is now so depressed that much of the "recycled" paper ends up being buried. 10-15% of the total landfill is newspapers - more on the East Coast, less on the West.

(Facts are from "Once and Future Landfills" by William L. Rathje, *National Geographic Magazine*, May, 1991.)

IS IT OR ISN'T IT?

The blue banner is gone! That was the announcement at the April meeting of the Bay Area Audubon Council (BAAC). Because of overwhelming negative reaction from members and chapters, the National Audubon Society is abandoning the ill-advised blue banner symbol and restoring the egret to its historic prominence.

The blue banner was variously reviled as "unrepresentative, unimaginative, uninspired and unnatural", a "warped square", "suitable for a pesticide manufacturer (Black Flag?)", "American Express with a twist" and other less kind remarks. The National was also denounced for its failure to consult the membership on this highly emotional symbolic change.

However, all of National Audubon's May publications continued to carry the banner. For some publications this was expected. But the *Audubon Activist* works on a relatively short deadline and it was surprising to find the blue banner in its pages. Perhaps they are waiting for the anticipated official announcement, which is yet to be forthcoming from National headquarters. Let's hope it's not too long in coming. ---Cliff Richer

DEALING WITH THE DEVIL?

We don't have all the details yet, but what we do have is enough to raise a few eyebrows.

It appears as if the US Fish and Wildlife Service is about to spend about a third of its \$9.5 million land acquisition budget to acquire 80 acres in the Mayhew Landing area. However, as part of the deal, it will allow developer Ed DeSilva to fill in wetlands on the remaining 46 acres. Reportedly the USF&WS will also assist Mr. DeSilva in obtaining the necessary permits from other federal and state authorities and will accept mitigation in the form of newly created wetlands on the 80 acres - a practice that has so far proven to be far inferior to retaining existing wetlands.

The city of Newark has already approved DeSilva's plan to deposit nearly 170,000 cubic yards of fill on the property. As of press time, there were no indications that he planned to file a development plan and an environmental impact report or apply for permits from any other agency or even notify the abutters - all required by law.

Ohlone Audubon Society is monitoring this development closely and will keep us advised.

MLPF GOES AFTER POACHERS

The Mountain Lion Preservation Foundation (MLPF) launched a statewide anti-poaching campaign in April by announcing a \$5000 reward for information leading to the conviction of poachers taking mountain lions or black bears in California.

The reward program will be conducted in cooperation with CalTip, the state secret witness program for poaching, and the California Department of Fish and Game (DFG). The reward will be used to spotlight poaching crimes in California. The foundation is also seeking to fund a statewide educational program to prevent poaching.

The Mountain Lion Preservation Foundation is also supporting legislation to provide over \$20 million annually to

the DFG. Half will be earmarked for new wardens and half for habitat protection.

In a related case, the MLPF is urging prosecution of the first reported violation of Proposition 117. Rancher Carol Silac of Gilroy is alleged to have shot a mountain lion eating a wild pig on her property, violating the prohibition against harming cougars. The foundation is urging the Santa Clara District Attorney to pursue the case and seek a judgment, so as to discourage other ranchers from taking the law into their own hands.

Earlier, in February, the MLPF won another important victory when the DFG barred the chasing of mountain lions by dogs for fun, photography or any other reason. The DFG also banned the importation into California of mountain lion heads, skins or other trophies.

BIRDATHON '91 RESULTS

Three teams participated in the 1991 Birdathon. The Scrub Jaywalkers (Edwin Duerr, Janet Duerr and Steve Schafer) were the first to try their luck. Beset by windy and rainy weather on April 12, they had to scratch for every species and ended up covering a vast territory from Pigeon Point to Los Banos, spending more than 20 hours in the field. Janet expressed great disappointment in reporting "only" 167 species.

Eight days later the Ultimate Coot (Cliff Richer, Bob Ulvang and Al Wofchuck) tried their luck. San Gregorio, Butano Park, Gazos Creek, Pigeon Point and the creek at the beginning of Mines Road were all "hotspots". Excellent weather and an extraordinary "dawn chorus" were big pluses. The team ran out of light 10 miles up Mines Road and called it a day after 16 hours and 184 species.

With Barry Sauppe's goal of 200 species in mind, the Megaticks (Dan Keller, Linda Kypta and Barry Sauppe) started out with high hopes that were soon dashed by unfavorable winds on the coast and ultimately frustrated by a relatively unproductive Mines Road. After 17 hours they called it a day at Corral Hollow Road, where they waited patiently and fruitlessly for a lesser nighthawk. Their 185 species was a let-down for this high-powered team.

Most pledges were obtained from the "phone-in" conducted by SAS, but Steve and Janet raised \$737.10 independently. In accordance with their wishes, the Board assigned the SAS share of the proceeds to the Education Committee budget for 1991-1992. A list of the Scrub Jaywalker's donors follows. The other donors and a complete species list for all three teams will be published in the September **NEEDLES**

BIRDATHON '91 DONORS

Bill and Anna Alvord	Wendi Baker	Wes Chang
Ali Duerr	Ed and Mitsuko Duerr	Edwin S. Duerr
Debbie Dyke	Julie Hejza	Kathy Jenkins
Jim King	Keilan King	Peggy Lynch
Larry McCorvey	Lisa Mitchell	Mia Mora
Tim O'Connor	Marisa Ong	Elissa Pehrul
Tom & Carol Rathmann		Alma & Doug Raymond
Steve Schafer & Janet Duerr		Wayne & Hatsue Schaf
Marjorie Sneed	Joanie Snover	Linda Valdespin
Bruce and Glenda Wicla	George Wilson	Linda Wollin

WARNINGS FROM ICEP-1

ICEP-1, the First International Conference on Environmental Pollution was held in Lisbon, Portugal in April. Attending were 300 scientists and policymakers under the joint sponsorship of UNESCO, the Portuguese government and the United Nations Environment Program.

No conclusions were reached, no solutions attained in this first conference; but the scope of the problems under discussion was global and chilling.

Half of Poland's rivers are so contaminated as to be unfit for any use. In Gdansk and some other Polish cities, the air contains toxic gases at levels that are six times the levels considered dangerous to human health.

Eighty percent of England's farm lands would have to be reverted to forest in order to meet the current EEC nitrate standards.

Nigeria - with no enforced controls on industrial pollution - has become a dump site for toxic chemicals from more industrialized nations.

Limestone buildings and statues - some of them thousands of years old - are dissolving in the polluted air and acid rain in Italy, Egypt and Greece. Athens is particularly bad in the summer as visiting tourists' autos and taxis emit new record amounts of pollution each year.

Not only third world countries, but many industrialized nations are still dumping untreated sewage and industrial waste directly into the ocean. Brazil's coastal cities are notorious dumpers. On the other side of the Atlantic, less than half of Portugal's sewage undergoes even rudimentary treatment.

WETLANDS PROTECTION UNDER FIRE

Louisiana's Representative Hayes (D) and Senator John Breaux (D) are introducing companion bills that would severely restrict the current definition of wetlands and leave the Corps of Engineers as the sole regulatory authority.

HR 1330, titled the "Comprehensive Wetlands Conservation and Management Act of 1991", would redefine wetlands to exclude seasonal and isolated wetlands not inundated for at least 21 consecutive days *in the growing season*; create a system of wetlands classification; limit the amount classified as high value to no more than 20% of a county's area; and require recognition of private property rights and economic growth in assessing the value of a wetland.

This bill has at least 53 co-sponsors and Senator Breaux's as yet un-titled and un-numbered bill is reputed to have more than 30 senators lined up as sponsors.

Letters to our own senators and representatives are needed to counter the well-financed agricultural and development interests that are supporting these bills. These letters should ask them not to support or co-sponsor these bills and should remind them of the value of wetlands in flood control and in maintaining water quality, as well as their value to wildlife and fish.

Senator Alan Cranston
1390 Market Street, #918
San Francisco, CA 94102
Tel. # 556-8440

Senator John Seymour
2150 Towne Centre Place
Anaheim, CA 92806
Tel. # (714) 385-1700

Representative Tom Campbell
599 N. Matilda Ave. #105
Sunnyvale, CA 94086
Tel. # (408) 245-4835

Representative Tom Lantos
400 El Camino Real, #820
San Mateo, CA 94402
Tel. # 342-0300

ITEMS FOR SALE OR RENT

San Francisco Peninsula Birdwatching	\$6.00
Birder's Handbook - Ehrlich, Dobkin and Wheye	\$17.60
Birding at the Bottom of the Bay - SCVAS	\$12.50
Birding Northern California - Jean Richmond	\$12.00
Eco-Safe String Bags	\$5.00
"I'd Rather Be Birding" Bumper Sticker	\$2.00
Mono Lake Guidebook	\$7.50
National Geographic Field Guide to the Birds	\$17.25
Pacific Coast Checklists - Pads of 25	\$3.50
San Mateo County Checklists	\$0.75
Sequoia Audubon Society Patch	\$3.75

Mail order prices include sales tax, handling and shipping.
Send checks to Sequoia Audubon Society, 30 W. 39th Ave., #202
San Mateo, CA 94403. Allow 14-18 days for delivery. Most items are available at a reduced cost at general meetings and at the office.

VIDEOS FOR RENT

Bird identification videos can be rented from the SAS office or at the General Meeting. Mail rental is available. Call the office for prices.

Techniques of Birding - Arnold Small	\$2.00/wk.
Video Guide to Birds of North America (Set of 5)	\$5.00/ea tape/ea wk.



**San Francisco
Peninsula
Birdwatching**

BEGINNING BIRDING: Red-tailed Hawks

You're driving with a car full of birders. Ahead, perched on a telephone pole, is something that to you looks like a football. Suddenly, several people in the car simultaneously shout, "Red-tailed hawk!" As the discussion in the car quickly degenerates into talk of "morphs" and "patagium", you wonder, how did they know that was a red-tailed hawk?

If this sounds familiar, you're not alone. Although the red-tailed hawk is our most common raptor, its highly variable plumage and apparent similarities to other birds of prey can make it difficult to identify. Yet there are several factors that can help in distinguishing red-tails from other birds.

Becoming familiar with some of the nomenclature and taxonomy of birds of prey can be helpful. Red-tailed hawks belong to a world-wide group of birds known as raptors (from the Latin *rapere*, to seize), which includes all diurnal birds of prey as well as owls. These are birds that hunt and eat other animals for food. Within this large order of birds is the order Falconiformes, which includes the hawks. In North America the three major groups of hawks include buteos, accipiters and falcons. Buteos are hawks with long, broad wings and short, broad tails which allow them to soar easily in search of prey in open country. Red-tailed hawks are in this genus (*Buteo jamaicensis*). The accipiters are hawks with shorter, rounded wings and long tails. They are primarily hunters of the forest and are adapted for short, powerful bursts of flight in hunting wooded areas. The falcons are birds with long, pointed wings and are masters of aerial hunting.

Raptors are highly specialized birds, having developed keen sight, strong sharp talons for seizing prey, and hook-like beaks for tearing food. Because they are hunting birds, they are high on the food chain within a given ecosystem. This means that birds such as the red-tailed hawk are often a dominant predator in an area and depend upon prey animals (such as rodents, small birds, reptiles and amphibians.) for survival. This also means that raptors are highly sensitive to their environments and are considered good indicators of the general health of an ecosystem. Fluctuations in numbers of raptors have been directly related to issues such as misconceptions about the value of predatory birds (e.g. large scale shooting of raptors), habitat loss (e.g. ancient forest and the spotted owl), or pollution of ecosystems (e.g. the peregrine falcon and DDT poisoning). In learning more about raptors, we also learn about the overall health of our environment.

Identifying red-tailed hawks in the field can be difficult. These are highly variable birds and at times it seems no two birds are alike. There are, fortunately, several guidelines which can aid the beginning birder in identification. Another factor that can alleviate confusion in the summer is the fact that we are somewhat "buteo-poor". There are only two breeding buteos in our area, the red-tailed and the red-shouldered hawks.

As a buteo, the red-tailed hawk has certain general characteristics that are common to all buteos. They are medium to large raptors with a somewhat heavy build (ergo, the football analogy). They have broad wings that usually appear blunt in flight. They are adept at soaring and are often seen using thermals for lift. They do not flap their wings often when soaring, but when they do, the wingbeats are powerful, slow and methodical. These generalizations are tempered with the fact that there are exceptions, and the red-tailed hawk is quite versatile and uses many other modes of flight (such as

stooping, hanging in the wind and hunting from a perch.)

Red-tailed hawks have characteristic field marks. As the name suggests, the adult bird has a reddish or rufous tail that is a reliable field mark. The amount of red in the adult's tail can be variable, but in almost all cases, it can be detected. The immature, or first year bird, has a barred brown tail.

Red-tails are generally brown above (i.e. the head, back and topside of the wings) and light below (i.e. the chest, or bib, and underwings). They may also show a variable band or speckling across the belly. This belly band is a widely used field mark. In the West you should look for a dark head, light bib and indistinct belly band. Almost all red-tails, regardless of coloring will have these characteristics.

Red-tails in flight reveal more diagnostic markings. A soaring bird will have long broadly proportioned wings. At times, the long primary feathers at the end of the wing can be distinguished with the fourth primary appearing longest. The underside of the wing is speckled, and can range from almost white to very dark. There is a characteristic marking on the underwing - a long dark line running along the leading edge of the underwing or patagium. This "patagial mark" is diagnostic.

The color variation in red-tails is infamous. Not only will birds' lightness or darkness vary from region to region (e.g. the eastern red-tailed hawk is usually much lighter), but also from bird to bird. A term that is often heard in hawk-watching is "morph". Hawk-watchers refer to light morphs, dark morphs and melanistic morphs in birds. (*The less accurate term "phase" is often used interchangeably with morph. --Ed.*) Red-tails encompass a wide range in color variance, from almost white (Krider's hawk) to nearly black (Harlan's hawk). In most cases, however, the above field marks can be distinguished. Be forewarned - these birds will confuse you and some of them will be very hard to identify.

From late winter through spring, red-tails display some truly exciting behaviors concerning territory, courtship, nest-building and breeding. Look for aerial displays around territories in early spring. These are a series of flights that range from long dives at other red-tails to talon-drops, in which one bird extends its legs down while soaring or flying over another bird; and undulating flights, in which a bird will come out of a soar and repeatedly tuck its wings in a dive and then open them on a fast ascent. Many of these displays are accompanied by its tell-tale scream - a long harsh "keecer".

Red-tails are secretive nesters. They will often return to nest sites for years and rebuild used nests. They can be very sensitive to intrusion during breeding season and will often abandon nest sites if bothered by human activity.

Red-tailed hawks lay between one and five eggs and produce one brood per year. The young birds are provided for for about six weeks after hatching, at which time they fledge. For the rest of the summer and into the fall, the immature birds will remain in the parents' territory, learning the basics of flight and fending for themselves. By winter these birds are on their own to face a dubious first year of independence.

Once you become familiar with red-tails, you'll soon be seeing them quite often and in many new places. Hawk-watching can be addictive and once you start, you'll find yourself walking with one eye to the sky. A red-tailed hawk can do this to you.

---David Buckley, Seattle Audubon Society,
(This article first appeared in Earthcare Northwest, the newsletter of the Seattle Audubon Society.)

MEXICO CITY AIR POLLUTION AT ALL TIME HIGH

This past winter Mexico City underwent a major increase in already legendary and notorious air pollution. Winds, which could disperse the pollution, usually come from the north but the city is surrounded on the east, west and south by mountains. Mexico City and its suburbs sit in a dead-end basin. Pollutants accumulate and mix together to form even more deadly toxic compounds.

The contamination is biological as well as chemical. About 30% of the population is without access to sewage facilities and human waste is dumped in the open. When it dries it contributes about 600 tons of fecal dust to the air each day! Hepatitis, and worse, can be contracted simply by breathing.

In March the Mexican government and the city began their \$2.5 billion four-year plan to save the city. The closing down of the state-run oil refinery was a necessary first step. Most important though it signaled the seriousness of the effort and was intended to convey the message that the lax and corrupt enforcement of air pollution regulations was at an end - at least at the highest levels.

On the direct enforcement level however there are indications that the government lacks the means and the personnel to do the job. The tradition of supplementing inadequate bureaucrat and police salaries by collecting "service fees" or "informal fines" is well entrenched and not likely to be changed rapidly.

There are some positive signs. The introduction of unleaded gasoline and mandatory use of low-sulfur coal have reduced level of lead and sulfur dioxide in the air. The laws limiting automobile use to four out of five working days have been enforced. Yet carbon monoxide levels continued to climb as 275,000 more autos were registered in Mexico City alone. Some of the autos are non-existent and the extra license plates are being used to avoid the "car-less day" restrictions based on the last digit of the registration number.

These limited signs of progress are not enough. Life itself is endangered in Mexico City. Children and older adults commonly suffer from a variety of respiratory ailments and many outdoor workers bear open lesions or large patches of rough discolored skin on their faces and arms. Plans for the future are well-intended and may do the job -- but *mañana* has come and gone. It may be too late.

SILLIMAN MOVING NORTH

John Silliman, one of our most active members for many years, is moving north to Oregon.

John has been president, program chairman, field trip leader, program presenter and a newsletter contributor, among other accomplishments. Recently retired from his work as a juvenile probation officer, John has had more time to devote to his main interests - traveling and birding throughout the world. One of his favorite areas is Costa Rica, which he has visited five times.

In September we will feature Part I of "A Costa Rican Odyssey" written by John Silliman and Sara Goodale.

Thank you, John, for all of your past favors and for giving us this parting contribution to remember you by.

OFFICER NOMINATIONS FOR '91-'92

Chairwoman Linda Kypta announced the slate of nominees for our 1991-1992 Officers and Directors.

President-Mary Bresler
Vice-pres.-Rick Johnson
Secretary-John Bryant
Treasurer-Fred McElhany

Directors - Three year terms
Nick Coiro
Louise Fletcher

Director - Two year term
Cliff Richer

The members of the Nominating Committee are Linda Kypta, Dan Keller and Steve Schafer.

Nominations are **not** closed. Nominations may be made, with the permission of the Nominee, from the floor of the General Meeting by any member in good standing.

T.V. SURVEY

T.V., as in turkey vulture, that is.

Lois E. Culp, a student at Cal State Hayward, is working on a project to map all of the turkey vulture roosts in the 9 Bay area counties and Sonoma County.

If you know of any such roosts, call Lois at 538-1762 or write to her at 18630 Stanton Ave., Castro Valley, CA 94546.

CUTTING WASTE!

"Cutting Our Waste in Half" is a new booklet filled with suggestions on how to reduce and recycle the 40,000,000 tons of waste that usually ends up in landfills each year. It is a project of Californians Against Waste under a contract from the California Department of Conservation. It was financed from unclaimed beverage container refund funds collected under the Beverage Container Recycling and Litter Reduction Act.

Sub-titled "The Model Planning Approach to Comprehensive City and County Waste Reuse, Reduction, Recycling and Composting", the guide is primarily intended for the government and business sectors. It addresses specific themes like marketing, source reduction, enterprise zones, and packaging. It has sections on working with the public and with the state, as well as the expected topics of commercial and residential recycling.

To get your free copy, write to:
Californians Against Waste,
909 12th Street, Suite 201,
Sacramento, CA 95814.

I had spoken of the rich years when the rainfall was plentiful. But there were dry years too, and they put a terror on the valley. And it never failed that during the dry years the people forgot about the rich years and during the wet years they lost all memory of the dry years. It was always that way. --John Steinbeck

A NOTE OF THANKS

To John Bridgham, Chairman of the Earth Day Observance on April 21 at Half Moon Bay State Beach where he arranged for a Sequoia Audubon display table.

To Amelia Orton-Palmer, wildlife biologist of the San Francisco Bay Wildlife Refuge, for contributing her expertise.

The above was under the aegis of our Vice-president, Rick Johnson.
---Mary Bresler

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AND MORE THANKS

Once your editor gets the *NEEDLES* to the printer each month, he has nothing to do with it until the finished product shows up in his mailbox a few days later.

In the meantime Linda Kypta and Nick Coiro have seen to it that the newsletter gets addressed and to the post office.

We acknowledge our debt to these selfless and dedicated volunteers who give us their time and toil every month.

Thanks, Linda and Nick!

---Cliff Richer

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