

This Month's Program



Venezuela: Birding the High Andes and the Low Llanos

SAS members Francis Toldi and Peter Metropolis will present this month's program covering the Andean Paramo near the city of Merida, with birding excursions to the

lower regions of the famous Humboldt Trail, Lake Mucubaji and down to the lush rainforest below Santo Domingo.

The Low Llanos plains area, during the dry season, offers large concentrations of birds and other wildlife in the remaining wetland areas. The large numbers of wildlife here is one of the grand natural spectacles in the world.

Next Month's Program

The May program will be about the birds of Midway Island. See next month's *Needles* for details.

California Wildlands 2000 Conference

May 5-7

**California State University,
Sacramento**

Three days of noted speakers, action workshops and participatory panels on the philosophy and the implementation of the environmental viewpoint and wilderness protection.

Contact information:

Website: www.calwild.org

Phone: 530-758-0380

or 530-304-6215

Fax: 530-753-0382

email: info@calwild.org

or verve@dcn.davis.ca.us

Birding in Hong Kong - Part II - See page six



From the President Heron and Egret Nesting Season is Upon Us

I recently got reacquainted with a childhood neighbor, Jobst Brandt, who has become a birder, too. We grew up together in what is called "Professorville" in Palo Alto. His father was a Stanford professor, as were several other people on the block. Anyhow, Jobst is a serious cyclist who rides his bike to work the long way around in a huge loop through Portola Valley. Even while speeding along he is a good observer of birds and he shares these observations with the larger birding community. This year an e-mail from Jobst marked the start of the heron nesting season. Sent on February 7th, it read, "I was in Portola Valley on Saturday as at least 20 herons flew in from Searsville Lake and inspected the trees at the heronry. After giving it their inspection the whole crew flew off again after about 10 minutes. I hope you get a good count this spring."

So, the nesting season would soon begin. I wondered if the herons would start as usual, even though our weather seemed to be specializing in rain, rain, rain.

Curiosity got the best of me on Monday, February 28th and I went to see for myself. Anne Moser and I have monitored this colony since the 1997 nesting season when there were 27 nests in a circle of redwoods along Portola Road. Shards of blue eggshells lay under the trees along with gray and white feathers. Sometimes, sadly, there were young birds that didn't make it on the ground, too. All of this resplendent with whitewash and cacophonous with the incessant noise that heron nestlings make. The next year *El Nino* took its toll on the birds and only about 10 nesting pairs arrived. Assessing the number of nesting pairs is problematic as the birds are difficult to see from underneath, so we usually spot from across the road.

Sure enough, on Monday, February 28th there were some adults sitting on big nests made of sticks and some still remodeling last year's nurseries. The incubating birds have a sort of glazed look in their eyes, as if they were thinking deep thoughts. Probably getting ready for the daunting task of raising the chicks to full-sized birds in the next four months. Maybe dreaming of owning earplugs to muffle the constant noise of their hungry young. We can only guess!

An even more spectacular heronry is available for you to enjoy by making a weekend trip to Audubon Canyon Ranch in Marin County. Great Egrets nest here as well as a smaller number of Snowy Egrets and Great Blue Herons. The ranch is situated right at the edge of Bolinas Lagoon where the parent birds secure food for the nestlings. It is an awesome experience to see nests way up in the evergreen trees with the young standing up and flapping their wings, unaware of the distance to the ground.

Members of Sequoia Audubon host on a number of weekends during the
(Continued on Page Two)

The mission of Sequoia Audubon Society is to participate in environmental education, and conservation and in the restoration, preservation, protection and enjoyment of our native natural resources with emphasis on birds and their habitats.



The S A S Calendar

THURSDAY, APRIL 6 — BOARD OF DIRECTORS MEETING — 7:30 PM — At the Sequoia

Audubon office. All members are welcome. Call ahead to make sure that there will be enough room.

SATURDAY, APRIL 8 — SEA CLOUD PARK -- This is our monthly beginners field trip. Information on use of binoculars and field guides will be given and there will be opportunity to ask questions. Sea Cloud Park in Foster City is reached by taking Hillsdale Ave. east from 101 and making a right turn on Edgewater Blvd., then going 1.3 miles to turn left on Pitcairn Dr. Look for the park entrance on the right and meet at the far end of the parking lot at 9:00 AM. **HEAVY RAIN CANCELS LEADER** **LESLIE FLINT**

THURSDAY, APRIL 13 — GENERAL MEETING — Francis Toldi and Peter Metropulos, fresh from their birding excursion to Venezuela will present this month's program covering the birds and other highlights of their trip. At the San Mateo Garden Center on the Alameda at Parkside. Informal get-together at 7:30 PM with the meeting beginning at 8 PM.

SUNDAY, APRIL 16 — MINES ROAD — Relict populations of birds linger on in these isolated valleys despite the destruction of their habitats in the Central and Livermore Valleys. Phainopepla, Lewis' Woodpecker, Lawrence's Goldfinch, Golden Eagle, Prairie Falcon, Roadrunner and Wild Turkey are usually seen and we have assembled lists of 75 to 100 species in a day. 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 so bring lunch and liquids. Weather is unpredictable, with temperatures in the past varying between 40 and 90 degrees on this trip. There are only two reliable restroom facilities, at lunch time and at mid-afternoon. There are no service station along the entire route so be prepared. To get there, follow I-680 about 25 miles to the Vasco Road exit. Follow Vasco Road to its end, turn right on Tesla Road. In about a mile you will come to Mines Road. We will meet at the intersection at 8 AM. Late arrivals will have no problem in catching up with the group if they follow Mines Road until they encounter the parked cars. **LEADER** **CLIFF RICHER** **873-1754**

SATURDAY, APRIL 29 — ED LEVIN PARK -- This park in the east foothills boasts an assortment of habitats including a duck pond, Sandywool Lake, grass and riparian habitats. To get there take Hwy. 101 to Sunnyvale and exit east on Hwy. 237. Continue east through Milpitas where it turns into Calaveras. Keep to the right where Calaveras forks at Downing Rd. The park entrance will be on the right. **A fee is required.** We will meet at 8:30 AM for this half-day trip. **RAIN CANCELS LEADER** **MERRY HAVEMAN** **344-2146**

News from ACR

Betsy Stafford



Bolinas Lagoon Preserve: The heronry's up and squawking again. Our public season started March 11 (and will run through July 16), and you, our good friends from Sequoia have already started hosting on weekend days. If you haven't signed up yet, please do so by calling (415)868-9244 (your host scheduler). We'll really appreciate you, and you'll enjoy the opportunity to get to know our beautiful preserve better.

An Education Program That Touches Thousands Each Spring: Each spring our school program at both Bolinas Lagoon Preserve and Bouverie Preserve reaches over 3000 schoolchildren in the Bay Area. Over 150 enthusiastic docents teach both in the classroom and on the trails. Bouverie just graduated 45 new docents, and Bolinas will start its 22 session training class in September. They're signing up potential docents now. Please call the ACR office to learn more about this exciting, award-winning natural history program that makes such a difference in our children's lives..

Bolinas Lagoon Preserve is also bustling with 25 recent graduates of the Ranch Guide Training Program. These wonderful weekend volunteers are anxious to share their newly-found knowledge of the area's flora and fauna. Be sure to pick their enthusiastic minds on one of your visits to Picher Canyon this spring.

Cypress Grove Preserve: Our Heron and Egret Project has just started its 12th year of observing more than 70 active colonies of Great Blues, Great Egrets, Snowy Egrets, and Black-Crowned Night Herons in the Bay Area counties. If you can help us observe a nesting colony in your area, please give us a ring at (415) 663-8203 or e-mail us at cgp@nbn.com



Looking Forward to May Two Special Field Trips Planned

For those of you who have never been to Audubon Canyon Ranch and may not want to venture out on your own, we will have a special field trip to the Ranch early in May. Ranch Naturalist **Greg Nevers** will be our guide. See next month's *Needles* for date and details.

Sequoia Audubon will celebrate **International Migratory Bird Day** with a beginners' bird walk at Bair Island on 9 AM, Saturday, May 13. Volunteers from our Bair Island Task Force will be on hand to greet the public and offer looks at wildlife through their spotting scopes. The bird walk and the wildlife viewing should last until 11:30 AM.

President's Message

(Continued from Page One)

season. Even if you've never been to the Ranch before, it's an ideal way to visit this natural wonderland. For a minimum amount of effort — helping visitors park and get registered — you can enjoy the herons and egrets, get close up looks at smaller birds at the bird hide and walk the trails. If you get there early enough you can trek up to the observation point and get an intimate look at this rite of spring before the crowds get there. And you won't find a nicer, more dedicated group of people than the ACR staff and volunteers.

For those of you who hate to try new things on your own, we're arranging an Audubon Canyon Ranch field trip, led by a professional naturalist, for the month of May.

Even if you can't host or attend our field trip, why not plan a visit so you can enjoy this annual spectacle!?!

Robin Smith

Robin Smith

Belize Audubon Society

The second annual Neotropical Birdathon, April 15th-17th, 2000.

An exciting 24 hour sponsored bird count, with the chance to come to Belize and participate personally, sponsor the count, or take part in simultaneous sponsored bird counts at home.

The Belize Birding Festival 2000

October 8th-15th, 2000.

Taking advantage of the great October migrations, the Birding Festival provides the opportunity to spend a whole week sampling the best Belize has to offer birders.

Sitting on the edge of the Caribbean in Central America, Belize is a birder's paradise. It has one of the world's richest

concentrations of bird species, with over 540 reported, and it plays a vital role as a resting area for thousands of migrating birds as they pass through the Americas. The country boasts lush tropical forests, a spectacular Mayan heritage, important wetlands and the hemisphere's longest barrier reef. Belize recognizes the importance of its environment with more than 40% of the country officially "protected".

As the longest established conservation organization in the country, the Belize Audubon Society works towards maintaining these amazing and unspoiled natural resources. The Belize Audubon Society's work includes the management of eight National Parks and protected areas, environmental education and advocating for Belize's environment.

By supporting the Belize Audubon Society and participating in these events you will personally benefit from a unique and fantastic birding experience, and at the same time contribute to the preservation of this ecologically crucial part of Central America.

The Belize Audubon Society is very keen to establish relationships and strengthen links with fellow birding organizations, especially other Audubon societies. They are confident that both sides would benefit from the resulting exchange of information and ideas, and would love to welcome members of such organizations to visit Belize.

They are also hoping to encourage as many sponsored bird counts as possible in April 2000, coinciding with their own Birdathon, and raising funds to be donated wholly or partly to The Belize Audubon Society.

Please contact them for more information: The Belize Audubon Society

Telephone: 01-501-2-35004

Fax: 01-501-2-34985 or

E-mail: base@btl.net

Their website is

<http://www.belizeaudubon.org>



Hard to believe — 28% of Africa is wilderness, North America is 38% wilderness — until you remember that most of Canada is empty.

S. California Fossils

One of the richest fossil sites found in recent years is southwest of Palm Springs where the Metropolitan Water District of Southern California is building its East-side Reservoir.

Mammoths, mastodons, bison, camels, horses, saber-toothed cats, giant ground sloths, North American lions, black bears, wolves, badgers, weasels, rabbits, turtles, mice, frogs, and birds are being found by San Bernardino County Museum paleontologists -- 20,000 fossils from 13,400 to 43,000 years old, including many never before seen in inland California.

Fossils began turning up in 1993 when construction began and paleontologists are still frantically collecting.

Golden Trout Workshop

The Golden Trout Natural History Workshop is located at 10,000 feet in the Golden Trout Wilderness, near the Cottonwood Lakes Basin, which is at the southern end of the John Muir Wilderness. The Golden Trout Camp is a hike-in facility composed of historic log cabins, where meals and showers are provided, and tent cabins for guests. The cabins are among the only structures that were allowed to remain inside the federally designated Wilderness Areas.

Each Summer the Golden Trout Natural History Workshop conducts three, one-week camps that include, in addition to meals and tent cabin space, daily naturalist-interpreted hikes and evening talks by professional botanists and geologists, among others. The Workshop provides an economical and unique High Sierra experience. Originally, the Workshop was affiliated with several chapters of the Audubon Society.

The Naturalist interpreted week sessions start on June 25, July 2, and August 6. Reserve early - The limited space is often full by May. For brochure, e-mail proark@silcom.com or 909-798-3060. Website www.1startists.com/gtc/

From the Conservation Committee

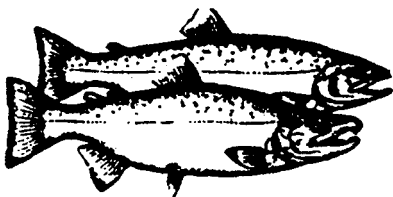
Conservation Committee Calendar Event

Coastside Audubon members are especially invited & encouraged to attend this special event!

"Salmon and the Water Quality Connections, a San Gregorio Creek Forum" Wednesday, April 5, 2000

The San Gregorio Environmental Resource Center (SGERC), a San Mateo County non-profit dedicated to preserving rare species and habitat, will be hosting a forum on San Gregorio Creek issues on April 5, 2000.

San Gregorio Creek is home to a host of wildlife, including, but not limited to, federally-listed steelhead trout, many rare amphibians and reptiles, many bird species, and is one of San Mateo County's largest creeks. In recent years, more attention has been placed on the creek because of water rights conflicts, the possible reintroduction of federally-listed Coho salmon, and the need to reduce the amount of silt and sediment in the creek. Many residents remember a time when there were more fish in the creek, and are eager to help restore the steelhead fisheries.

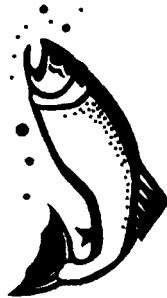


The forum will provide information on the watershed, its existing fisheries, and the impacts of land-use decisions on water quality. This event will provide an opportunity for residents and concerned citizens to learn new ways for preventing or minimizing pollutants and sediments in stormwater runoff from impacting the stream and its aquatic inhabitants. The watershed, as you may know, is home to a variety of land uses, including, but not limited to, agriculture, residences, and recreation. For the birders, it is a time to get together and share ideas with people concerned with preserving the riparian systems as a whole for the myriad

migratory and resident species who depend on San Gregorio Creek for food, shelter, and breeding habitat every year. Short talks will be given by area agency

scientists and free information hand-outs will be provided.

When: Wednesday, April 5th. Doors open at 6:30 for refreshments. Forum will start at 7 pm, and end at 8:45. There will be



time afterward for informal discussion with the speakers.

Where; La Honda Elementary School, Sears Ranch Road. From 1 or 280, take Hwy. 84 to La Honda, and turn north onto Sears Ranch road (next to Pioneer Market, across the street from Applejack's Tavern). The elementary school is on the right, about 1/8 mile.

Who: Scientists from the California Dept. of Fish and Game, Coastal Watershed Council, and the Regional Water Quality Control Board will be giving information on water quality, salmon and steelhead and efforts to improve creek habitat. San Mateo County Supervisor Rich Gordon will give information on the County's efforts in the watershed.

The event is free and open to the public. For more info, contact Chris Larson at 726-2499

The San Gregorio Creek Forum is funded by the San Mateo County Stormwater Pollution Prevention Program, a program of C/CAG.



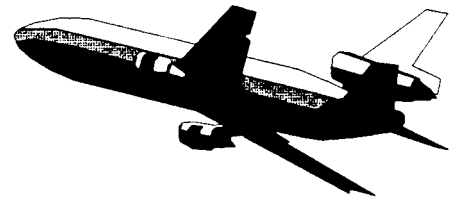
To learn what species are included on any state's WatchList, visit the National Audubon Society Web site at www.audubon.org/bird/watch/state2/.

This site was updated on September 1, after review by experts in each state.

SFO Runway Expansion

Impacts and Alternatives Robin Smith

Bob Wilkinson and Robin Smith from the Conservation Committee attended Save the Bay's all day conference at the College of San Mateo on the SFO runway expansion project. A series of panel discussions covering Impacts on the Bay, Alternatives and Assumptions, EIR/EIS and the Permit Process and How You Can Make A Difference comprised the agenda.



OR



We learned more about the issues concerning hydrology, wetland restoration, species of birds, invertebrates and fish of San Francisco Bay, available and needed scientific information, airport system technology under development and what all of us can do to have a say in the process.

Bay Conservation and Development Commission has a website that has a concise report of the recommendations made at the October NOAA Conference in San Francisco which were presented at this conference. I would recommend that you read this report as a starting point to understanding the scientific issues involved.. If you don't have web access call Save the Bay at 1-510-452-9261 for a copy of the report.

We will need a knowledgeable membership when it comes time to influence public opinion to achieve an outcome that is good for all of us and our bay.



SPRING 2000 BIRDSEED SALE ORDER FORM

ALL ORDERS WITH PAYMENT MUST BE RECEIVED BY WEDS., APRIL 19

Proceeds support local Audubon conservation and education programs

Check preferred pickup location. Pickup dates will be April 27-30, 2000

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THE NEXT SEED SALE WILL NOT BE UNTIL OCTOBER 2000

Please enclose a **stamped self-addressed envelope** to receive your order confirmation and directions to pickup location. Mail check and order to: **SEQUOIA AUDUBON SOCIETY**

Name _____ 30 West 39th Avenue, Suite 202
 Address _____ San Mateo, CA 94403
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On My Own in Hong Kong Francis Toldi

(Continued from last month)

I repeated my transportation procedure, taking a somewhat longer cab ride out to the Mai Po Natural Reserve. Mai Po is wonderful wetland area along Deep Bay. It consists of both natural wetland, mangrove edges, and abandoned and still-operative fish ponds. The area was the scene of a major environmental battle in past years (they wanted to put the airport there). Thanks mostly to World Wildlife Fund Hong Kong the area was saved, and is now operated by WWF as a nature reserve.



As luck would have it, I stumbled upon "Mai Po Day", when all of Hong Kong seemed to be here to learn about and enjoy Mai Po. There were cars and busses full of people all talking, walking down the paths to interpretive stations, learning about birds and the environment. At first I was disappointed, and the helpful staff apologized for all the commotion. But my conservationist's heart won out over my birder's exclusive snobbishness, and I was happy to be there and witness this. I had been under the mistaken impression that the local Chinese population in Hong Kong was not that interested in birds outside of cages or the stew pot. How wrong I was! My experience here was very encouraging and educational.

As it turned out, it wasn't so bad for birds, either. The "Discover Mai Po" folks stayed to a fixed route, and the rest of the Reserve was open to me as a birder, so it wasn't that hard to find the remote byways and some of the more furtive species. Besides, I was mostly after common species anyway, and without a scope, local assistance or adequate preparation I

probably wouldn't know a rare sandpiper if it flew up and pecked me on the nose!

As I walked the levee trails and peeked in at various ponds, blinds, and wooded margins, I started to see the basic set of Asiatic herons and ducks, including a few real gems:

Black-faced Spoonbill (critically endangered), White-breasted Waterhen, Common Kingfisher, Red-throated Pipit, more bulbuls, Black-necked Starling. I always get a kick out of seeing flocks of Tufted Ducks and Eurasian Wigeons. In Japan the real experts avidly scan large flocks of these species for the rare scaup or American Wigeon! I was particularly proud of myself for working out some of the warblers, eventually identifying Plain Prinia, Chinese Bush Warbler, Fantail Warbler (Zitting Cisticola) and Dusky Warbler.

My special one day pass also allowed me access to the members-only WWF blind right on Deep Bay on a special boardwalk that goes beyond the massive, barbed-wire wrapped border fence. There are two blinds at the end of the boardwalk. The first one I tried had two soldiers in it, looking for illegal border hoppers, I guess. The birds were all over at the second one, so I moved over to that one. This was occupied by a couple of locals doing some kind of bird survey. At that instant I contracted an unfortunate case of the shies, and hardly said a word besides hello. I was at a real disadvantage without a scope here. It was almost impossible to see any detail on the somewhat distant, huge flocks of shorebirds and gulls. I had a near miss on one of my target specialties, a Saunders's Gull. I did work out a number of shorebirds, Common Shelduck, Eastern Marsh Harrier, Black-capped Kingfisher. All in all this was the most frustrating part of the day for birdwatching, both because of the challenging conditions and because of my own lapse in social skills that might have gained me a peek through someone's scope and a few words of advice on what I was seeing.

As I made the long walk back to the entrance headquarters, roundly cursing myself for my conduct, I noticed some distant ducks. With perseverance and a little luck (the birds eventually flew fight

overhead) I was able to identify Baer's Pochard, a long sought species for me in these pads. Then I passed on the trail a nice couple that I had met that morning at Tai Po Kau, who gave me a warm greeting.

The headquarters staff called me a cab, so I headed back to the KCR, then as the sun went down made my way back to my cushy hotel in the middle of the wonderful urban madness that is Central Hong Kong.

My Mai Po total was 45 species, of which 3 were lifers and another 6 new for Hong Kong. My total for the day was 66 species, not bad for a fairly spontaneous do-it-yourself kind of day in a faraway land!



Florida Burrowing Owl Study

The Florida population of Burrowing Owls is disappearing rapidly. And, surprisingly, no previous studies exist, even though this little owl has been a "species of special concern" since 1979.

Current estimates of numbers range from 3000 to 10,000 Burrowing Owls left in the state of Florida. It is hoped that the survey by the Burrowing Owl Project will come up with a more accurate number.

(Based on my limited experience looking for Burrowing Owls in Florida, I believe the population to be even lower. On my visits I checked out 21 "known" owl locations only to find strip malls or bulldozed earth. The only exceptions were two burrows that did not appear to have been used for some time. —Ed.)

The Curmudgeon

Cliff Richer

Animal Ages

One of my pet peeves is the "free Willie" article that begins (or ends) with a statement like, "Koalas live an average of eight years in captivity but can live to 15 years in the wild."

This is a classic case of comparing oranges to apples. If you turn it around you can just as easily — and truthfully — say "Koalas usually don't survive their first year in the wild, but can live to 20 years in captivity."

The truth is that with some notable exceptions — great white sharks are one — most animals will live far longer in captivity than in the wild. Most wild animals never see their first birthday. Besides disease, parasites and infection, which affect the youngest most severely, most creatures occupy the lower levels of the food chain and are lunch before they are adults.

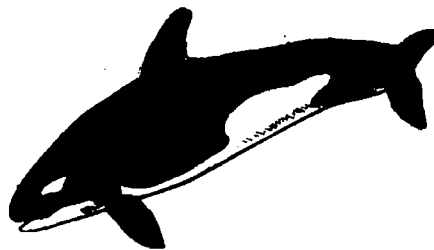
Even at the higher tiers of the food chain, survival rates are low. Among birds the eggs are timed to hatch at different times so that one chick will be older and larger and will get the bulk of the food. In a good food year the second chick may get enough to eat but it takes an extraordinarily abundant year for a third or fourth heron, hawk or owl to fledge. After fledging, the prey species face their greatest test — learning how to hunt. Many who survive their siblings' aggressiveness do so only to starve to death.

Migration is — for some species — the ultimate passage into the adult stage. A creature that survives its first migration will usually live beyond the average age. Indeed, in many cases it is already beyond the average age.

The worlds' zoos today are facing unique problems as many of their animals have lived far beyond normal life expectancy. Hsing-hsing, the National Zoo's giant panda, is a classic case of animal geriatrics. At 29 years old he is racked by arthritis and kidney problems. In the wild he would have been unable to feed himself years ago. At the zoo they supplement his bamboo — with which he can no

longer, fully feed himself — with a slop of cottage cheese, honey and rice laced with vitamins. Even so, when his arthritis is flaring, he will not eat at all, with one exception — Starbucks' blueberry muffins. In order to keep Hsing-hsing alive it takes three muffins a day, each containing his arthritis medicine.

Mesizou, a 44 year old gorilla, is also arthritic. Her hair is gray (not silver, as in mature "silver-back" males. No wild gorilla has ever been found old enough to develop gray hair.) She gets vitamins, antibiotics and regular dental care.



Maureen, the 15 year old sea lion, is toothless and has an infection that refuses to heal, requiring more than a \$1000 in medication each month. Her companion, Esther, requires steroids to keep her alive.

Taj, the tiger, at 15 can't control his hind legs and his few remaining teeth have had root canals.

Nile, a 47 year old hippo, can barely move out of water and is kept alive by periodic IV treatments.

I do not like to see animals behind bars, and I have no way of knowing how the animal feels about it. But I refuse to join those who think of the natural world as being some kind of Disney habitat where wart hogs and lions live in harmony and no creature ever gets sick. It's a lousy, germ, violent world out there and captive animals will outlive wild animals by a ratio of anywhere from two up to a hundred to one.



Extinction

Periodically, the newspapers or magazines publish the statement by some half-baked biologist or anthropologist that "we are losing 100 (or 1000) species per year (or minute)" or "we are losing species at an unprecedented rate."

Such statements are just plain stupid. First of all no one knows how many species there are. Scientists estimate there are anywhere between 4 and 100 million different species — a considerable difference of opinion. Taxonomists differ on what constitutes a species. Some biologists don't count bacteria, viruses or other single-celled organisms unless they cause disease or perform some useful service. And no one has any idea what a "normal" rate of extinction means.

What we do know is that at times in our past there have been massive die-offs. One of the least fatal, but best known, is the phenomenon that killed off the dinosaurs. Although there are holes in the theory, most people now accept the idea that this was caused by the impact of a giant meteor or minor asteroid striking the earth somewhere off Yucatan Peninsula.

Prior to that, fossil remains indicate that there were at least two false starts to evolution and that some natural phenomenon killed off all life on earth.

Now a Harvard team of geologists, examining rock layers in Namibia is contending that there has been at least one and perhaps four or more "global freezes", in which everything on the earth would have been frozen to the deepest parts of the oceans, killing off every living thing except those bacteria living in the melt-water created by undersea volcanoes.

Eventually, over millions of years, the carbon dioxide emitted by these volcanoes accumulated, creating the greenhouse effect and global warming ensued.

So the current rate of extinction is not "unprecedented". Indeed it proves once again that whatever human beings do is pretty small potatoes compared to what nature can and has done.

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.

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Sequoia **NEEDLES** is published monthly except in January, July and August. Members are encouraged to submit material to be published in the **NEEDLES**. The deadline for the submission of materials is the first day of the month preceding publication. These may be original articles, original artwork or cartoons, or uncopyrighted material from other sources. Items dealing with conservation issues must be submitted to the Conservation Committee prior to publication.

Information for all officers and chairpersons should be mailed to 30 West 39th Ave., Suite 202, San Mateo, CA 94403-4561. Please send **RENEWAL MEMBERSHIPS** directly to National Audubon in the envelope accompanying your renewal notice.

Please send **LATE RENEWALS** or **NEW MEMBERSHIPS** through Sequoia Audubon Society to insure continuity of newsletter or magazine subscriptions.

SEQUOIA AUDUBON SOCIETY'S WEB PAGE'S URL is <http://Sequoia.ca.audubon.org/>

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Term ending '01	Merry Haveman	344-2146
	Cliff Richer	873-1754
Term ending '02	Rick Baird	574-1067
	OPEN	

ACR Representatives: Leslie Flint

STAFF	Nicole Salgado	345-3724
	Fax	345-3748
	e-mail	sasoffice@neteze.com

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