



BLUEBIRDS FLY!

California Bluebird Recovery Program's newsletter

—sponsored by National Audubon Society-California
—an affiliate of the North American Bluebird Society

for the encouragement and conservation of cavity nesters—especially bluebirds—anywhere in the West

Fickle weather frustrates monitors and early birds

Spring came late in most of California. Rain and cold weather persisted through March and into April. As if remembering the El Niño storms of '98, the Western blues suspended or held off nesting until late April and early May in much of the State.

By the time they started, the Tree Swallows had arrived and were nesting simultaneously. County coordinators got anxious calls from monitors reporting that blues and swallows were fighting over the nestboxes.

Robert & Kathy Hall, El Dorado, left a message with their coordinator. By the time he could respond, paired boxes had been erected on their property and both bluebirds and swallows were happily nesting.

The Oak Titmouse, as usual, was the early bird, and seemed less bothered by the weather. The well-drained nest construction with its moss base, then fine bark and twigs topped by a deep fur cup, keep their eggs and chicks warm even when it's cold out. Ms Titmouse buries her eggs in the fur when she's out foraging. Full clutches were being incubated in late April and chicks were arriving in early May in mid-State areas.

Orange County Coordinator **Dick Purvis** put it this way: "Earlier warm weather caused many bluebirds to start nesting April 1st and even before. After two weeks of wet and very cold weather, several of my nests with eggs were abandoned. I have had reports from others here in the county with abandoned nests also. At least one of the nests was with young chicks.

"This also happened last year with the wet weather of El Niño but I never noticed it happening in the previous 13 years. We rarely get rain during the nesting season. I have come to the conclusion that our birds are fair weather birds which quit at the first sign of hard times. I guess it is a survival process that saves the most important lives—namely the adults."

After very late starts, the first broods came on in earnest. Large egg clutches and good success seemed the rule of the day. But this caused the second nesting to start late. In the Central Valley and the Sierra foothills temperatures jumped to 105° F and higher for 3 or 4 days at the end of June and early July and again about 10 days later. Many eggs failed to hatch and young chicks died in the nest.

We won't know till the annual reports are in, but it was a fairly successful year for most but not without its drawbacks. Heat seemed to be the major cause of losses this year whereas last year it was the rain and cold.

Some thoughts on beating the heat are included elsewhere in this edition.

If this issue seems late, it's because your editors spent a very active field season with the cavity nesters and their landlords. Though late, it gives us time to request your Annual Reports now while the season is fresh in your mind. See adjacent article.

SEASON WINDS DOWN — THINK ANNUAL REPORT

We have a new Annual Report form. Before you all groan, let us explain how it came about.

Many have asked for more detail that may be plugged into other studies. Others have begged for simplification. Both arguments have their place. Still others have argued that reports mean nothing since CBRP can't hope to measure the total population of nestboxes nor are our monitors trained to record accurately. We believe the latter attitude reflects unjustly on many of our conscientious birders.

To meet both needs, we have divided the form into essential information and other desirable information. You may choose to answer it either way. We will use the detailed information as a subset of the total.

The simple way is to give us the number of tries or attempts (which means how many laid at least one egg), and the total number fledged by each species. You will note that these lines are plain white.

The more detailed reporters will also use the shaded lines.

If you don't keep track of the number of broods, just fill in the totals.

Additional information is requested on the size of box. In the past, the Wood Ducks, owls, and kestrels have been totalled with the smaller birds. Now we can separate totals by box size.

We'll take your reports at any time.
The best time is now.

Natural selection—cavity-nesters in North America

—by Keith Kridler, Mt. Pleasant, Texas

For possibly several hundred thousand years or longer bluebirds got along fine with *Homo sapiens*. It was not until Europeans invaded this continent that they declined.

Bluebirds nested in hollow trees in naturally formed edge clearings (forest fires/tornadoes, etc.) just like they had evolved for eons. The ax, slash & burn farming tactics to improve soil fertility destroyed nesting sites.

By 1850, smallpox had exterminated many Indian tribes and the House Sparrow—just imported—was to have the same effect on the small native cavity-nesters.

There were now more white men in the New England states alone than all the native Indians on the entire continent. Aztecs, Mayans, and Mound Builders were some groups that “natural selection” exterminated for all practical purposes. Stand on the huge mound (mountain) along the Natchez Trace made by Indians without a steel shovel and tell me they were inferior!

In 1900, the European Starling was introduced and it took until the 1940s to make it to California and the 1970s to reach the northwestern states and parts of Canada (still expanding).

WWII introduced the need for pesticides to feed more people on less acres. Massive farms with no edge rows for hundreds of miles exploded in many parts of the U.S. DDT wiped out all insects on these farms poisoning all species of field loving birds who relied on sick or dying insects to feed themselves and their young. House Sparrows and Starlings nesting in yards and towns and relying mainly on seeds and spilled grains saw their populations explode in these protected environments. This is “natural selection” in this century.

When DDT was banned in the 70s House Sparrows exploded into the “killing fields” of farmland now practically devoid of bluebirds. NABS’s formation in 1978 coincides with the turn-around in the steep decline of the Eastern Bluebird.

Bluebirds nesting in virgin timber were most likely to be nesting in beaver-killed trees or “tree branch” style nest sites at very high heights.

For our ease of checking we force bluebirds to nest at low heights in direct competition to the House Wren; so, to combat this, we move boxes out 100 yards from all vegetation. It is *unnatural* to place boxes in *full sun*!

This is why bluebirds need help until we can figure out a way to have 9 billion people on earth and save all species. The things we learn with a non-endangered species are helping others like the Red-cockaded Woodpeckers now being saved from snake predation with the Krueger Snake Trap developed with only the thought to save a few bluebirds in an East Texas backyard by a man with *only* 17 nestboxes.

Research just 10 years ago on NABS nestboxes found 2 more unknown species of parasitic wasps (one of the most studied and collected insects in the world).

This is why we have spent our lives helping and saving these birds. What we may learn this year may save the last species of some remote birds.

The joy and wonder of seeing those blue eggs hatch may spark a fire and determination in some child next spring that may lead them into a life of research and with the right brain at the right time could possibly save us all.

California Bluebird Recovery Program

Founded in 1994, supported by National Audubon Society-California and affiliated with the North American Bluebird Society, CBRP is “for the encouragement and conservation of cavity nesters—especially bluebirds—anywhere in the West.”

CBRP is non-profit, has no paid staff, and is supported entirely by the efforts of volunteers and donations accepted by the Mt.Diablo Audubon Society on CBRP’s behalf.

CBRP members had located and reported on 4,142 nestboxes by the end of 1998, with more than 11,000 cavity nesters fledged—nearly half of them western and mountain bluebirds.

CBRP welcomes membership from the public who wish to support its program, and especially seeks those who will place appropriate nestboxes in the proper habitat, faithfully monitor the birds’ progress through the nesting season, and report yearly on the results.

CBRP can furnish nestbox plans, a monitoring guide, forms for monitoring and reports, technical advice through a network of county coordinators, and sometimes the nestboxes themselves.

Membership, which includes this quarterly newsletter is available for a donation of \$5 or more made payable to “MDAS—Bluebirds” and mailed to CBRP, 2021 Ptarmigan Dr #1, Walnut Creek, CA 94595. Donations are tax-deductible.

California Bluebird Recovery Program

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Support our colleagues



Founded in 1978, the **North American Bluebird Society** (NABS) is a non-profit organization determined to increase the populations of the three species of bluebirds on this continent. Inasmuch as the populations of these birds have diminished due to the maladroit actions of human beings, as well as natural disasters, the society strives explain the importance of preserving native cavity nesters.

The society works within the bounds of effective conservation to study obstacles impeding bluebird recovery and to promote ideas and actions which might reduce their effect.

Membership is \$15. NABS's mailing address is PO Box 74, Darlington, WI 53530.

National Audubon Society



There are local chapters of the **National Audubon Society** (NAS) in all fifty states, Guam, and Latin America. In California there are over fifty local chapters. Chapters have newsletters, monthly programs, and field trips to local areas of interest.

To join NAS, contact your local Audubon Chapter, or call NAS-California at (916) 481-5332. National dues are \$20 for new members, and include a bimonthly magazine as well as membership privileges in your local Audubon chapter.

Spotlight on our cavity-nesters

The Violet-green Swallow is a neotropical migrant breeding west of the Rockies and wintering from Southern Mexico south. Compared to its close relative, the Tree Swallow, little is known about the ecology of the Violet-green.

Violet-green Swallow

Tachycineta thalassina



In California, they are not nearly as common as the Trees. Unlike the Tree, which has actually increased over the past 30 years, the V-g has declined 41%. Of our smaller birds, only the Bewick's Wren and the Chestnut-backed Chickadee have had a greater decline.

Perhaps this is because the Violet-greens are so dependent on insects in their diet. The Tree Swallow consumes 20 to 30% seeds and berries, but the Violets are 99% insectivorous. Cold weather puts them at the mercy of the elements when many insects go dormant. And they compete with all of the other cavity-nesters for nestboxes and other cavities. House Wrens are their chief rival for nesting places.

V-gs are found in the same areas as Trees. After the hatching year, the adults can be told from Trees by their white rump patch which extends almost to the midline of the back. However, the white of the face is obscured in younger birds. Moreover, if both species are in the same area it may be difficult to tell which bird goes with which nestbox. Second year birds are difficult to separate by facial markings alone.

Nestlings can be told apart when they're between 10 to 14 days by their facial markings: the Violet-green chick has light-gray to white upper eyelids; the Tree Swallow's eyelids are the same sooty-gray brown as the top of the head.



VGSW



TRES

By the time they are ready to fledge, their eyelids may no longer be noticeably lighter, so, if in doubt, check your chicks when they are at the right age.

Like Tree Swallows, the Violet-greens lay 4 to 6 white or pale pink eggs in a nest of stems, twigs, dry grass, fur, or horsehair. Egg laying may begin before feather gathering commences. The male brings in the feather adornment.

The female will begin incubating *before* the clutch is complete. As a result the hatching is asynchronous, that is, the chicks may pip from the eggs, one by one, over a five day period. Incubation takes about 13 to 15 days. The chicks' eyes open at 10 or 11 days. They're in the nest from 23 to 25 days.

Unless something happens to the first clutch, there usually is not a second brood. There is no information on how long the juveniles depend on adult support.

The male develops a less pronounced brood patch than the female but will sit on the eggs while the female is out feeding during the incubation period.

As the Cornell Lab of Ornithology says, the female displays extreme fidelity to the breeding site. Approximately 80% of females return to the same breeding area every year. Whether males show similar site fidelity is unknown.

No information exists regarding juvenile dispersion. Here's another project for bird banders.

—HG

RATS!

Another predator to contend with

Eavesdropping on the BLUEBIRD-L list produced this article:

Dick Purvis, Orange Co. says “I suspect that rats are a much worse and more prevalent predator than has been previously believed. The worst thing about rats is that I can think of no defense!”

Keith Kridler, Texas, responds, “Rats? Predators! Which type of rat? I have heard of the white-footed mouse killing very young birds but most of our Texas rats that climb are too big to enter a 1⁹/₁₆" hole. They are deadly to ground nesting birds and even young chickens here. Tell us more Dick!”

“The type of rat that I suspect is involved in the predation of bluebirds is a Norway rat.

“I have also found rats in nestboxes several times out in the wild areas along the river. These are wood rats... The ‘proof’ I had was two nests destroyed in a very urban setting where there was no possibility of wild animals such as weasels. In one nest, 5 nestlings near fledging size were gnawed about the head and killed in the nest. Parts of them were eaten and the remains were in the nest. The second nest had an incubating female killed and partially eaten and the eggs were eaten and the shells left in the nest. The culprit could only have been a rat.”

Kevin Putman, Sutter Co., says, “This past February, I was checking some nestboxes, a little after sunrise, on a golf course. I found a large rat in one nestbox. I concluded that the rat would have to go, however, I lacked proper weaponry. I attempted to smack it with a socket wrench; it jumped out of the box and ran to-

wards a nearby tree. I caught up with it, knocked it off the tree, and then stomped it. I finally succeeded in killing it.

“Anyway, I cleaned out the nestbox and found lots of blue feathers that had obviously come from an adult male bluebird: it appeared to have been eaten in the nestbox. I speculated that the bird had perhaps died in the box, and then the rat, when it moved in later, found the bird and ate it. No way to know if the rat had actually killed the bluebird.

“Here’s one possible solution: put up some Barn Owl nestboxes!”

Fread J. Loane, Oklahoma, agrees with Kevin: “Setting strong posts as perches in the middle of grasslands encourages owls to use these to launch attacks from.”



Research here at *BLUEBIRDS FLY!* leads us to believe the Wood Rat (Pack Rat) is not a likely culprit. Its normal diet is vegetarian, although most rodents are omnivores.

On the other hand, the Norway rat is notorious for eating nearly anything. It’s considered to be the most destructive mammal in the U.S. Its close relative the Black Rat (Roof or Wharf Rat) is also quite a pest. Both of these Old World rats carry many diseases and cause much economic loss. They are always associated with manmade structures. They gnaw through the best made wooden structures and are the source of many electrical fires.

Their skulls measure under an inch in breadth and their sinuous bodies can usually squeeze through wherever their head can go, so they can certainly access a nestbox. Gray and Fox Squirrel skulls are close to 1¹/₂", so they normally must enlarge a hole to enter.

Can we beat the heat?

In the Central Valley and the foothills of the Sierra, extreme heat greater than 105° F occurred on 6/30-7/2 and 7/12-13. Many second nestings suffered with losses of eggs and young. The East has suffered unusual heat, too. Here are some ideas picked up from the internet.

Temperatures of 107° F for 4 hours is lethal to most native-cavity nesting bird eggs and young. Chicks 1-6 days old are the most at risk because they cannot regulate their body temperature.

A dark stained nestbox will gain 17° F over the shade temperature when placed in full sun; so this location is only safe if your temperatures never go above 90° F. A white NABS-style box with no side roof overhang will gain 5° F in full sun.

Double topped boxes; i.e., screen roof on top of the box itself and another fixed roof with 6" overhang above for heat and deflection, have been tried for years in the east. The 6" overhang keeps the full sun off from the hours of about 11 am to 4:30 pm.

Dick Tuttle in the early 80s showed that if the sun shines directly into a nestbox it will raise the temperatures as much as 5° F more than if the box is in the exact same location but is turned or has more roof overhang so the sun can’t shine into the box.

Placing boxes on the east side of utility poles will reduce losses from heat. Protect them from the brutal west sun by having a tree on their west. A shaded box is a cooler box, regardless of where the shade comes from.

Either drop the front ½" or drop the two sides ¼" to allow the hot air an easy way to vent out.

Thanks to Keith Kridler, Dean Sheldon, Merlin Wright, Haleya Priest, et al, for your posts.

THE SWALLOWS COME BACK TO VENTURA

Jan Wasserman's Tree Swallow Nesting Projects, Inc.

Jan Wasserman got started with banding in bird watching classes conducted by the late **H Elliott McClure**, at Ventura College in 1986. At the end of his class, McClure, the dean of American bird banders, put on an exhibition of banding for his class. In his autobiography, *Stories I like to tell*, he wrote, "Jan was so enamored by the job that she turned to [her husband] Hal and asked, 'can I quit my job and do this?' He acquiesced and she did, spending many weeks with me, learning both netting and trapping techniques."

Since 1991, Jan has been developing her Tree Swallow trail. She monitors 182 boxes and bands at an additional 80. Her website—www.westnet/~bandlady/index.htm—gives the history of her project:

"While the Tree Swallow is somewhat common throughout North and South America, it was almost completely extirpated from the Southern California area, and especially in Ventura County. This is due in part to development and agriculture, as most of the trees that could be used for nesting have been cut down. The Tree Swallow is a secondary cavity nester, which means it must have the use of "dead" trees to nest in. Providing "homes" for secondary cavity nesters is, fortunately, one of the easier habitat repairs that can be done, with the placement of nestboxes in the appropriate areas.

"In the early 1980s it was noticed that there were a few pairs of Tree Swallows still along the banks of the Santa Clara River, which covers both Los Angeles and Ventura Counties. Consequently, a few nestboxes were placed at the Ventura Sewage Ponds,

at the mouth of the Santa Clara River, in Ventura. There was some moderate success, however, due to various circumstances the project was left alone for many years.

"In 1991, the project was restarted and expansion began. In addition to the nestboxes already in place at the Ventura Sewage Ponds, three boxes were placed at the Saticoy Spreading Grounds, Freeman Diversion, run by United Water Conservation District. The boxes were successful and over the intervening years more and more nestboxes have been placed at that site. In 1995 a request was made by UWCD to place some boxes at another of their sites, the Gravel Pits. The request was generated as a result of the decrease in mosquitoes and other flying insects in areas where the boxes were already in place. The District was concerned about the use of pesticides, and felt that the swallows provided an answer to pest control that is totally natural and nontoxic. Both areas have experienced a dramatic lessening of the flying insect population.

"In 1996 the area of Hedrick ranch was added to the site map. The swallows had been nesting there historically, as it was one of the few undisturbed habitats along the river. Boxes were added there just to supplement the strong, but small population.

"Since the project has been aggressively expanded, the population of Tree Swallows has grown from approximately 10 pairs along a 45-mile stretch of the river, to several thousand birds hatched and fledged."

Jan's is a real success story in effective conservation and should be an inspiration to all monitors.

Mighty Mite revisited— diatomaceous earth recommended

In the Spring of 1998, **Dee Warencia**, Placer, wrote of her losses of Tree Swallows to infestations of mites (*Acarina*). Not all swallow nests are infested with mites, but there is high mortality in nests with heavy infestation. Dee asked for advice.

For years, pyrethrins have been an insecticide of choice with birders because it causes little harm to the birds. However, it's very difficult to find a pyrethrin spray that isn't mixed with some other, more dangerous, pesticide.

More recently, diatomaceous earth (DE) has been recommended. Apparently there are two kinds of DE: one that is used as a filter in swimming pools and one that is used in gardening. It's the latter that's suggested for nests.

Jan Wasserman dusts her nests with DE for the mites. She says, "It doesn't get rid of all of them, but it does keep the mites at bay. I start dusting the nests as soon as I see eggs. DE is not toxic. It breaks down the exoskeleton of the insect, so it is totally safe to use on the birds. I don't dust 'pink babies' though, because I'm afraid it might irritate the skin. Mites in small numbers don't seem to be harmful to the birds, but I have had major infestations that have killed nestlings, that's why I am diligent about dusting boxes. Hope this helps."

Not only is DE a good control for mites but it's effective on ants as well. It can be placed around the bottom of the nestbox pole to stop ants.

Your editor priced DE at a local nursery. It runs \$6 for a 1½# box. Add it to your monitoring kit.

NABS Conference is great success

The North American Bluebird Society's 22nd Annual Convention in June, drew 253 registrants to Great Falls, MT. The wide expanses of Big Sky Country provided the backdrop for three 7:00 AM field trips on which eager birders burst from 6 tour buses at numerous stops to scour the open grasslands and fire-scarred timber. Mountain Bluebirds were in abundance and other varieties were added to many Life Lists.

Indoor activities included slide talks about exciting encounters with raptors and four-footed creatures that share the great outdoors. On display were many examples of nestboxes, art work, and habitat enhancement techniques.

Round-table discussion at the Friday breakfast included bluebirding, banding, habitat, monitoring, questions, and exchange of ideas on trail management.

The Board of Directors met twice, and 25 representatives of Affiliated Organizations met to cover a range of subjects from startups to financing, and membership development.

Fullest credit must be directed to management of logistics for the meeting by **Bob Niebuhr** and others on behalf of Mountain Bluebird Trails, Inc., hosts for the Convention.

The death of **Art Aylesworth** on May 1 was a personal loss to every attendee and was observed by presentation to **Vivian**, his widow, of a plaque in his honor. Bob carried on with the myriad of details and conduct of the several meetings. He, too, received an award from MBT, Inc. for his tremendous dedication and work.

NABS 2000 will be held in Galena, Jo Daviess Co., in the far NW corner of Illinois on June 22-25, 2000. Write NABS 2000, PO Box 502, Elizabeth, IL 61028 for registration.

BANDERS REACH NEW HEIGHTS THIS YEAR

With the addition of **Jan Wasserman**, master permittee, to our list of cooperating bird banders, the total number of cavity nesters banded and reported to CBRP has soared.

1343 Western Bluebirds, 1072 Tree Swallows, 175 Oak Titmice, 122 Violet-green Swallows, 84 Ash-throated Flycatchers, 37 White-breasted Nuthatches, 30 House Wrens, 19 Mountain Chickadees, 17 Chestnut-backed Chickadees, 8 Mountain Bluebirds, and 2 American Kestrels were banded by the group which is listed on page 7.

In his first year, **Lee Franks** accounted for all of the Chestnut-backed Chickadees; banded in San Mateo County. **Hatch Graham**, with his high elevation trail near Carson Pass in El Dorado and Alpine Counties, banded the Mountain Chickadees and Bluebirds. The bulk of the Violet-greens and the 2 kestrels were banded by **Malcolm King** in Mendocino County. **Jan Wasserman** contributed 707 of the Tree Swallows in Ventura.

Both **Malcolm** and **Kevin Putman** also band Wood Ducks for the California Waterfowl Association. Kevin reports 885 woodies in 1999 including several returns and recaptures.

Banding is done under a Federal regulations and licensing procedure. Most banders work under the direction of a master permittee (MP). In CBRP, we have **Hatch Graham** in addition to **Jan Wasserman**. Bands are issued to the MP and all the detailed records of location of the birds, date banded, species, age, sex, and band number are funneled through the MP to the Bird Banding Laboratory in Laurel, Maryland.

Currently, **Howard Rathlesberger**, San Mateo, **Garth Harwood**, Santa Clara, and **Susan Yasuda**, El Dorado, are candidates. More are welcome.

NABS launches Transcontinental Bluebird Trail

The North American Bluebird Society is actively planning a continental effort to extend nestbox trails across Canada and the U.S. Personnel from NABS headquarters in Darlington, WI plan an early visit to California to meet with CBRP representatives and those of Wild Birds, Unlimited, who are making a very substantial contribution to organization, to lay out details of the TBT program.

TBT is not planned as an extended single line of nestboxes but rather a web of trails covering contiguous territories.

CBRP's Memorandum of Understanding with the U.S. Forest Service will undoubtedly play a large role in furthering this effort in California.

Combined with the planning of the trail by local NABS affiliates, is the Adopt-a-Box program, wherein donors may contribute \$35 to NABS to have a nestbox registered in their name. The box will be maintained and supported by the NABS affiliate organization (in this case, CBRP).

Local monitors and County Coordinators might consider how their trails can fit into the TBT system. We'll let you know as plans develop. Stay tuned.

SEQUOIA AUDUBON TO GUARANTEE PARK TRAILS IN SAN MATEO

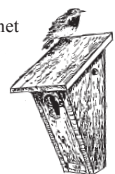
Sequoia Audubon Society won't sponsor a cavity-nesting trail in San Mateo County, but they have pledged to guarantee existing trails in County Parks. This means they will find monitors in the event current caretakers are no longer able to continue maintenance and monitoring.

Parks guaranteed are San Bruno Mtn State & Co. Park, and Edgewood and San Pedro Valley County Parks.

Call your coordinator if you need help—

Are you having problems identifying your birds? Are you having problems with wasps, blowflies, mites? Have your nestlings been abandoned. Are your nestboxes being invaded by House Sparrows? Your County Coordinators can give you advice and assistance, or have resources they can call on to help. Keep in touch.

COUNTY	COORDINATOR	STREET	CITY/STATE/ZIP	PHONE VOX	PHONE FAX	EMAIL
Alameda	Ann Kositsky	1090 Miller Ave	Berkeley, CA 94708	(510) 527-5091		ajpa@pacbell.net
	Raymond A. Fontaine	P.O. Box 92	Livermore, CA 94551	(510) 447-0213		
Amador	Penny Brown	20624 Parkside Dr	Pine Grove, CA 95665	(209) 296-3849		penny@cdepot.net
Butte	Emily Harbison	3536 Butte Campus Dr	Oroville, CA 95965	(530) 895-2449		deb@cin.butte.cc.ca
Calaveras	La Verne Hagel	466 Thompson Lane	Copperopolis, CA 95228	(209) 785-2363		
Contra Costa	Shirley & Warren Engstrom	232 Tharp Drive	Moraga, CA 94556	(925) 376-4695		wlese@juno.com
	Oscar Enstrom	21 Manti Terrace	Danville, CA 94526	(925) 837-8392		bigolanset.com
El Dorado & Amador	Hatch Graham	P.O. Box 39	Somerset, CA 95684	(530) 621-1833	(530) 621-3939 fax	birdsfly@innerecite.com
	Viola Sampert	5655 Hollow Ln	Greenwood, CA 95635	(530) 333-0318		
	Jim or Martha Fletcher	3731 Leisure Ln	Placerville, CA 95667	(530) 644-4895		
Lake Lassen	Jeannette Knight	PO Box 152	Cobb, CA 95426-0152	(707) 928-5250		
	Edward Bertotti	470 413 Wingfield	Susanville, CA 96130	(530) 257-3774		
	Mike Magnuson	PO Box 767	Chester, CA 96020	(530) 258-2141		
	Tom Rickman	PO Box 2017	Susanville, CA 96130	(530) 257-2151		
Los Angeles	Doug Martin	13066 Shenley Street	Sylmar, CA 91342	(818) 367-8967		
Madera	William Rihn	PO Box 1648	Coarsegold, CA 93614	(209) 683-3052		
Marin	Ruth Beckner	15 Portola Avenue	San Rafael, CA 94903	(415) 479-9542		
	Meryl Sundove	37 Greenwood Beh Rd	Tiburon, CA 94920	(415) 388-2524	(415) 388-0717 fax	
Mariposa	Lawrence Punte	9443 Banderilla Dr	LaGrange, CA 95329	(209) 852-2559		
Modoc	Charles Welch	PO Box 825	Alturas, CA 96101	(530) 233-4534		
Napa & Sonoma	David Graves	1500 Los Carneros Ave	Napa, CA 94559	(707) 257-0843		
Nevada	Lorry Hukill	15954 Wolf Mtn Rd.	Grass Valley, CA 95949	(530) 477-7165		
	Richard Nickel	107 Bawden Ave	Grass Valley, CA 95945	(530) 273-2600		
Orange	Dick Purvis	936 S Siet Place	Anaheim, CA 92806	(714) 776-8878		Dickersly@aol.com
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Plumas	Patricia Johnson	PO Box 767	Chester, CA 96020	(530) 258-2141		
Riverside	Melissa Browning	10154 Beaumont Ave	Cherry Valley, CA 92223	(909) 845-9266		
San Bernardino	Glen Chappell	1923 Abbie Way	Upland, CA 91784	(909) 981-1996		Chappell@CHS.Chaffey.K12.CA.US
San Diego	Rosemary Fey	PO Box 1245	Borrego Spgs, CA 92004	(619) 767-5810		
San Francisco	Don Wolff	1376 6th Ave	San Francisco, CA 94122	(415) 665-6938		
San Joaquin	Thomas Hoffman	10122 E Woodbridge Rd	Acampo, CA 95220	(209) 369-8578		thoffman@lodinet.com
	James A. Guthrie	806 S. Orange Avenue	Lodi, CA 95240-4636	(209) 369-6522		
San Mateo	Howard Rathlesberger	230 Ridgeway	Woodside, CA 94062	(650) 367-1296	(650) 369-4788 fax	Rathles@aol.com
Santa Barbara	Richard Willey	4172 Vanguard Dr	Lompoc CA 93436	(805) 733-5383		willey@utech.net
Santa Clara	Garth Harwood & SCVAS	5901 Pescadero Crk Rd	Pescadero CA 94060	(650) 879-0724		GarthHar@aol.com
Santa Cruz	Nanda Currant	530 Amigo Road	Soquel, CA 95073	(408) 462-3703		hearth@cruzio.com
Siskiyou	Mike Hauptman	PO Box 92	Yreka, CA 96097	(530) 841-1669	(530) 842-4332 fax	writeidea@snowcrest.net
Sonoma (see Napa)						
Sutter & Yuba	Kevin A. Putman	2884 Coy Dr	Yuba City, CA 95993	(530) 755-1480		dputman@syix.com
Tehama	Pete Flower	331 Oak Street	Red Bluff, CA 96080	(530) 527-0392		
Tulare	Peter C. Morrison, MD.	325 So. Willis	Visalia, CA 93291	(209) 733-1154		
All Other Counties	Don Yoder	2021 Ptarmigan #1	Walnut Creek, CA 94595	(925) 937-5974 vox & fax		cbrp@value.net



Find out more about your birds—have them banded

When you have determined your estimated hatching date, call a bander if one is near. Schedule permitting, the bander may be able to band the adult incubating the eggs and/or the nestlings a week or so after they pip from the eggs. Banding helps us learn about the site fidelity of the adults, the dispersal of the chicks, longevity, and other elements of population dynamics.

BIRD BANDERS:

Amador & southern El Dorado	Hatch Graham	(530) 621-1833	birdsfly@innerecite.com
Northern El Dorado	Dave DeLongchamp	(530) 333-2304	selkaijen@jps.net
Mendocino & Lake	Malcolm King	(707) 462-3277	kingfarm@zapcom.net
Placer & northern Sacramento	Dee Warenycia	(916) 786-5056	warbler5@aol.com
San Francisco Peninsula	Lee Franks	(650) 592-7733	
Sutter & Yuba	Kevin Putman	(530) 755-1480	dputman@syix.com
Ventura	Jan Wasserman	(805) 987-3928	bandlady@west.net

Anyone desiring to band who can commit 2 or 3 days per week is encouraged to contact Hatch Graham.

How do I know if my birds really fledged?

Novice monitors often wonder if their nestlings really fledged or disappeared for some other reason.

matted nest

An extraordinarily dirty nest flattened and matted down with fecal matter along with "whitewash" below the entry hole is a good sign the parents fed large babies through the entry hole and had no time to carry out fecal sacs.

whitewashed sides

Often a large amount of whitewash will be high up on the interior walls as the big chicks jostled for position. There will often be seeds in the bottom of the box and carcasses of dead insects such as grasshoppers amongst the fecal droppings. And absence of any dead chicks is of course something else to check.

chitin

Chitin ('kīt-ʹn) is the horny integument that sheathes the emerging feathers (pinfeathers) and develops on the nestlings' legs as they grow. It sheds like dandruff and filters down through the nest. Quantities of this chaff on the floor of the box is a good sign the babies grew and developed.

timing

If you've kept good records, you know the approximate fledging date. Checking shortly after will reveal the above clues. Of course, you still may find unhatched eggs or even decomposed or desiccated nestlings in a worn, vacated nest. The most observant sometimes miss these when monitoring an active nestbox. Records can be corrected and the rest can be considered fledged.

Poets' Corner

BLUEBIRDS FLY! welcomes poetry and light verse provided it meets our standards of craftsmanship or humor or both. Send your inspirations to *Poetry Editor, Bluebirds Fly, PO Box 39, Somerset, CA 95684.*

Box #5

My bluebabies flue de coup

Nuttin dere but hay and poop

I glad dey grue

I glad dey flue

But howsome now I feelin blue?

- cj goudeau

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BLUEBIRDS FLY!
California Bluebird Recovery Program's
Newsletter
Vol 5 No 2 Summer 1999

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a service of
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