



BLUEBIRDS FLY!

California Bluebird Recovery Program's newsletter

—sponsored by the 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

Brutal weather bombards bluebirds Heavy losses reported Statewide—but second nestings underway

Barbara Milligan wrote Santa Clara County coordinator **Garth Harwood**: I've just lost another bluebird nest!! This one had five fully-feathered bluebird chicks that were within a couple of days of fledging. When **Carol Hankermeyer** and I found them this morning, they were comfortably nestled in the nest and all looked fine except they had been dead about 3 or 4 days and had ants crawling up the post and over them. Would the ants have killed the chicks??"

Garth speculated that the longer-term effect of the foul weather was more likely the direct cause and the ants were just the cleanup crew. In addition, Barbara writes, "I lost an entire nest of 5 bluebirds one cold night towards the end of May and three of the four chicks in another nest. The survivor of that nest fledged a few days ago." She asked for our comments.

This was not the first dismal report we received here. *BLUEBIRDS FLY!* was aware of local losses such as these:

On May 8, **Betsy Meland** had a bluebird hen incubating five 2-day old chicks. On the next afternoon, there was a severe and sustained thunderstorm in Folsom and El Dorado Hills (Sacramento and El Dorado Counties). The box check on May 15 revealed all the chicks dead. They and the nest were damp. It appeared they died of

wet chill when the storm blew into the vents under their store-bought box which had little overhang.

Amador County Co-Coordinator, **Penny Saulsbury**, found a female bluebird and all five chicks dead in the box after the cold arctic storm in late May. The box was in a streamside meadow along Hwy 88 where cold air from the Sierra drains down at night. The young were all reasonably feathered at approximately 8 days.

Leslie Rose in El Dorado County had two hens sitting on 4 eggs and 5 eggs, respectively, succumb overnight to the same storm. These two nestboxes face north, the direction from which the storm came.

We wondered if mortality was widespread around the State and requested information from County Coordinators and others for their assessment. We asked if they had similar experiences.

Howard Rathlesberger: "The first nesting cycle of bluebirds started out with great numbers—8 nests with 37 eggs. Along came El Niño's curse—cold rain and misty weather, and that number was reduced by 4 nests and 19 dead birds. Two other boxes gave up—one of 5 eggs was taken over by Violet-green Swallows and one of 4 eggs was abandoned early on. The last of this first cycle fledged June 10. Four out of 5 similar to

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IS THERE A SILVER LINING? —PROBABLY

There is some hope. There's some indication that second nestings are more common than in previous years. Maybe the bluebirds will make up for their losses in their second efforts. —**Dick Purvis**

For what it's worth, early reports here indicate that other bird species fared much better through our worst episodes than the bluebirds did. —**Garth Harwood**

On the positive side, I am seeing *muchos* Wood Duck nests that are just getting started. I anticipate a colossal second half of the nesting season that will make up for much of the early failures. I see a lot of the bluebird pairs still hanging around their boxes; I'll bet they will be going back to work soon. I banded 4 more American Kestrels today. They certainly had no trouble with the weather.

—**Kevin Putman**

The second brood cycle is now in play, along with Violet-green Swallow nesting, of which 1 box of 6 eggs already is hatched. There are 9 active Violet-green nests here.—**Howard Rathlesberger**

In Amador and El Dorado Counties, we found bluebirds building new nests over nests that had failed and even over the bodies of dead birds and cold eggs. They seem to be anxious to get on with the season now that better weather is here. We're looking forward to making up for all the losses.

—**Hatch Graham**

Can you answer these questions?

QKevin Putman says Derrold Daly, his local duckling rescuer, used to live in Truckee, and that he had Mountain Bluebirds nesting in his yard. Daly claims that the parents will remove (small) dead young birds from the boxes. Can anyone confirm this, and is there any record of Western blues doing the same?

QRegarding the cold, wet nests, Garth Harwood wonders if inserting a moisture barrier between nestlings and wet nest material, for instance a bit of polyester batting such as that used to stuff sleeping bags, quilts, etc., might help in these cold-weather emergencies—what do you think?

QMalcolm King in Mendocino County suggested the cold weather caused irregular and delayed development and Kevin Putman and Dee Warenycia are thinking exactly the same thing. Does the bad weather slow development?

QDon Yoder: "It is reported in the literature that perhaps 5% of bluebird eggs are white. Last week I was teakettled pink because I had a Peterson box with 4 white eggs and so noted in my log. Today I had a friend along who verified that those same eggs are blue. Yes, I'm sure of the white last week. I was so surprised I took a second and third look. But my passenger agrees they are blue today. So my question is: Do reported white eggs remain white all during brooding, or are they known to 'turn' blue when brooding starts, or is there some chemistry in the shells that alters the color?"

Your answers are welcome!

Wait! Don't touch that nestbox!

Conventional wisdom has always held that birds' nests should not be disturbed. The old wives' tales and Grandpa's admonitions to the contrary, most birds have strong instincts to incubate their eggs and brood and care for their young.

In late May, Hatch Graham got an urgent call from Doris & Bill Allison. Nine occupied boxes had been raided by raccoons. They had read about raising the boxes on poles in the Winter issue of *BLUEBIRDS FLY!* and wanted advice as to whether they could still raise boxes already occupied by birds. Hatch figured it was safer to disturb the occupants than to risk having them eaten. The next day he went to help

He approached one of the boxes, found the hen bluebird incubating her eggs, captured the hen, banded her and put her back on the nest. After waiting 3 minutes, Hatch with an electric drill, removed the 4 screws holding her box to the post; screwed and clamped the ½" pipe to the back of the box, while Bill with another drill was fastening the ¾" pipe to the post. No one had noticed the hen leaving so they stole a peek and saw that she was still there.

They raised the box up to its 9 ft height, slipped the ½" pipe into the ¾" and pinned it in place. As they left, the lady was still sticking tight.

At another nest, the swallows were out of the box containing a nest and five eggs when the crew arrived, but after the above operation, as the box was being raised, the couple swooped down around it and as Doris, Bill and Hatch

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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 3,600 nestboxes by the end of 1997, with more than 8,000 cavity nesters fledged—nearly 5,400 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.

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Brutal weather

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the box that fledged 4 out of 5 on June 1."

From Contra Costa County **Don Yoder** replied, "I've had some calls about losses. **Warren Engstrom** in Moraga has had some—don't know his total number yet. **Ann Haiman** lost a clutch in Tilden Park and there have been a couple of others. On June 1, I removed at least 11 [dead chicks] from 4 boxes, some in such condition it was not possible to distinguish dividing lines. All had nests wet in the bottom of the boxes. I've also been seeing half-grown looking wet or oily and not at all perky as they should be for their age."

Dick Purvis responded from Orange County, "We have experienced the worst and most puzzling nest failures ever. The only difference is the weather so I guess we get to blame El Niño. What is puzzling to me is that even though it has been a bit cooler and wetter, still it would seem mild enough not to bother the birds. I have much more empathy now for easterners who are at the whim of bad weather which is even freezing there at times. First of all, the nesting season was delayed from two to four weeks by the cold weather. Then we encountered a large number of abandoned nests with eggs. In one of my small parks, there were three nests of 5, 5, and 6 eggs and all three were abandoned. We have had a large number of these. I wouldn't have thought it would happen but we have also had a large number of nestlings which were abandoned. I have had several nests where otherwise healthy chicks were cold and dead. Even in successful nests there is a much smaller number of fledglings per nest than in previous years. Only one or two fledglings is quite common. I frequently remove a

couple of dead chicks from a nest of five or six hatchlings."

In the meantime, other Santa Clara County bluebirders besides **Barbara Milligan** had numerous losses, also. **Garth Harwood** writes: "A number of whole clutches died on the nest, some of them painfully close to fledging. One quick-witted monitor, **Jennifer Lyon**, removed the last two survivors from a clutch of 5 after seeing the others die off gradually, and took them to a wildlife rescue facility where they bounced back strongly. (I'm not sure how much we want to promote this option, but as the disaster reports kept coming in, I have to say, I was awfully glad those two were saved.)"

Our bird bander in Placer County, **Dee Warenycia**, reports, "After checking all of my nestboxes—the final mortality results are in! Let's just say it was a pleasant surprise when any of the nestlings banded in the two weeks were **not** found dead in the nest. I don't have the heart quite yet to add up how many dead chicks I shoveled out of nests during the past two days. The interesting thing to me was that I lost **none** of the unfeathered chicks that were present a week ago. So, I don't think it was a food problem, but an exposure problem. If the female got inside the box and brooded the chicks, they survived..."

Kevin Putman, Sutter/Yuba, writes " ...have some rather grim news: the recent rains have taken a rather heavy toll on my bluebird chicks. I checked 3 boxes that were due to band yesterday. In the first box 2 of 5 were dead; second box, 6 of 6 dead—the whole nest; 3rd box, 6 of 6—the whole nest again. The thing is, the chicks looked like they were in pretty good condition as far as nutrition; they weren't emaciated as though starved. I suspect that it was the cold

temperatures at night—exposure.

"I had another box that had 6 chicks last week. I returned to find 4 live chicks and one dead chick in the box. One chick was gone. I found more mortality today: I checked 4 nests that were due to be banded and all 4 were wiped out.

"More evidence that it is exposure: the chicks are dead in the nest almost as though they were gassed; they are sitting side by side as though they died simultaneously—as would happen when nest temperature dropped too low. With starvation, it would be unlikely that all of the chicks would die at the same time; as **Dee W.** put it, 'some would be trod upon.'"

We also asked **Pixie Senesac**, Research Coordinator for the Cornell Lab of Ornithology's Nest Box Network staff about our problems.

Her reply, "I don't have any specific information on Western or Mountain Bluebirds, but as far as Eastern Bluebirds are concerned, they nest early here in the Northeast—long before the threat of snow, cold and heavy frosts are over. But if you are a bluebird, nesting early is probably a risk worth taking—nest early before the competition arrives. Choice nest sites are available—but insects are not as plentiful and the possibility that you will lose your brood to cold weather is high. But if you luck out, you've pulled off a successful brood before the competition arrives.

"Either way," she continues, "a bluebird will nest again. Brood losses in first nest attempts by bluebirds are high here in central NY; worse in some years than others. But from a bluebird's perspective, early nesting is worth the risk."

We guess we're lucky here in California that we don't have this kind of weather every year.

NOTES FROM THE FIELD



In his bird banding rounds on May 29, **Hatch Graham** checked on 2 boxes that **Katie Bolger** monitors and had reported as having young chicks or eggs and possibly hens incubating or brooding.

Slipping his hand carefully into the first box, he found a bluebird hen brooding her 5 young chicks. She was already banded.

When he got home he looked her up in his records. She was banded on 4/30/97 as a chick at **Bluebird Haven Iris Gardens** where **Mary Hess's** son **Eric** monitors. The hen's new home is approximately 5¼ miles north as the bluebird flies across the Middle Fork of the Cosumnes River over Sandridge, across the North Fork and into an area known locally as Hanks Exchange—at least 20 miles away by road.

Hatch says it's only right that being born in one of his boxes she should choose another one of his for her first nest.



During the miserable Spring, **Ernie Weinberg**, Siskiyou Co., had been tending a nestbox in his backyard. He saw the hen disappear and the male struggling alone to feed the brood in the awful weather. Ernie substituted for the hen by removing fecal sacs with tweezers as he'd seen the missing female do with her bill. When the clutch was reduced to only one survivor, he began cutting up earthworms and supplementing the male's efforts. Ernie's fairly confident the solo chick survived. He feels like a godfather. Nice going, Ernie!



From Ventura County, **Pete Triem** writes in detail about his 100+ nestbox trail on the Taft Ranch.

Acorn Woodpeckers have enlarged a number of holes in some of his boxes. Pete reports learning something unexpected: "When the other hole nesters see the 'signature' of the woodpecker damage on the entrances, they will not go near the boxes."

After he repaired the entrances, "the swallows appeared from nowhere and took possession of the boxes while I was standing by.

"I have since learned as a rehabber that [Acorn Woodpeckers] attack and kill bluebirds and even flickers."

The solution would seem to be to avoid areas where woodpecker colonies are nesting and to protect the nestbox holes with panels of plastic or polycarbonate with 1/16" holes in them.



We're not sure if all of this report concerns cavity nesters, but **Dee Warenycia**, Placer Co., says, "Two of my 3 Wood Duck boxes have aggressive hens incubating eggs. No. 3 box has nothing (this was the one with a starling nest I removed two weeks ago). I also observed a third hen fly out of the creek. Also...I checked the Turkey Vultures that are nesting in the bottom of a huge hollowed-out blue oak (it takes a ladder to climb up to where you can look inside). Six weeks ago they had 2 eggs, and today the eggs were replaced by the cutest little white-downy chicks with black faces!!! I hope they make it to fledging. Last year, Barn Owls nested in this same tree, and I think they were preyed on by a raccoon."

(Do we need a line on the annual report for buzzards? —Ed.)



Orange County monitor **Bob Franz** reports on a nestbox hung on a limb near a schoolyard; the box had a full nest in it. He found it on the ground and replaced it, hoping the bluebirds would return. He says, "I monitored this box two separate days afterwards and [was pleased] to see a pair going in and out of the box. The next time I came, the nest had 3 eggs in it and the pair was monitoring my every movement as I took the box down to check it. Success!

Send us your field notes by letter, e-mail, or telephone. Include on your annual report. This newsletter is what you make of it. —Ed.

Checking Bluebird Nests

Annual grasses dry and pale as sand,
the awns and seedheads catching,
sharpened barbs. A month ago
this field was soft with filaree.
Now, exploded pods of vetch
rattle like snake-grass, star-
thistle strikes at pantlegs.
Insects rasp and skirl,
a lizard slithers
out of sight.

Last week you held
a nestling in your two
cupped hands. Today
we count the thin shells
scattered. But see
from the dry ground rises
a flash of feathered blue.

*Taylor Graham
from Poetry Magazine*

Editorial**MEETING THE CHALLENGE: A CASE FOR NESTBOX DIVERSITY**

My hat goes off to Hatch Graham for his recent research into population trends of cavity nesting birds throughout California. Those of us planning and coordinating nestbox trail networks here in Santa Clara County had been seeking just such information. I have to admit, however, that the small table on Page 4 of the Winter 1997-98 issue of *BLUEBIRDS FLY!* simply floored me.

I was not prepared for the news that so many of the native cavity nesters are in real trouble throughout the state. No fewer than eight species have apparently suffered declines greater than the 23% of Western Bluebirds which have been lost over the 29-year period for which data are available. Barn Owls are down nearly **eighty percent** over that span; other familiar and much-loved species such as Bewick's Wren, Chestnut-backed Chickadee, and American Kestrel have declined by almost half. Given that there is no reason to suppose that these trends have come to a stop, it seems we have a crisis in the making here.

Fortunately, those of us working with the California Bluebird Recovery Program are in a position to address this situation effectively—and even enjoyably! We have already learned how to build, mount, and monitor high-quality nestboxes for bluebirds. And we've developed a fine network of volunteers dedicated to giving cavity-nesting birds a boost.

Good, time-tested designs for nestboxes exist to accommodate a wide variety of species.

All we need to meet the challenge posed by the sharp decline in so many native cavity-nesting birds is the **will to do it**. Currently, our statewide program explicitly emphasizes bluebirds. I see no need to change that: there's a lot to be said for having these snazzy, lovable creatures as the stars of our show! But I call upon all of you, County Coordinators, box-builders, and trail monitors, to reassess your current efforts and find ways in which your work can benefit the widest range of species, especially those whose need is greatest. Educate your volunteers and public that non-bluebird species are neither consolation prizes nor pests, but unique species with critical conservation needs of their own.

Here in Santa Clara County, our entire program took a sharp turn after the statewide data appeared in *BLUEBIRDS FLY!* We changed our distribution of boxes from 100% bluebird boxes to 50% bluebird, 50% chickadee/titmouise, and we're moving toward production of kestrel and owl boxes next. Our chickadee/titmouise box is a scaled-down version of the NABS bluebird box with a 4"x 4" bottom and 1 1/4" entry hole (we tried 1 1/8" but found that some titmice couldn't quite get in). This box design has been a success with chickadees, titmice, wrens, and even a few skinny Violet-green Swallows! (Note that all 4 are high-priority "decliners".)

The easiest way to make a big change fast is to integrate a few "c/t" boxes into existing trails. In almost every respect, these boxes can be treated exactly like bluebird boxes. The birds for whom this box is designed generally prefer more cover, however, and tree-mounted boxes will do better than open-field boxes. We find that it's more fun for many monitors to have a diversity of boxes, because the different species all have their charming peculiarities, and there's a longer active season, as some of the small species get going as early as February.

Kestrel boxes may be relatively easy to integrate into existing trails, as well, given the experience of the one local trail monitor who's already done so. Barn Owl boxes are a different kettle of fish, though. These are big, heavy constructions that need to be at least 15 feet up, and will probably require specialist volunteers willing and able to mount and monitor such boxes. Still, our early results have been encouraging, as these owls readily accept a well-proportioned box.

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New bird banders expand effort across Northern California

With the addition of three new federal bird banders, the dispersal study undertaken by **Hatch Graham**, **Dave Delongchamp**, and **Dee Warenycia** has doubled.

After a training session in Roseville on May 9, **Malcolm King**, **Kevin Putman**, and **Craig Ferrari** all received their permits. All are active with Calif. Waterfowl Assn. banding Wood Ducks, and have bluebird trails as well.

For now, the banding will be concentrated from the Nevada border and Lake Tahoe to the Mendocino Coast throughout Amador, El Dorado, Placer, Sacramento, Yuba, Sutter, Colusa, Lake and Mendocino counties.

Since our objectives are patterned along the lines of Cornell Lab of Ornithology's study in New York and Pennsylvania, **Paul Allen** of the Cornell Nest Box Network has dubbed our California group "honorary members of the CNBN dispersal study."

Target species are the Western Bluebird (of course), but also Tree and Violet-green Swallows and Oak Titmouse, all birds that are quite tolerant of banding.

In order for a dispersal study to work, it is essential that as many adults be banded as possible. This

is because the banding of chicks alone yields little data. We need to find out if the chicks banded return the following year or are found at some distant location. The unfortunate fact is, half the young birds fledged do not survive till the next year. Once they reach adulthood, their chances of survival increase.

Trail monitors in the counties listed above: you can help by informing your nearest bander as soon as you have a full clutch of eggs on the nest. The target species are easiest to approach when in their second week of incubating and for a week or so after hatching while they are still brooding the young.

If your nearest bander can schedule a visit, he or she will want to try to band the hen while she is incubating or brooding, then return when the chicks are 7 to 14 days old and band them.

If you get late nesters this season, please call your local bander. The banders are listed after the County Coordinators on page 11.

Monitors with the time and desire to train to become a bird bander are encouraged to call Hatch Graham, the Master Permittee, at (530) 621-1833.

Weather treats Tree Swallows treacherously, too

While the long El Niño storms caused unusual losses in bluebirds this year, we've often seen early arriving Tree Swallows dead or dying in the nestboxes. This year had been difficult for populations in the Northeast. **Pixie Senesac**, Cornell researcher, commented on the situation in late June:

"With unseasonably cold temperatures, thunder storms, and al-

most constant high winds this past week, Tree Swallow adults as well as chicks have been stressed. Chicks were dying in large numbers. Why?

"Since Tree Swallows are aerial insectivores and feed on the wing, bad weather tends to affect them more so than birds like bluebirds, who tend to pick insects off the

TO ERR IS HUMAN TO FORGIVE DIVINE

As if the weather hadn't been bad enough, **Dick Purvis** writes from Orange County:

"The landscape maintenance people seem to have sold a bill of goods to businesses, schools, and parks. Everyone is convinced that they need to prune their trees regularly and at any time of year. Most landscape and ornamental trees should never be pruned. It has no beneficial effect.

"Using the bogus excuse of safety, the managers of parks, etc. are having trees butchered down to stubs even in the nesting season. One of our regional parks pruned so heavily that several bluebirds abandoned their young. The [pruners] got an estimated 100 native bird nests including a Great Horned Owl and a Barn Owl. Other locations here have done the same causing bluebirds to leave their nestboxes."

And **Candy Perisho** in El Dorado County alerted us to the danger of three-rail vinyl horse fences when under construction. Most are put up in early spring to replace the white wooden horse fences. The posts are placed first. They are 4"x 4" white vinyl with openings on the sides to accept the rails which snap into the post.

Trouble is, the bluebirds go into the openings to investigate for a nest site. They're unable to climb up out of the slick vinyl.

Candy and her husband saw a male bluebird go into one and not come out. They rescued him but found 4 more bluebirds that died in the same manner. Candy figures the holes should be covered or taped until the rails are installed.

If you have complaints about human ignorance, air them here.

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NORTH AMERICAN BLUEBIRD SOCIETY NESTBOX CONSTRUCTION STANDARDS

In a move to end the proliferation of substandard nestboxes that are detrimental to the health of cavity nesters, NABS has adopted standards for the use of commercial suppliers of nestboxes. CBRP applauds the effort which will improve the chances for birds to survive. Although there can be variations and departures from these standards, their use will greatly improve the chances for successful fledging. Eastern and Western Bluebird standards vary somewhat. We have only included the NABS standards for Western and Mountain Bluebirds here.

Materials:

- 3/4" wooden boards or PVC pipe with attachable wooden roofs are commonly used for bluebird boxes. Peterson boxes often use 2"x4" boards
- do not use pressure treated wood because it contains toxic compounds
- paper milk carton style or corrugated cardboard boxes are unacceptable
- woods such as redwood and cedar are long-lasting even when left unpainted

Entry holes:

- Western and Mountain Bluebirds use 1⁹/₁₆" round openings

Floor sizes:

- Western and Mountain Bluebird nestbox floors should be at least 5"x5" or 5½"x5½" to accommodate larger clutch size

Access:

- it is imperative that all bluebird nestboxes open readily from the top, side, or front to facilitate box monitoring and cleaning
- if the box's side or front pivots to allow access to the box, it should do so at as high a point as possible to ensure that the door does not obscure tall nests from being observed
- a screw, or a nail angled in a predrilled hole, should secure the door to ensure that mammalian predators can not readily open the nestbox

Colors:

- natural wood is acceptable
- if painted or stained, use light colors to minimize overheating during warm weather in locations where this is likely

Water-resistance/drainage:

- drainage holes must be provided in the box bottom to allow any rain entering the box to drain out and to provide air circulation to keep nesting material dry
- the box should be water-tight
- the roof should provide sufficient overhang beyond the box entry and vent holes to minimize possibility of rain entering these openings
- the roof should cover the top edge of the box back unless other features eliminate any possibility of rain entering the joint between the back and roof even if the wood warps

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NORTH AMERICAN BLUEBIRD SOCIETY NESTBOX CONSTRUCTION STANDARDS

(CONTINUED)

Heat/cold protection:

- vents providing cross ventilation should be present near the box peak. These openings should be protected from rain by having the box roof overhang enough to keep the rain out
- dark colors should be avoided to minimize overheating
- it should be possible to plug or cover vent holes during cold weather periods early in the nesting season
- long roof overhangs minimize the possibility of letting sun, rain, or snow enter the box

Predator deterrence:

- the box should be easy to mount on a predator-resistant post in areas with raccoons or cats
- a 5" roof overhang above the entry hole reduces the possibility of raccoon or cat predation
- wooden guards placed over the entry hole are **not** effective in eliminating raccoon predation
- very deep tunnel-like predator guards **deter** bluebird use
- boxes mounted on heavily greased pipes or on waxed electrical metal tubing (conduit) will deter many climbing predators
- mounting boxes less than 5' from the ground increases the opportunities for climbing or jumping predators to raid the nest
- wooden posts, ungreased pipes, PVC pipes are readily climbed by predators such as raccoons

Mounting:

- boxes should be designed so that they may be readily and securely mounted to a support post such as a water pipe or electrical conduit
- fenceposts are acceptable mounts in areas where raccoons are rare
- a back extension above or below the main box body is convenient for attaching the box with screws, nails, wires, pipe clamps, or U-bolts

Perches:

- perches should **never** be used on any bluebird boxes because they aren't needed by bluebirds and only facilitate harassment by non-native species such as House Sparrows

Inner walls:

- interior wall should **not** be painted or stained
- the front wall below the entry hole should feature a rough surface to facilitate chicks climbing to the entry hole for fledging

Parasite control:

- nestboxes with a raised screen floor may reduce blowfly infestation but this has not been conclusively proven
- rotenone should **never** be applied to the interior of nestboxes as it is counter-productive in controlling blowflies

Extracted from NABS Nestbox Specifications (1/5/98). For further information contact:

North American Bluebird Society, PO Box 74, Darlington, WI 53530

e-mail: nabluebird@aol.com Website: <http://www.cobleskill.edu/nabs/> Fax: (608) 329-7057

TREE SWALLOWS

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ground. Adult female Tree Swallows usually brood their nestlings at night for 5-6 days after they hatch, but then cease brooding at night. The chicks can't regulate their body temperature until they are about 10 days old. In a normal summer, temperatures are in the high 60's and low 70's at night, so the fact that they aren't brooded at night isn't at all detrimental. This year, however, the weather in the northeast has been in the 40's at night for about a week now, with rain, wind, and severe thunderstorms thrown in for good measure.

"Not only are these Tree Swallow chicks subject to very cold temperatures at night, but the adult birds are having trouble finding enough food for them, since insects don't typically fly in cold, wet, or windy weather. The majority of chicks in the 5-9 day age range in our nest boxes are dying. Paul Allen checked 30 boxes with chicks in that age range today. 18 nests had dead chicks, the rest didn't look good, and probably won't make it through the night, especially since there is a frost warning tonight.

"Chicks older than 10 days of age that can regulate their own body temperature may make it through this, depending on insect supply. Chicks that are still being brooded by the adult may make it if the weather becomes more seasonable soon. It's never fun finding dead and/or almost dead chicks in your nest boxes. But we have no control over the weather. If you, too, are experiencing unseasonably cold weather this spring/summer, be prepared."

from the NESTBOX-L with permission
For info e-mail tlk5@cornell.edu.

Don't touch that box?

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walked away the female went in to her eggs.

A few days later, Dianne McCleery, also in Amador, called with the same problem. She'd had eggs and chicks stolen with all the evidence of a raccoon. Hatch responded and found three of her five boxes occupied. One had 2 cold bluebird eggs (the remnants of a coon attack), another had 5 warm eggs, and the last had 5 Ash-throated Flycatcher chicks. The first box was raised up. The next, because of an overhanging tree had to be moved 8' away as well as raised. The flycatcher chicks also were moved laterally as well as vertically.

Hatch asked Dianne to watch carefully and see if the bluebird or the flycatcher returned to their nests.

Dianne e-mailed Hatch the next day, "Yesterday in box #3, there was new nesting material over the 2 cold eggs (I removed the eggs). In box #4, the eggs were warm. In box #5, the babies were fat and content and I saw one of the parents fly out of it, so it's a success!"

And from Kevin Putman on July 6: "I just wanted to tell you about a little experience I had here. I checked my boxes out at the golf course last month.

There was one box with a new nest in it with 3 eggs built over the top of the old nest. The new nest material was dry, but it was sitting atop the old nest, which was drenched. It was obvious that I had put it in the line of fire of a nearby sprinkler last Jan. Sure enough, there was the sprinkler, just 10 feet from the tree. The bluebird pair had descended upon me by this time, watching my ev-

ery move. I knew that if I did nothing this nest would fail also, so I decided to move the box to the other side of the tree.

"I did so, 180 degrees around the tree, where the sprinkler couldn't spray it. I also took the old drenched nest out from under the new material. I then stood back and watched the bluebird pair as they tried to fly to a box that was no longer there. They flew to the bark in confusion. They soon made the adjustment, and began to investigate the box, looking inside, etc. It looked like it was going to work out, so I left.

"That was June 19. I went back out to that course today and that box had 5 chicks in it, about 1-2 days old. I thought it worth telling you all."

Intelligent intervention on behalf of the birds is worth the effort, seldom causes any harm, and often saves live. —Ed.

Here's That Trend Table Again

Referred to in the Editorial on page 5.

California Cavity Nesters Trend & 29-year change

Species	Trend	Change
Wood Duck	+6.5	621%
Mtn Bluebird	+6.4	604%
WB Nuthatch	+4.1	321%
Tree Swallow	+2.1	83%
Ash-t Flycatcher	+1.2	41%
House Wren	+1.0	33%
Nuttall's Wdpkr	+0.9	30%
Acorn Wdpkr	+0.4	12%
House Sparrow	-0.3	-8%
RB Nuthatch	-0.4	-11%
Western Bluebird	-0.9	-23%
BC Chickadee	-1.2	-30%
Oak Titmouse	-1.5	-35%
Mtn Chickadee	-1.5	-35%
VG Swallow	-1.8	-41%
Am. Kestrel	-2.0	-44%
CB Chickadee	-2.3	-49%
Bewick's Wren	-2.3	-49%
Barn Owl	-4.7	-78%

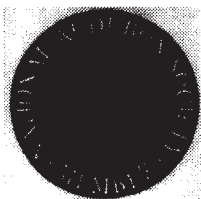
Sauer, J.R., et al, *The North American Breeding Bird Survey Results and Analysis*. 1997

Assist California Bluebird Recovery Program's supporters



The North American Bluebird Society (NABS) is a non-profit organization determined to increase the populations of Eastern Bluebirds, Western Bluebirds, and Mountain Bluebirds on this continent.

NABS studies obstacles impeding bluebird recovery, publishes results of studies, and encourages participation by its membership in all facets of its programs. Through its quarterly journal, *Sialia*, the Society addresses such issues as improved nestbox design, control of competitors and predators, and enhanced techniques for increasing winter food supply. Membership is \$15. NABS's mailing address is PO Box 74, Darlington, WI 53530.



The National Audubon Society (NAS) has local chapters 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 bi-monthly magazine as well as membership privileges in your local Audubon chapter.

Bluebird Haven Iris Gardens hosts CBRP for fourth year

Mary & John Hess were early supporters of the California Bluebird Recovery Program. In El Dorado County's inventory of over 1700 nestboxes, theirs are numbers 0021 to 0032. Bluebird Haven's annual catalogues advertise our program and every year on Mother's Day and an adjacent weekend when their visitors are at their highest, they host CBRP volunteers and a display with our promotional material. El Dorado coordinators Viola Sampert, Jim & Virginia Fletcher, and Hatch & Judy Graham have manned the booth in years past.

Their young teenager Eric Hess has taken over the monitoring and does an excellent job. And this year, they also assumed the monitoring of the booth when other CBRP'ers were unavailable—this, in spite of their very heavy sales schedule with the myriad of visitors who come to view and purchase specimens of the outstanding irises on display on Mother's Day weekend. Not only did they run the booth, this year they collected more dollars than the other volunteers have ever garnered. Over \$60 was collected in donations.

The Hess's have 12 nestboxes which are very productive. We're pleased to have them as members and cooperators.

WOOD DUCKS SCORE REMARKABLE COMEBACK

California once contained 900,000 acres of forested wetlands, the prime habitat of Wood Ducks. Only 10% of them exist today.

In the first half of this century, Wood Ducks were rarely seen and by today's standards could be considered threatened. Nestbox pro-

NABS annual meeting in Regina is a success

Reporting from Regina, Saskatchewan, Canada, Don Yoder with wife Sue, proclaimed the North American Bluebird Society's annual meeting as thoroughly enjoyable. Meeting June 25 to 28, the 21st annual get-together attracted 180 bluebirders from across the States and Provinces including 9 from California.

In addition to Don & Sue from Contra Costa Co., Richard & Katie Purvis and Colin & Martha Campbell came from Orange Co, Janet & Malcolm King from Mendocino Co., and David Cook from Santa Clara Co.

Don was particularly impressed with the Affiliate's Meeting made up of representatives of the various regional organizations (of which CBRP is one) to discuss future directions for NABS. He expressed confidence in the new Co-Executive Directors John D. Ivanko and Lisa Kivirist. "They have a big job," he says, "but they seem up to it."

At the Annual Business meeting Don says he was pleased to accept on their behalf, the NABS Award for Outstanding Contribution to the Field of Bluebird Conservation—presented to: Judy & Hatch Graham, June 27, 1998.

Don't forget the NABS Annual Meeting June 17-20, 1999 in Great Falls, Montana. Mark your calendar. Details to follow.

grams proved highly successful; and, particularly since 1991, the California Waterfowl Association's Wood Duck nestbox program has helped bring the population level of these cavity nesters back to where their numbers greatly exceed levels of the early 1900s.

—a real conservation success.

These coordinators are ready to help you—

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Editorial

—continued from page 5

Here are a few more suggestions for encouraging diversity in your programs:

- At every opportunity, recognize diversity as a goal in itself. Award prizes and commendations for highest diversity as well as highest numbers.
- Encourage specialization. If one volunteer is nuts about chickadees, let that person become your chickadee expert! Likewise owls, ducks, and the rest. Charge each specialist with testing out specific box designs, site preferences, etc., and give them opportunities to share their discoveries with the others in your network.
- If you haven't already done so, get your local chapter of the National Audubon Society involved in your program. (The best way to do so is probably to write a guest article for their newsletter introducing your program and calling for volunteers.) This step might well provide you with a whole new set of trail leaders, as well as a corps of experienced birders who can help establish local conservation priorities. There are 53 local chapters in California alone—to find yours, check out the web page at www.audubon-ca.org, or call the State office at (916) 481-5333.

We'd like to stand behind this call to action with all the support and encouragement we can provide. If you'd like to contact *BLUEBIRDS FLY!* or us about diversifying your trail or network, feel free to contact me by e-mail at scvas@scvas.org or telephone at (408) 252-3747.

*Garth Harwood
Santa Clara County Coordinator*

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BLUEBIRDS FLY!

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