

Global warming is
threat to our birds

Purple Martins in
natural cavities

Bluebird

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Bluebirds are 'helpers'. Story on 21.



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From the President

Doug LeVasseur

Greetings from Senecaville, Ohio, to all NABS bluebirders. For the next several years messages from the president will originate from here because I recently became the new NABS president, and this is the place I call home. A bit of an introduction is probably in order.

My name is Doug LeVasseur. My father named me after Gen. Douglas McArthur, but, just as no one called him Doug, no one calls me Douglas. I discovered bluebirds in the early 1980s, and will have to admit to monitoring a bluebird trail of only modest proportions (16 boxes). Both bluebirds and bluebirders have brought great happiness into my life; I enjoy being around both the bluebirds and the bluebirders immensely.

My experience on the organizational side of bluebirding consists of serving NABS in varying capacities since my early bluebirding days. I have also been actively involved with a state organization, the Ohio Bluebird Society, for many years. Most recently, I have held the positions of vice president for NABS and president of the Ohio Bluebird Society.

This past year, I had the opportunity to visit many of our affiliated organizations across the continent at their annual meetings. I look forward to continuing to develop relationships with our state and provincial bluebird organizations. Bluebirds see the North American land mass without borders. Bluebirders should look at it that way, too.

In assuming the presidency of NABS I know I am standing on a firm foundation consisting of the dedicated work of many others. This

realization both humbles and inspires me. We must remain respectful of the values and traditions of our founding members, yet sensitive to the wishes and desires of the youth who are part of us, too.

To the old-time bluebirders out there, I say, you have so much to be proud of. Our movement is a rare and real grass roots success story. But our work is not finished.

To those of you who are new to bluebirding, I say, here, take my hand. We will slide over to make room for you. You are among friends.

To all of you, I say, let us work together to meet the conservation challenges that lay ahead. I will make only one promise: This is going to be fun!

Corrections

In the Spring 2000 issue, we erroneously credited Don Yoder with being editor of *Bluebirds Fly*, the excellent newsletter published by the California Bluebird Recovery Program. Hatch and Judy Graham deserve credit for *Bluebirds Fly*, as Mr. Yoder graciously pointed out in a note to us.

* * *

In the nest-box preference article by Scott G. Somershoe and David A. Zegers, *Bluebird*, Spring 2000 (Vol. 22, No. 2, pages 14-17), an error appears. The first sentence of the discussion portion of the article refers to NABS boxes with oval holes. This is wrong. All NABS boxes used in the study had round holes.

Transcontinental Bluebird Trail officially launched across North America in May

Bluebirders across North America celebrated a conservation success May 20. The occasion was the launching of the Transcontinental Bluebird Trail (TBT), and participants recommitted themselves to furthering bluebird conservation, education and research.

Affiliated organizations, Wild Birds Unlimited stores, land management agencies, and recreation departments have joined together in this effort to help bluebirds and other native, cavity-nesting species.

Thousands of TBT nest boxes have been registered on privately managed trails. NABS-affiliated organizations have helped develop

and manage over 15 special, educational Adopt-A-Box trails in 11 states or provinces. A public awareness media campaign has alerted millions of people to the importance of wildlife conservation and its value to their communities now and in the future.

The TBT program also has generated over \$60,000 in grants to NABS or partnering organizations in support of the educational, conservation and/or research initiatives planned and, in most cases, already underway. NABS affiliates that have joined in support of the TBT and now manage bluebird trails in their state or province have, in total, received over \$3,000 as a part of the Adopt-A-Box sponsorships

collected by NABS; these funds have been used to support the grassroots conservation efforts on a local level.

For more up-to-date information and to register your private bluebird trail or to join a NABS-affiliated organization in your state or province, visit the NABS web site at www.nabluebirdsociety.org and click on the TBT program.

Famous nest box designer, Dick Peterson, dies at 81

When Dick Peterson, designer of the famed bluebird nest box that bears his name, was buried May 9 in Minnesota, a pair of Eastern Bluebirds appeared from nowhere to fly above his grave.

"It was unbelievable," said Dorene Scriven, a friend and fellow bluebirder who was at the ceremony at Fort Snelling National Cemetery near Minneapolis.

Mr. Peterson died May 4 at age 81. A resident of Brooklyn Center, Minnesota, his nest box design was known throughout North America.

Field testing by Kevin Berner, NABS research chairman, and others established the Peterson design as the box most preferred by bluebirds.

The Bluebird Recovery Program

(BBRP) of the Audubon Chapter of Minneapolis has shipped Peterson box plans to well over 12,000 persons. Dave Ahlgren, also of the Minneapolis-St. Paul area, has shipped over 60,000 Peterson box kits or assembled boxes.

The BBRP is establishing a Dick Peterson Memorial Fund. One of its projects will be a book of remembrances of Mr. Peterson contributed by people who have known him, met him, or been influenced by him either directly or indirectly by putting out a Peterson box and attracting bluebirds. Bluebirders are invited to send their remembrances to the BBRP at Post Office Box 3801, Minneapolis, MN 55403.

Bluebird

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Letters to the editor and articles in this magazine express the opinions and positions of the authors. Articles published do not necessarily represent the opinions and positions of the officers, directors, or employees of the North American Bluebird Society.

'BirdWatch' features trails, bluebirds coast to coast

NABS, NABS members and the TBT program are being featured on public TV again!

Watch Craig Tufts on "BirdWatch" when he visits with Becky Parsons on her Eastern Bluebird trail to see what makes a trail work.

Alicia Craig-Lich, a new NABS board member, introduces and explains the newly launched Transcontinental Bluebird Trail.

Dick Hutto joins Erv Davis in the National Bison Range to see Moun-

tain and Western Bluebirds in his private trail segment of the Transcontinental Bluebird Trail.

Finally, Dick and Craig Tufts visit Dr. Janis Dickinson, a past recipient of a NABS Research Grant, in the Carmel Valley of California to learn about the unusual nesting behavior of Western Bluebirds.

For airtimes in your community, visit: www.pbs.org/birdwatch/showtimes.htm.

National Audubon conference featured NABS speakers

NABS joined birding enthusiasts from across the continent at the national Audubon conference in April in Asilomar, Calif. This is the first time NABS has been invited to speak at the National Audubon Society Convention, another positive sign of growing interest in and support of bluebird conservation and awareness of NABS programs and reputation.

Joan Harnet, Don Yoder, Lisa Kivirist, and John Ivanko made a presentation on bluebird conservation. Ms. Harnet is NABS board member and chair of the Bluebird Recovery Program, Natural Area Guardians of Jo Daviess County, Elizabeth, Illinois. Mr. Yoder is program director of the California Bluebird Recovery Program. Ms. Kivirist and Mr. Ivanko are co-executive directors of NABS.

"Bluebirding is a natural area of interest for folks already involved with other birding areas," said Ms. Harnet. "Participating in the conference gave us an opportunity to spread the bluebird message and network with and learn from other similar-minded conservation organizations."

NABS education materials win 'Addy'

And the winner is . . . the bluebirds! The bluebird educational materials developed last spring by the Southern Indiana Gas & Electric Company (SIGECO), in partnership with NABS and the Indiana Bluebird Society, recently won an Addy on the local level. These awards are given by the American Advertising Federation to honor excellence in all media.

Addys were awarded to the overall bluebird campaign, which consisted of a kids' bluebirding poster, Pocket Field Guide for Kids, and other

educational materials. An award also went to a colorful bluebird folder that was used for press kits.

SIGECO has donated free copies of the poster and pocket field guide for NABS members (\$7 for shipping and handling). These two-sided posters work well in classrooms, nature centers, and other venues.

The Pocket Field Guide for Kids (and NABS nest box plans) also will be a featured item in the upcoming book, *Free Stuff For Kids 2001* (Meadowbrook Press).



The 2001 North American Bluebird Society summer conference will be held in Columbus, Ohio, June 21-24. Events will be at the Airport Radisson Hotel in Columbus. For more information, contact Doug LeVasseur by e-mail at emdlev@clover.net.

GLOBAL WARMING

It's not good news for birds: Extirpation predicted

By Jim Williams

Did Spring come early in your part of the continent? Were migrant birds early to return, your bluebirds, perhaps, seen far ahead of schedule?

Bluebird-L, the e-mail network on which bluebirding information is shared by members, was filled with exclamations about early arrivals. Other birding nets carried the same comments about other bird species.

Spring and the birds it brings were early. Why?

Was this an aberration, one of those early springs sometimes given us, a blessing for those in colder climates? Or is this sign of changing climate, something more permanent, perhaps not a blessing? Are we talking about global warming? And if we are, what does it mean for our birds?

"The 11 warmest years since the invention of the thermometer have occurred in the 1980s and 1990s," said meteorologist Paul Douglas of EarthWatch Communications and the CBS television station in Minneapolis. "1998 was the warmest year in the 1,000-year reconstruction of past temperatures over the Northern Hemisphere," he said, writing for a report issued by the organization Minnesotans for an Energy Efficient Economy.

"Researchers at Scripps Institute of Oceanography confirm that spring comes a week earlier across North America than a decade ago. Scientists at Boston University report a 10 percent increase in vegetation north of 45 degrees north latitude, based on satellite observations. Alaska is as much as 5 to 10°F warmer than it was at the turn of the century; permafrost

is melting in the soil, disrupting construction and forests," Mr. Douglas said.

"From the Rockies to the Alps and Andes, glaciers are disappearing at an alarming rate. And the 6- to 10-inch rise in sea level since the turn of the century is consistent with warming and volumetric increases in the oceans.

"Based on studies done at the National Center of Atmospheric Research, Meteorologist Tom Wigley believes that a significant portion of recent warming is caused by human activities, and that volcanic activity and variations in solar radiation will

Climate Change's Third Assessment Report.

"The summer ranges of birds are often assumed to be tightly linked to particular habitats," he said. "This is only partially true. Birds also are limited in their distributions by their physiology and the availability of food. Habitat selection, food availability and competition may all play a role in the local distribution of a bird species. The summer distributions of many North American bird species can actually be modeled quite well based on climate alone."

Dr. Price explained that climate change will bring significant changes in the locations birds will choose for breeding. Many species will be driven

The 11 warmest years since the invention of the thermometer have occurred in the 1980s and 1990s.
— Meteorologist Paul Douglas

no longer be controlling our future, as some skeptics have argued," said Mr. Douglas. This is not good news for our birds.

EXTIRPATION PREDICTED

Dr. Jeff Price spoke to that problem in a recent article in the magazine *Minnesota Birding*. Dr. Price is the director of Climate Change Impact Studies for the American Bird Conservancy, and one of the authors of the Intergovernmental Panel on

from their current ranges by warmer temperatures.

"Bird communities, as we currently know them," Dr. Price said, "will likely look quite different in the future.

"The potential rates of change of birds and the plants that make up their habitats are often quite different," he said. "While most birds can respond quickly to a changing climate, the ranges of the plants may

GLOBAL WARMING

Birds driven north will outdistance needed habitat

take from years to centuries to move." In other words, a different climate will produce different plants and different insects, potentially depriving birds of the food sources they need for survival. The birds will have to go elsewhere.

JUST ONE EXAMPLE

Here is an example of what that means. Using model projects depicting what the average climatic conditions may look like sometime in the next 75 to 100 years, Dr. Price made a prediction about birds that nest in Minnesota today. He said that 36 species of birds currently breeding in Minnesota will be driven from the state. Bird species forced north will include flycatchers, vireos, warblers, blackbirds, finches, Boreal Chickadee, and Red-breasted Nuthatch.

Another 24 species will be driven to far northern Minnesota. These will include Tree Swallow, House Wren, White-breasted Nuthatch, and more warblers, vireos, sparrows, and finches.

Certain species will expand their ranges north into Minnesota, and some birds not seen there now possibly will begin colonization.

"How quickly these changes might occur is unknown," Dr. Price said. "It will largely depend on whether the limits to a given species' distribution are more closely linked with climate, vegetation or some other factor. However, it is possible they could occur relatively quickly.

"One study has found that the average latitude of occurrence of 43 percent of the warblers already has shifted significantly farther north in the last 20 years, by an average

distance of greater than 40 miles," Dr. Price said.

"In summary, climate change will cause changes in the distributions of birds. Even a relatively small change in average temperature could impact bird distributions These changes could occur (and probably are occurring) relatively quickly. While these changes will have some ecological and, possibly, economic effects, the magnitude of these effects is unknown," Dr. Price said.

Terry L. Root, professor at the University of Michigan's School of Natural Resource, also writes that climate change may be affecting the geographical ranges and migration patterns of North American birds.

Of 47 species whose spring arrival dates were recorded in the upper Peninsula of Michigan between 1965 and 1994, Dr. Root found that four expanded their ranges northward during that period and 15 advanced their arrival dates by one to eight weeks. Twenty-seven species showed

no significant change in arrival times, and only one species, the Hermit Thrush, arrived later.

"Is this something to be concerned about?" Dr. Root asked. "It depends on what the species are." If species move their ranges north at differential rates, it may lead to the "tearing apart" of ecological communities. It also could lead to birds arriving in their spring breeding grounds before key food sources are available.

Dr. Root also found what she called a "striking association" over the 30-year study period between the arrival of some migrants and the thawing of lake ice. The ice-out date is a "very good indicator of the weather itself," she said.

Dr. Root's comments are from a report delivered in October 1998 at a conference entitled "Is Climate Changing Where the Wild Things Are?" sponsored by the U.S. Environmental Protection Agency Office of Policy, Office of Economy and Environment.

36 species of birds currently breeding in Minnesota will be driven from the state ... flycatchers, vireos, warblers, blackbirds, Boreal Chickadee, Red-breasted Nuthatch, and finches.

— Dr. Jeff Price

GLOBAL WARMING

Climate change will affect Bluebirds and swallows

By Peter Dunn

You probably have heard a lot about global warming, most of it not good news. Dire predictions have been made about coastal flooding, the spread of tropical diseases, crop failure, and changes in habitat.

What effect will this have on bird populations? Until a few years ago no one knew. We did not even think birds would be influenced very much. Temperatures have only increased by about one degree Fahrenheit (0.5 C) during the past 100 years, so you might not think it would have much of an effect. However, recent evidence indicates that these small changes in temperature can influence bird populations.

The first evidence came in 1997 when Humphrey Crick and colleagues at the British Trust for Ornithology showed that 20 species of birds laid their eggs an average of nine days earlier in 1995 than in 1971 (Crick et al. 1997). These scientists analyzed long-term collections of nest record cards submitted by volunteers. Recently, these scientists have shown a direct correlation between rising temperature and earlier laying (Crick and Sparks 1999).

RANGES SHIFTING NORTH

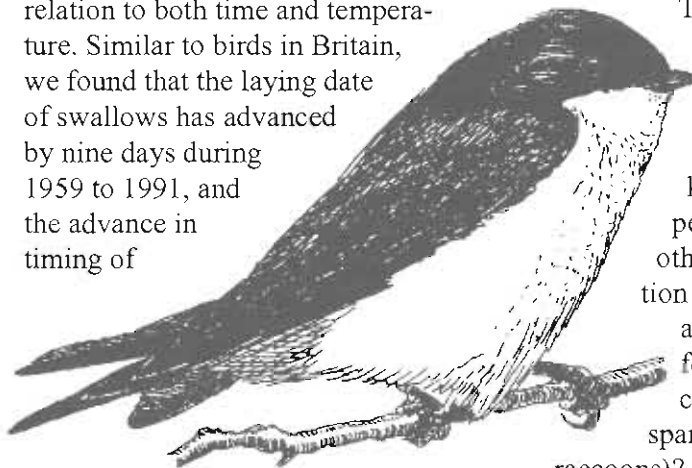
Not only are birds laying earlier, but they are also shifting their ranges farther north. On average, the northern ranges of 59 bird species inhabiting the southern part of Britain have moved north by 11.5 miles (19 km) from approximately 1970 to 1990, while the southern margins have remained relatively intact (Thomas and Lennon 1999).

If climate change is affecting birds in Britain, then what is happening to

bird populations elsewhere? Although the British may beg to differ, Britain is a relatively small island, and it may not be representative of the rest of the world. What we need is a study of species across a large area, preferably an entire continent.

TREE SWALLOWS

By chance, Dr. David Winkler (Cornell University) and I had been collecting similar types of nesting data on Tree Swallows from across North America. So, we examined the laying dates of Tree Swallows in relation to both time and temperature. Similar to birds in Britain, we found that the laying date of swallows has advanced by nine days during 1959 to 1991, and the advance in timing of



laying has occurred in response to warmer spring temperatures (Dunn and Winkler 1999). Thus, our study provided the first continent-wide evidence that climate change has affected reproduction in birds.

In our analysis, we used 3,450 nest records of swallows from across North America collected prior to 1992. Much of our data was submitted by bluebirders and NABS members to collections such as the Cornell Laboratory of Ornithology and the five major Nest Record Schemes in

Canada (see Acknowledgments). Our study would not have been possible without the help of thousands of dedicated volunteers who have diligently submitted their data for the past 50 years. (Thank you!) These long-term data sets are essential for looking at long-term and large-scale questions about how our environment is changing and affecting our birds.

What are the consequences of climate change for Tree Swallows and other species? In many birds, laying earlier is associated with laying a large clutch of eggs, and, as a consequence, fledging more young.

Thus, warmer temperatures during laying may lead to greater production of young. However, we do not know what effect temperature may have on other aspects of reproduction and survival. Will it also affect the abundance of food and the number of competitors (e.g., house sparrows) or predators (e.g.,

raccoons)? How will the habitat change? Will habitat on the summer and winter ranges change the same way? Answers to these questions are not yet known.

BLUEBIRDS

What effect will climate change have on bluebirds? No large-scale study has been conducted of the effects of climate change on laying date, but there is evidence that winter weather can affect the abundance of bluebirds on their breeding range. I have analyzed 33 years of Breeding Bird Survey data, and found that

GLOBAL WARMING

Large scale ecological studies ... depend on the cooperation and contributions of thousands of volunteers and private groups. Volunteers are needed to collect data ... and send it to NABS.

Eastern Bluebirds are more abundant on the breeding grounds following warmer winters. Presumably, more birds survive when winters are warmer. Thus, it

is possible that climate change may lead to greater winter survival and increasing abundance of bluebirds in the summer. However, we know very little about how other factors such as food, competitors and nest site abundance may change as temperatures increase. To answer these questions we need your help.

Large scale ecological studies of bluebirds and other North American birds depend on the cooperation and contributions of thousands of volunteers and private groups. Volunteers are needed to collect data on bluebird nests and send it to NABS. The Transcontinental Bluebird Trail will be a major advance in collecting and analyzing the data we need to monitor bluebirds. Further information may be found at the NABS web site (www.nabluebirdsociety.org). Analysis of long-term trends in bluebird laying dates and productivity will provide an important opportunity to verify the pattern we have found in Tree Swallows. Persons interested in contributing to or collaborating on a study of long-term changes in laying date of bluebirds should contact me directly (pdunn@uwm.edu).

ACKNOWLEDGEMENTS

Our Tree Swallow study would not have been possible without the assistance of thousands of volunteers

who checked nest boxes over the past 50 years. We also wish to thank the nest record card programs and their managers for access to these data: British Columbia Nest Records Scheme, Ellis Bird Farm, Maritimes Nest Records Scheme, North American Nest Record Card Program, Prairie Nest Records Scheme, and Quebec Nest Records Scheme.

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Minnesota couple 'outstanding conservationists'

Marlys and Dick Hjort of Chisago City, Minn., were honored late last year at a dinner by the Minneapolis Chapter of the National Audubon Society. They were named Outstanding Conservationists of the Year.

The Hjorts have been active in the Minnesota Bluebird Recovery Program (BBRP) since 1983, and also joined the North American Bluebird Society (NABS) at about that time.

For 18 years they have been reporting bluebirds — over a hundred new fledglings annually in recent

Royal Soc. London, Series B 266: 2487-2490.

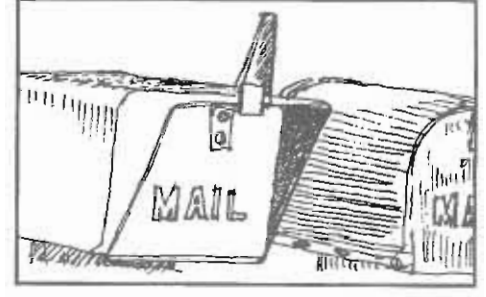
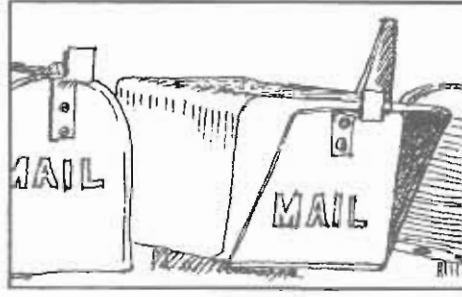
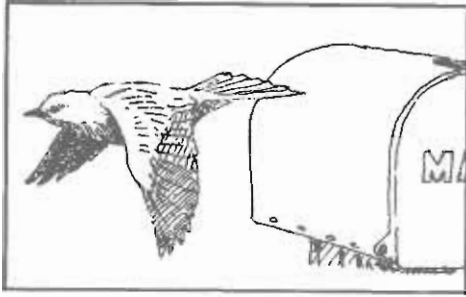
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(Peter Dunn is an Assistant Professor of Biological Sciences at the University of Wisconsin-Milwaukee. He has been studying the mating behavior and reproductive ecology of Tree Swallows since 1985. Address for correspondence: Department of Biological Sciences, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin, USA 53211; telephone 414/229-2253; e-mail pdunn@uwm.edu).

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years — in Chisago and Anoka counties in Minnesota. Dick Hjort has twice served on the NABS Board. They have both been members of the BBRP Board.

Bluebirds are only one of the many facets of conservation work the Hjorts have done over the years. In their gardens they have made unique bird feeders and homes for Wood Ducks, martins, bats, turtles, salamanders, and toads. They are active in many conservation and environmental efforts.



Who nested in this wood duck box?

To the editor,

We have 17 Wood Duck nest boxes on our farm. All of them are on posts in water of different depths. Few are checked during the nesting season because it is difficult to get to them. Weather was cold enough last winter to freeze the pond and marsh solid enough so each box could be cleaned and fresh wood shavings could be placed inside.

Twelve boxes contained Wood Duck egg shells, indicating that ducks had hatched. One box contained unhatched duck eggs. Two contains House Wren nests. One box appears to have successfully fledged only starlings, while another had fledged starlings after use by a Wood Duck.

Yet another box appeared to have been used by a screech owl. This box contained feathers from Mourning Doves and Blue Jays, plus many sparrow-sized feathers.

Five nest boxes contained a few screech owl feathers, owl pellets, and feathers of other birds, including

cardinals, all of which were on top of Wood Duck egg shells. This would indicate the owl moved in after the ducks left.

One red-phase Eastern Screech-Owl was present during nest cleaning. It moved up to the box entrance hole, and remained there while the nest was renovated.

Four boxes contained dry Red Oak leaf nests along with owl pellets and feathers. All of this was on top of duck egg shells. All four of these boxes are in rather deep pond water, and were thought to be far enough from shore and tree branches to have prevented access by squirrels and opossums. Raccoons could have swam out with a mouthful of leaves, climbed the steel pipes, entered the box, and made a nest of wet leaves, but this seems not a reasonable explanation.

Does anyone have a good explanation of this?

— James O. Smith, 13474 N. 130 East Road, Homer, IL 61849

Hard wood used to protect hole size

Dear editor,

When I read the article by Bruce Burdett, "Nest Boxes to Last Forever," (Winter 2000) it reminded me of the raccoon guard I made for a Peterson-style nesting box. We have a flicker that has pecked at feeders and boxes to open them up. He chipped out enough pine wood around a Peterson box entry hole that later

enabled a starling to reach in and pull out a mother bluebird.

That will not be a problem any more. I cut an oval raccoon guard from Osage Orange, one of the hardest woods around, and that guard should last longer than the box.

— Glenn Marshall, Jonesborough, Tennessee

Against sparrows

To the editor,

Although my nearly 100-house section of the Transcontinental Bluebird Trail is in a rural setting, I still have a lot of problems with House Sparrows.

Last week (early February) I noted several pair of sparrows already building nests in the city where I work, although it was late January with snow on the ground. I decided to check some of my bluebird houses. I found that in a number of male House Sparrows had put in some nesting material and were advertising for females. I set some traps and caught two males.

I am a bit embarrassed that it has taken nearly five years of bluebirding for me to find this out. It is very significant for all of us as it means that it is possible to eliminate at least some of the sparrows well before bluebirds begin to nest.

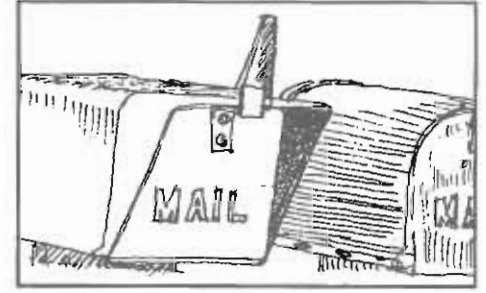
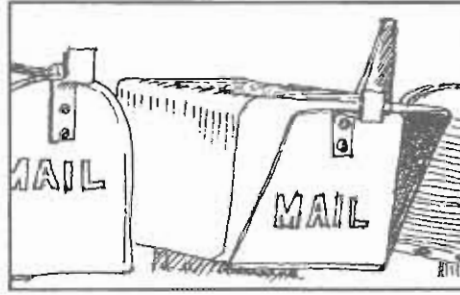
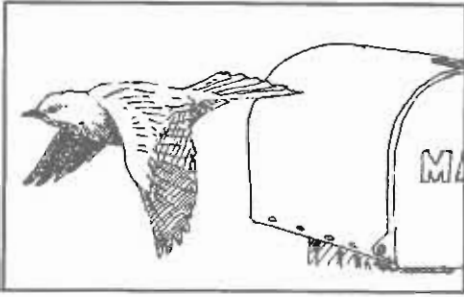
— Robert Walshaw, Coweta, Okla.

For sparrows

To the editor,

I am saddened by articles on the destruction of House Sparrow nests, eggs, and young. I have Purple Martin and bluebird boxes, and could never bring myself to destroy ANY bird's labors.

— Ann May, Bossier City, Louisiana



Let's work together to help all cavity-nesting species

Dear editor,

Karen Lippy's letter from the Autumn 1999 issue raises some valid points. I hope this begins a strong dialog among our members in the coming year on how we can promote all cavity nesters.

As president and one of the founders of the Virginia Bluebird Society, I have strongly urged our group to promote not only bluebirds, but other native cavity nesters as well. We highlight a different cavity nester in each issue of our newsletter, and now that we have established a number of bluebird trails, we are beginning to experiment with Prothonotary Warbler boxes. A number of our members also maintain Purple Martin boxes and Wood Duck boxes.

We train all of our monitors to recognize the various species, such as Tree Swallows, that might occupy our boxes, and the only birds that we consider unwelcome and are evicted are the non-native House Sparrows.

It is clear that as an organization NABS is concerned about other cavity nesters as well. But, unfortunately, I think Ms. Lippy's experience with the bluebirder who scoffed at the idea of helping other cavity nesters is not unique. We also have encountered folks who are none too happy about Tree Swallows or chickadees in their bluebird boxes.

Instead of looking at this as an opportunity to learn about and help another creature, these folks seem to act like their bluebird trail has been

compromised. Maybe we never will change these attitudes, but we can at least foster more positive attitudes and practices among new generations of bluebird-trail stewards.

We aren't creating welfare birds by providing man-made nest boxes. Almost 80 percent of all songbirds live less than one year. The real natural selection comes into play when it comes down to whether or not a young bluebird is savvy enough to avoid predators or find enough food to survive the winter.

Unfortunately, I don't think we can ask ourselves, "How long will it take for bluebirds to recover?" And I think it will be impossible to define when our job will be complete. We face an ongoing battle with increasing loss of habitat and available nest sites, continued competition from non-native cavity nesters, and the death of songbirds from pesticide poisoning.

Ms. Lippy says she is beginning to question our focus on nest boxes for bluebirds, but if you think about it, other successful conservation movements often started with a signature issue or species. Bluebirds are an excellent poster bird for all cavity nesters.

We aren't celebrating these lesser-known species, and certainly none of us say we have a Tree Swallow trail, but we ARE helping Tree Swallows just the same. Hopefully, those involved with bluebird trails may take things a step farther and create kestrel

or Bewick's Wren boxes.

As a society, we can help by continuing to educate people on the needs of other cavity nesters, and to encourage our membership to look for ways to help these birds.

— Julie Kutruff, Virginia Bluebird Society

Against sparrows

To the editor,

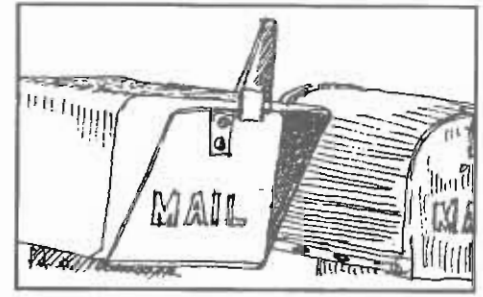
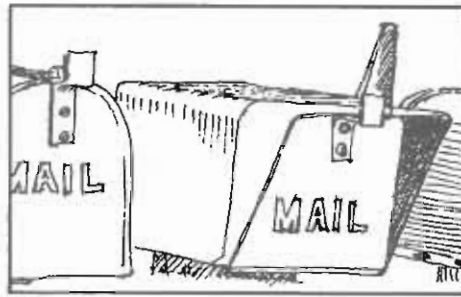
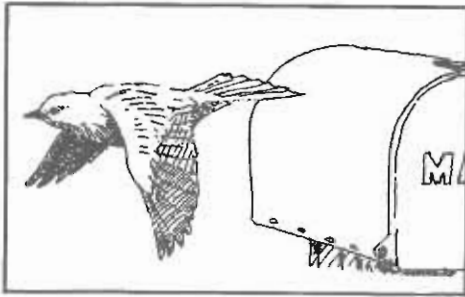
In the Autumn 1999 issue of *Bluebird*, I found a letter by Jim Walters of Iowa City, Iowa, somewhat disturbing.

Mr. Walters seems to have a lot of sympathy for a songbird killer, the House Sparrow. I have seen the results of this killer's actions and I have no compassion for this bird.

Mr. Walter states, "You might, if you observe closely and long enough, observe bluebirds killing House Sparrows." I am 79 years old, and never have observed or heard of this happening.

This gentleman implies that we now have enough bluebirds. I have been a bluebird lover all my life, and as far as I am concerned, we can never get too many of God's beautiful creation.

— Hobart H. Ellifritt, Clarksburg, West Virginia



Questions and observations about study, bluebird trails

To the editor,

Was the Somershoe and Zegers nest-box study (Bluebird, Spring 2000) done in an area that had no boxes in the past, and, if there were boxes present prior to the study, would this prior-box history impact the study?

I ask this with some experience under my belt. I operate a 20-box trail, and 19 of the boxes are NABS boxes just as most all of my boxes have been for approximately nine years. The last two years I have had a PVC pipe box installed as the 20th box. It is in just as good bluebird habitat as the other boxes; in fact, I moved it this spring just to make sure there wasn't something screwy that I was missing with the prior location.

There have been no bluebird takers in the PVC pipe box for two years now. I wonder if the bluebirds of my cow pasture are predisposed to use NABS boxes since those are the only boxes in existence here for nine years? I am in a high-density bluebird area, and have no trouble having high occupation of bluebird boxes.

Why must these studies be complicated by performing them in areas in which so many competitors exist? Wouldn't it be better to perform the studies (where there are fewer competitors)?

On a second subject, I think pushing a trail of the magnitude of the Transcontinental Bluebird Trail is placing quantity before quality. With

the number of trails already installed without ground predator guarding, all NABS is going to accomplish is raccoons, snakes and house cats across America. I see way too many bluebird trails already that are erected poorly — nest boxes attached to fence posts or tree trunks, miles of them.

— Terry Washburn, Nashville, Ark.
(Mr. Washburn has a bluebird web site at www.iocc.com/~twash/bluebirds.html.)

Mr. Somershoe responds:

The area where we put boxes had few to no others previously. The area where we had 11 pairs of boxes never had boxes before. A couple of the sites were in people's yards where they had NABS boxes (the bluebirds ended up using the Peterson boxes in all cases, interestingly enough). I actually searched all areas within a mile of my sites and found few to no boxes in most areas, certainly not enough for all the bluebirds in the area. Many were very old, falling apart, and/or full of old nests, and thus unusable. Out of many square miles of suitable habitat, I think I found three maintained boxes appropriately placed for bluebirds. There were a bunch of boxes in people's yards that were full of bushes, trees, vines, etc., habitat too dense for bluebirds. Many of these boxes had House Wrens, titmice, chickadees, or House Sparrows.

It certainly would be good to repeat this experiment in areas like the south, where I am now doing graduate research, and which has no House Wrens. We still have many species that use nest boxes that could compete with bluebirds. This is why I recommended repeating this experiment throughout the breeding ranges of the Eastern bluebird for potential regional effects on box preference.

I am curious if Mr. Washburn has predator guards on his boxes, and/or how successful his birds are (with or without them). I'm interested in whether predator guards really do any good or not.

Nails work just fine

To the editor,
My comment on the "Screws vs. Nails" article in spring 2000 *Bluebird*: Having constructed innumerable bluebird nest boxes for more than 30 years, I have used 8d and 10d annular-ringed coated (hot dipped galvanized) thin-shanked clapboard nails with 100 percent success. Using 6d nails does not afford the necessary holding power. I used the 8d for sides and bottom and 10d to hold the roof in place. These nails penetrate without splitting, and are almost impossible to extract. I have never had a box come apart, even after 12 or 15 years of weathering.

— Joe Gray, education chair, Mid-Coast Audubon Society, Jefferson, ME

NABS launches new research web site for collection of nesting information on-line

NABS has launched a new research web site. The web site will provide the opportunity for NABS members to enter nesting information directly on-line. This was accomplished thanks to the expert technical guidance of Ken Avery of Washington and the scientific oversight of Dr. Bernie Daniel in Ohio.

The web site is designed to provide immediate summary information for bluebird conservation efforts across North America, using an on-line database system.

On-line voluntary data submission is free to all current NABS members, and was designed to be as simple and brief as possible. An on-line glossary of terms used on the research site will help address questions about terms and definitions.

The data collection web site was made possible, in part, through the generous underwriting of Wild Birds Unlimited and dedicated hours volunteered by Ken Avery, Arlene Ripley, Bernie Daniel, Bob Lane, and numerous others.

A remarkable quantity of data and information is collected by NABS members. This web site enables both real-time tabulations of bluebird statistics during the course of the nesting season and the collection of information in a database which can then be analyzed by the scientific community.

Individual state summaries, private TBT trails and, of course, TBT Adopt-A-Box trails all will be summarized here. A related affiliate

web collection site is being developed for entering Adopt-A-Box TBT trail data.

NABS members are encouraged to enter their nesting information on the web site. To enter your data, first go to the NABS web site at www.nabluebirdsociety.org. Follow the on-line data collection link to the main data collection web site page.

Each NABS member has a unique ID number, printed on the outside of the journal on the mailing label above their name. To sign on to the web site, just enter your member ID number and type in the default password, "nabs".

You will be prompted to change the password to one of your choosing. Please make a note of it since your password will not be accessible from NABS headquarters.

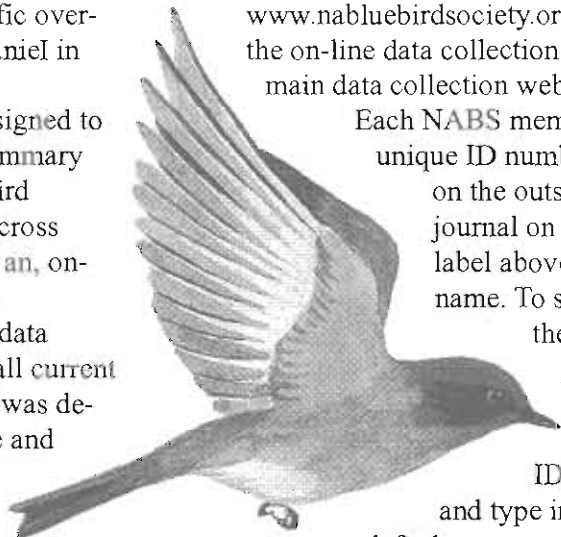
If you are unable to sign on with your member ID number, it is likely that either your membership has expired or you recently renewed and

the on-line database has not yet been updated. If you have renewed, check back on the web site in three to four weeks and your ID number should be updated.

Once at the site and registered, follow the simple and complete instructions on how to contribute your nest-box information.

You can update your nest box summaries during the nesting season or wait until the end of the season. No entry is needed if there is no activity in your boxes. If you have too many boxes to enter, select a representative sample of your most effective nestboxes (just keep using the same ones year after year to preserve the integrity of the data).

For NABS members unable to enter data at home, at their local library, or through a relative (perhaps a great way to get kids or grandkids involved), please send a self-addressed stamped envelope to NABS, Report Request, P.O. Box 74, Darlington WI 53530. A printed form will be sent for your use. However, information received by mail will not be part of the web site database.



NABS has launched a research web site for collection of nesting data. The following four pages replicate the instruction pages for this site, showing you how simple it is to use this on-line reporting procedure.

ON-LINE

bluebird networks and web sites

Birders with computers and connections to the World Wide Web can choose from many web sites and e-mail exchange networks. The former offers much information on a wide variety of subjects. The latter gives participants a chance to communicate directly, via e-mail, with persons sharing similar interests.

Bluebird fanciers are among the very fortunate in this regard. A web site drawing rave reviews has been created particularly for them, and an e-mail message network, allowing hundreds of bluebirders to share notes of interest, also exists.

The Bluebird-L Reference Guide web site is a significant source of all types of information about bluebirds. The reference guide, which answers almost any question one might have about bluebirds, was created by Haleya Priest of Amherst, Massachusetts. The site on which this material is found is maintained by Barry Whitney of North Augusta, South Carolina. The information has been assembled from contributions of members of Bluebird-L, the e-mail network for bluebirders maintained by the Cornell Laboratory of Ornithology.

There are two addresses for the web site: <http://bluebird.htmlplanet.com/> and www.crosswinds.net/~bluebirdguide/.

The North American Bluebird Society, publisher of this magazine, has another fine web site. Its address is www.nabluebirdsociety.org.

Another site is maintained by the Rutherford County (North Carolina) Bluebird Club at www.rcbc96.homestead.com.

If you are not familiar with the workings of the web, these sites can be brought onto your computer screen, opened much as you open this magazine. You can examine the site as you choose, page by page. Search options sometimes exist. Material usually is organized by topic for easy and fast access. E-mail networks, called listservs, require enrollment, usually referred to as subscriptions (no fees are involved).

BLUEBIRD-L is an e-mail group for bluebirders and persons interested in cavity nesters. "The value of BLUEBIRD-L as a communications device for bluebirders all across the continent is unexcelled anywhere," said Dean Sheldon, a NABS board member and long a bluebird activist in Ohio.

To subscribe to BLUEBIRD-L, send an e-mail message to: listproc@cornell.edu containing this single line of text: SUBSCRIBE BLUEBIRD-L Your Name. Do not put anything in the subject line of your message. The text line must appear exactly as you see it here, with the addition of your name where indicated. You must send this mail from the e-mail address on which you normally receive e-mail.

The Cornell Laboratory of Ornithology's Birdhouse Network web page can be found at <http://birdsource.cornell.edu/birdhouse>.

The North American Chimney Swift Nest Site Research Project has

a web site at <http://www.concentric.net/~dwa>><http://www.concentric.net/~dwa>.

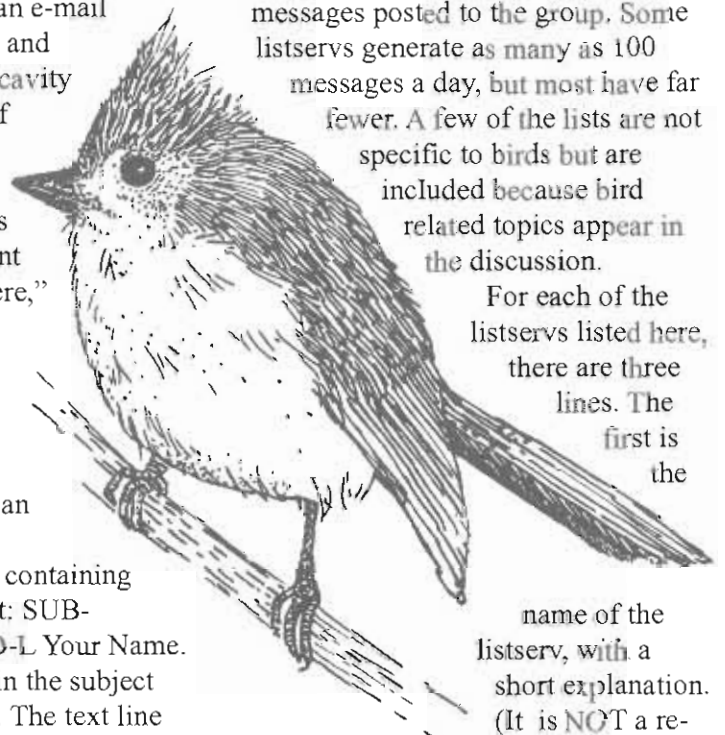
On the next page are other bird-related e-mail discussion groups, some of those addresses gathered by Rick Blom, a writer and editor who lives in Bel Air, Maryland. This material was first published on BirdChat. It is used with permission.

Individuals may subscribe to any of these lists and they will receive all messages posted to the group. Some listservs generate as many as 100 messages a day, but most have far fewer. A few of the lists are not specific to birds but are included because bird related topics appear in the discussion.

For each of the listservs listed here, there are three lines. The first is the

name of the listserv, with a short explanation. (It is NOT a re-

view, merely an explanation.) The second is the e-mail address you use to subscribe to the listserv. The third line is the message you send to subscribe. Where it says "Your Name," type in your own name, without the quotation marks. Do not put any message in the subject line of your e-mail. The only information you need is the message, in the body of the e-mail. Some listserv requests are case



ON-LINE

save this list of net sites

sensitive; that is, they require careful reproduction of caps and lowercase letters in the subscription message. Again, you must send the request to subscribe from the e-mail address on which you normally receive e-mail.

If you try to subscribe to any of these lists and get error messages, check the address carefully. Even an unwanted or inadvertent space can cause an error.

• **BIRDCHAT:** General discussion of North American birds and bird watching.

subscription:
listserv@listserv.arizona.edu
message: subscribe BIRDCHAT
Your Name

• **BIRDCNTR:** Transcriptions of rare bird alerts for the central U.S. and Canada.

subscription:
listserv@listserv.arizona.edu
message: subscribe BIRDCNTR
Your Name

• **BIRDEAST:** Transcriptions of rare bird alerts for the eastern U.S. and Canada.

subscription:
listserv@listserv.arizona.edu
message: subscribe BIRDEAST
Your Name

• **BIRDWEST:** Transcription of rare bird alerts for the western U.S. and Canada.

subscription:
listserv@listserv.arizona.edu
message: subscribe BIRDWEST
Your Name

• **BIRDBAND:** Discussion of bird banding with periodic postings from USF&WS Bird Banding Laboratory.

subscription:
listserv@listserv.arizona.edu

message: subscribe BIRDBAND
Your Name

• **Bird Feeder:** Discussion of backyard bird watching.

subscription: birdfeeder-
request@userhome.com
message: subscribe

• **BLUEBIRD-L:** An e-mail group for bluebirders and persons interested in cavity nesters.

subscription:
listproc@cornell.edu
message: SUBSCRIBE BLUE-
BIRD-L Your Name

• **CAVNET:** Scientific discussion list on cavity-nesting birds.

subscription:
listserv@uvvm.uvic.ca
message: subscribe CAVNET
Your Name

• **TITNET:** Scientific discussion list for Parids (Chickadees) and other cavity nesters.

subscription:
listserver@relay.doit.wisc.edu
message:
subscribe TitNet Your Name

• **Wild gardens:** Discussion about attracting birds, bees, butterflies, bats, frogs, toads, and other wildlife through the use of plant life as well as ponds, organic methods of gardening, seeds, native plants, birdhouses, feeders, birdbaths, compost, and planting techniques.

subscription: wildgarden-
request@userhome.com
message: SUBSCRIBE



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by acting as a courier.

Contact:

Lina DiGregorio
719-578-9703

edcon@aba.org

or

Betty Petersen
508-224-6521

bpetersen@manomet.org

www.americanbirding.org/
consbex.htm

Bluebird News from Shore to Shore

Girl Scouts in the **Mt. Pinos** area of **California** are becoming involved with bluebirds. Nest boxes for Western Bluebirds were built at a recent meeting. Veteran bluebirder **Don Johnson** and **Nancy Banfield** are helping the young ladies.

Steve Simmons in **Merced, California**, tends 220 nest boxes, most of them intended for Wood Ducks. He also puts out boxes for Barn Owls, American Kestrels, Western Screech-Owls, and bluebirds.

In **Lassen County, California**, **Suzanne McDonald** and her husband tend bluebird nest boxes in a meadow. They sometimes need hip boots to get to the houses, and other times reach them on snowmobile! **Hatch** and **Judy Graham**, also active in the **California Bluebird Recovery Program**, have used snowshoes to reach boxes they tend on trails with elevations between 8,000-9,000 feet.

(Thanks to the California newsletter *Bluebirds Fly* for those items.)

Notice of the 2002 NABS convention received prominent attention in a recent issue of *The Nestbox*, newsletter of the **Southern Interior Bluebird Trail Society** in British Columbia. That event will be in BC at the **Penticon Lakeside Resort Convention Centre and Casino**.

Doug LeVasseur, president of NABS, spoke at the spring meeting of the **Oklahoma Bluebird Society**.

Eleanore Petersen of **Sturgeon Bay, Wisconsin**, used an umbrella to shade her nest box in last summer's heat. The birds didn't seem to mind. All the fledglings survived.

Would you like to recognize a loved one or friend with a nest box carrying a small inscription plate? **The Bluebird Recovery Association**

of **Wisconsin** is selling a Peterson box on the front of which is mounted a plate with room for a person's name and the dates of birth and death. The price is \$50 each.

Two bluebird trails maintained by the **Calvert County (Maryland) Bluebird Trails Monitors** have been filmed for broadcast on Maryland Public Television. **Arlene Dziezdic, Andy Brown, John Zyla, and Arlene Ripley** were filmed offering comment on the trails and the birds.

A bluebird nest-box project undertaken by **Eagle Scout Jarrod Kaplan** at the **Daniel Stowe Botanical Garden in Belmont, North Carolina**, has resulted in 167 fledged birds. Jarrod added 30 boxes to a trail of 34. Fifty-six clutches were recorded.

Joe Sedlacek of **Broome County, New York**, received the 1999 **Fran Hanes Award** for Bluebird Conservation given each year by the **New York State Bluebird Society**.

Lowell Rowland of **Danville, Virginia**, was on a boat, fishing off the coast of Florida, about 25 miles from land, when a bluebird landed on the boat. It rested for about 20 minutes, he said, then flew away. **Helen Munro** reported the story in a recent issue of *Bluebird Notes*, published by the **North Carolina Bluebird Society**.

Leonard Palm of **Saunders County, Nebraska**, walks his 33-mile bluebird trail. This impressive fact was offered in a recent issue of the newsletter *Bluebirds Across Nebraska*.

As if native pests weren't problem enough, Minnesota bluebirders now contend with opossums as well. The mammal has become more common

in the state in recent years. **Robert Adrian** reported losing four Tree Swallow nests to opossums in the east central part of the state last season. The boxes attacked all had Noel wire guards. The problem was reported in *Bluebird News*, published by the **Bluebird Recovery Program of the Audubon Chapter of Minneapolis**.

In Wisconsin, master bander **Tom Nicholls** reported that he and banders working with him, including **Ann Wick**, have banded 374,000 Eastern Bluebirds to date. Of these, 2,255 have been recovered in subsequent banding efforts. The longevity record for birds recaptured is eight years.

In a difficult spring with much rain and cold weather, an unusual number (8-10) of female Western Bluebirds were found dead by **Portland, Oregon**, bluebirders. Seemingly healthy the night before, the birds were found dead on the nest, over eggs or dead nestlings, or on the ground. Taken for necropsy, the birds were found to be infected with acanthocephalan endoparasites, or thorny-headed tapeworms. **Elsie Eltzroth**, bluebirder and bird rehabilitator in **Corvallis, Oregon**, had knowledge of these. The only known intermediary of this tapeworm is the Pillbug, an isopod common across the country. Bluebirds will eat Pillbugs when the weather is cold and wet, when fruits and berries are gone and other insects are not available. There is no treatment because the bird dies rather quickly. The problem subsides when warm weather comes. The event was first reported in the **Prescott Bluebird Recovery Project** newsletter. An article discussing this problem will appear in a future issue of *Bluebird*.

PURPLE MARTINS

Significant numbers in Oregon nest in natural cavities

Before the helping hand of man was available, Purple Martins found their own nesting cavities — natural cavities. A paper published in the spring 2000 issue of *Oregon Birds* states that some birds of this species still do things the old-fashioned way: They nest in natural cavities.

Purple Martins are uncommon and local in most of western Oregon, where author Eric Horvath conducted his study. During the summer of 1998, he visited 111 of 134 reported colonies, attempting to account for all Purple Martins nesting in Oregon. (He defined a colony as one or more pairs of martins nesting more than 6/10ths of a mile [1 km] from other martins.)

He observed 784 pairs of martins

at 112 colonies, 45 of which previously were unknown.

One-quarter of the Purple Martins he found nested in natural cavities, mostly in snags and pilings. The remaining three-quarters used nesting structures provided by man specifically for that purpose, i.e., nest boxes, gourds, and apartments.

This was the first population study of this bird for Oregon, establishing minimum population numbers. Mr. Horvath stated, however, that the range of Purple Martin in Oregon has contracted during the last 60 years.

The following is from Mr. Horvath's *Oregon Birds* article:

"Data were collected on 35 pairs nesting in snags. Thirty-two pairs used old woodpecker holes, and three

used natural-rot pockets in the snags. Most frequently, only one pair nested per snag, but natural apartments of two, three and four pairs in a single snag also were found. These cases of multiple pairs nesting in one snag indicate that high-density colonies can form in natural as well as artificial colonies.

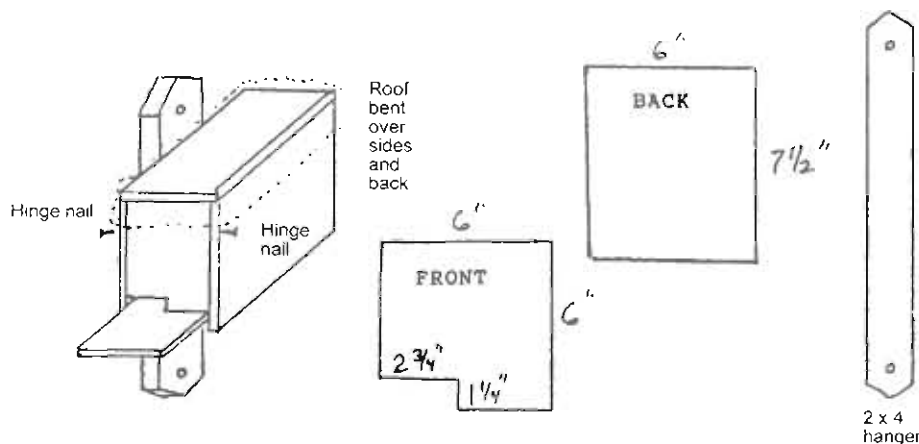
"Mean colony size where nesting was predominately in snags was 3.6 pairs. Martin nest snag trees were Douglas-fir, Cottonwood, Red Alder, Willow, and Oregon White Oak. Douglas-fir snags were most commonly used.

"Among all martin-nest snags, mean height was 62 feet (19 m). Mean cavity height was 49 feet (15 m). Mean cavity height above the brush and young trees was 42 feet (12.7 m). This last measurement may be an important variable in nest site selection by martins. The effective height of cavities in snags surrounded by brush and young trees is not the distance to the ground, but instead the distance above the brush. Martins chase off small mammalian predators by diving at them (personal observation), and are only able to defend cavities that are well above the brush. Hence, martins may be selecting higher cavities to avoid predation.

"Compass direction that the nest faced was recorded for 27 cavities in snags used by martins. Cavity entrances faced in many directions; no pattern was found.

"Martins used snags in a wide range of decay, from relatively young (10 years since burned) snags with bark and fine twigs still present to old

Purple Martin nest box plan



- Floor 6"x18". Top and sides 7.5"x14". Roof of aluminum or galvanized sheet metal 14"x18".
- Front hinged on two nails as shown. Use 3/4" plywood to avoid nail splits.
- Opening exactly 1-1/4"Hx2-3/4"W keeps out most starlings.
- Metal roof protects top, upper sides.
- Paint exterior white to reflect sun and protect wood.

- Roughen entrance floor for traction.
- Mount hanger using 8" galvanized spikes or lag screws.
- Tilt box slightly to allow rain to run out entrance.
- Number front of each box.
- Install on creosoted pilings in water at least 30 feet from shore (50 feet if House Sparrows are in vicinity). Face all boxes in one direction.

Continued on next page

PURPLE MARTINS

West Coast Purple Martins need nest boxes

By Eric Horvath

Purple Martins on the West Coast have declined in the last century due to loss of nest snags and competition from European Starlings. Currently, that martin population is small, and appears to be limited by lack of available cavities.

On the West Coast, most folks lack the east-of-the-Rockies tradition of putting out houses and gourds for martins. Yet, without nestboxes, martins will not increase in locations

where starlings are common.

My success with martins on the central Oregon Coast began in the early 1990s when I began adding nest boxes to a few small Purple Martin colonies on Yaquina Bay. In 1993, less than 10 pairs nested on the bay. By adding nest boxes, this population increased to 50 pairs in 1999. That year, I put up 159 nest boxes at about a dozen colonies along the central Oregon Coast.

Since there are so few martins on

the West Coast, a good current strategy is to add nest boxes to existing colonies, unlike the situation east of the Rocky Mountains where martins are common, and people can attract them to backyards simply by putting up housing.

However, to avoid converting the entire West Coast population to artificial nesting, we should **only** put up nest boxes in areas overrun with starlings.

Since colonies in Oregon often are associated with water, a successful tactic is to add nestboxes to small colonies already present in pilings in estuaries, or in standing dead trees in reservoirs.

While breeding martins have been largely extirpated from their former range in southern California, there are small colonies that could use nest boxes from northern California to southern British Columbia. Coastal estuaries frequently have abandoned treated pilings which are ideal for martin nestboxes, and lowland reservoirs sometimes have Osprey nest poles or unrotten snags; those poles also are good mounting sites for boxes. Often, a boat is necessary to get to the pilings, and in estuaries one must go at high tide.

House Sparrow competition can be avoided by placing the nest boxes far (more than 100 yards) from shore. Care must be taken to exclude European Starlings by making the nestbox entrance a horizontal slot 1-1/4 inch by 2-3/4 inches (drawing, page 16).

(Eric Horvath leads birding and natural history trips for The Nature Conservancy. He can be contacted at P.O. Box 721, South Beach, OR 97366; e-mail horvath@pioneer.net.)

Oregon's Purple Martins

Continued from previous page

snags with no limbs or bark and rot invading the center of the tree. Martins most often occupied snags with substantial decay. The snags often had many old woodpecker holes.

"Mean distance from the snags to tall, live canopy trees was 634 feet (195 m). Martins selected snags which were isolated and/or apart from live canopy trees. This is likely an important factor in nest site selection.

"In one former (inactive) colony, martins reportedly had ~~been~~ nesting in a live green tree. This tree, however, had an emergent dead top which functionally resembled a snag.

"The snags used by martins often were far from water, with mean distance 2,700 yards (2,500 m) to open water." In later correspondence, Mr. Horvath added, "Most martins nested near water. This association is an interesting generalization about the population that reflects where the artificial housing is located, but it

holds true nevertheless.

His article added: "Also, the nesting colonies in snags tended to be at higher elevations than the general population. These locations often were remote areas in forested uplands that lacked European Starlings. Starlings appear to occupy most suitable cavities in lowland snags, competitively excluding martins from many potential and former areas. ... Purple Martins would likely have a much wider use of snags in Oregon without European Starling competition."

In addition to tree snags, martins were found in this study to be nesting in holes in pilings, under caps on pilings, "and in a miscellaneous collection of odd sites including a broken out streetlight, in pulleys at the top of a boom of a crane, in holes under a dock made of old railway cars, in holes under a concrete railway bridge, in crevices between beams on navigational markers, and in a horizontal metal pipe," according to the author.

PURPLE MARTINS

Purple Martins in eastern range also use natural cavities

Purple Martins use natural cavities for nesting in the eastern portion of their range, as well as the familiar multi-compartmented nesting boxes and other man-made accommodations. Records are few, however, and most information on such use is historic.

The birds will use cavities and crevices in rocks, trees, or cactus, including old woodpecker holes, according to Paul Baicich and Colin J. O. Harrison in their 1997 book *A Guide to the Nests, Eggs, and Nestlings of North American Birds*. The book says use of artificial sites is extensive.

Thomas Sadler Roberts, in his two-volume study *The Birds of Minnesota*, 1937, said martins will nest in "holes in trees, under piles of

boulders, about bridges, in openings in cornices of buildings," as well as in nesting boxes.

His citations date from the late 1800s to the first 30 years of the 20th century. He records martins using woodpecker holes and in the "clefts and crannies of cliffs." Most interesting is his account of an estimated 300 pairs of Purple Martins nesting in 1930 under the boulders of a small island in Lake Mille Lacs, a large central-Minnesota lake. An additional 50 pairs of martins were on another island nearby. The martins shared the islands with Common Terns, fighting them for territory.

Samuel D. Robbins Jr., in his book *Wisconsin Birdlife*, mentioned a 1942 report that estimated that Purple Martins in the southern part of the

state used man-made nesting structures 96 percent of the time. In the northern half of the state, the estimated use of man-made boxes was 60 percent. Rocky cliffs and holes in trees provided the other nesting sites.

Arthur Cleveland Bent also makes reference to use of woodpecker holes and other natural cavities "in remote sections of the country." This is found in *Life Histories of North American Flycatchers, Lark, Swallows, and Their Allies*, part of his series on North American birds.

PMCA works to reverse martins' decline

The Purple Martin Conservation Association (PMCA) was formed in 1987 to coordinate conservation, research, and education programs aimed at helping Purple Martins.

A species of swallow, Purple Martins tolerate man, have a pleasant gurgling voice and graceful flight, and eat nothing but flying insects. They were first attracted to human-supplied housing by native Americans, who put up dried gourds as nesting cavities.

Purple Martins are not as common as they were a century ago. The PMCA is working to reverse this trend. It conducts research at its colony site on the eastern shore of Edinboro Lake in Pennsylvania, where as many as 150 pairs of

martins nest each year.

Over 6,000 members receive its quarterly publication, *The Purple Martin Update*. Additionally, the PMCA is in touch with over 100,000 Purple Martin enthusiasts throughout North America.

By making accurate information on martins available to would-be landlords, designing better martin housing systems, and by conducting scientific research, the PMCA is working to increase the Purple Martin population through its North American breeding range.

For more information, contact the Purple Martin Conservation Association, Edinboro University of Pennsylvania, Edinboro, PA 16444.

Purple Martin range jumps the Rockies

Purple Martins are generally found east of a line running south from western North Dakota through western Texas, with an arm extending north across the middle of Canada's prairie provinces. There is another population area running down the West Coast, beginning barely inside British Columbia and ending before reaching Los Angeles. Martins also are found in some parts of Arizona and New Mexico and in small portions of Colorado and Utah.

1999 Nesting Box Report

By Conley C. Black

Two hundred and thirty-eight trail monitors submitted reports for the 1999 nesting season, a significant drop from the 440 received for 1998. As a result, bluebird fledglings reported for all three species decreased 37 percent to 81,065. Some of the large state affiliates did not submit reports, and this accounts for much of the decline.

Overall, 56,566 Eastern Bluebird fledglings were reported, along with 20,166 Mountain Bluebirds and 4,333 Western Bluebirds.

A total of 28 species of birds were reported to fledge young from one or more nest boxes.

Despite the decline in reports, the number of Carolina Chickadee fledglings almost equalled those of 1998 (1,399/1,431), and both White-breasted and Brown-headed nuthatch numbers were up.

There were significant declines in the numbers of Oak Titmouse (93 for 1999, 627 for 1998), Bewick's Wren (27/206), Ash-throated Flycatcher (35/575), American Kestrel (5/104), Wood Duck (60/1,659), and Purple Martin (155/690)

reported.

The total number of fledglings of all species reported for 1999 was 107,083, down from 174,282 in 1998.

Golf course trails are becoming increasingly popular, but one monitor attributed the death of several nestlings and adults at golfing sites to pesticide poisoning, and another

reported that a brood drowned when the irrigation system filled the nest cup with water. Monitors are requested to keep these dangers in mind, and to share remedies with other bluebirders.

Here are selected highlights.

NORTH

Hot weather in Ohio and Illinois might have reduced hatching rates, but did not appear to have caused much nestling mortality. House Wren competition is an increasingly serious problem in the north, with many monitors reporting bluebird eggs pecked or thrown out of nest boxes. The region produced 32,794 bluebirds and 3,024 House Wrens in.

The Indiana Bluebird Society fledged 3,483 bluebirds, up five percent from last year.

Bluebirds across Nebraska fledged 10,264 bluebirds from 4,581 boxes, an increase of almost 2,000 over 1998. Julie Milota of Papillion produced 390 bluebirds, 117 Tree Swallows, 25 House Wrens, and 14

Black-capped Chickadees from 192 boxes.

The New York State Bluebird Society reported totals of 5,109 bluebirds and 4,376 Tree Swallows fledged from 3,821 boxes.

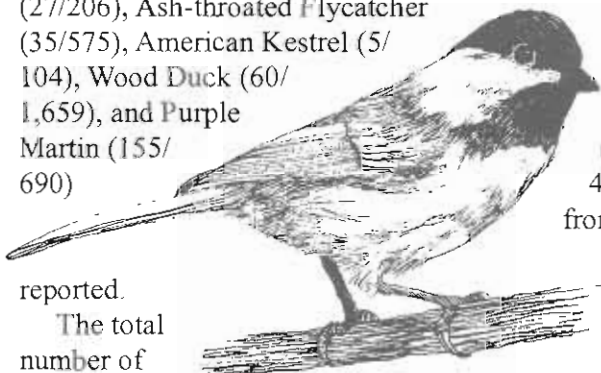
SOUTH

A spring freeze in the upper south killed some nestlings and eggs, particularly in North Carolina, and a drought caused problems in Kansas, Maryland and Virginia later in the season. Many of these monitors indicated that snake and racoon predation was at an all-time high, perhaps because prey

28 species used monitored boxes during 1999

These species of birds were reported as using monitored nest boxes during the 1999 breeding season.

Eastern Bluebird
Western Bluebird
Mountain Bluebird
Black-capped Chickadee
Caroline Chickadee
Mountain Chickadee
Chestnut-backed Chickadee
Tufted Titmouse
Oak Titmouse
White-breasted Nuthatch
Brown-headed Nuthatch
Tree Swallow
Violet-green Swallow
House Wren
Caroline Wren
Bewick's Wren
Great Crested Flycatcher
Ash-throated Flycatcher
Prothonotary Warbler
House Finch
Red-headed Woodpecker
Downy Woodpecker
Acorn Woodpecker
Yellow-shafted Flicker
American Kestrel
Wood Duck
Purple Martin
Eastern Screech-Owl



Continued on page 24

1999 Nesting Box Report

Continued from previous page

populations were diminished by the drought. Fire Ants are becoming a problem in some states. The region fledged 23,772 Eastern Bluebirds and 1,298 Carolina Chickadees.

The Belle Vista, Arkansas, Bluebird Society celebrated its 20th anniversary by producing 1,235 bluebirds. Lela Sandfort says the group has fledged almost 17,000 over the years.

The North Carolina Bluebird Society produced 5,282 bluebirds, a slight decrease from last year due to a spring freeze. Helen Munro reports that the Foxfire Garden Club fledged 323 bluebirds, 5 Tree Swallows, 11 Black-capped Chickadees, 17 Tufted Titmice, and 29 White-breasted Nuthatches.

WEST

A wet spring impacted production in British Columbia and Washington, and a Mother's Day snowstorm caused problems in Montana. Some California monitors reported losses due to a shortage of insects during critical nesting periods. The region fledged 24,499 bluebirds and 1,142 Violet-green Swallows in 1999.

Montana's Mountain Bluebird Trails produced 16,694 Mountain Bluebirds and 1,611 Western Bluebirds. The combined total of 18,304 is the second highest total in the organization's history.

FINAL REMARKS

This is my third and final Annual Nest Box Report. I've enjoyed my tenure as coordinator and must confess that picking up reports from the post office is like getting candy in the mail. I have come to recognize your names and will miss hearing

about your successes each year. I thank each of you for your help in compiling this important information.

NABS is embracing the Internet as a means of increasing efficiency and providing additional member services. Next year trail monitors will be asked to report electronically, as the first option, and submit paper reports to headquarters only if they are not wired into the Web. I encourage everyone to participate and make the system a success. Please remember that the continued existence of our beautiful feathered friend depends on you. Good bluebirding.

(Mr. Black can be reached by e-mail at clay.black@swfwmd.state.fl.us.)



Handy trail-monitoring equipment

Here is a short list of basic equipment to take with you as you monitor your bluebird trails. The first eight items on the list appeared in *Georgia Bluebirdline*, the newsletter of Bluebirds Over Georgia. Number 9 has been added.

1. Notebook and pencil.
2. Small mirror for peeking into nests.
3. Pliers, claw hammer, screwdrivers, galvanized nails, and screws for small repairs.

4. Whisk broom for cleaning out boxes (be careful not to breath the dust).

5. Putty knife for snatching wasps and their larvae.

6. Petroleum jelly (a thin coat inside the roof helps prevent wasps from affixing a nest there).

7. Disposable gloves.

8. Paper towels, baby wipes, and a plastic bag.

9. Bottle of water and bag of trail mix (for the monitor).

BLUEBIRDS AS 'HELPERS'

Birds feeding and caring for other birds well documented

By Marjorie J. Gibson

The sight of a male Eastern Bluebird carrying food brings a contented smile to the face of many people. We recognize this activity as a sign that plump, youngsters with spotted bellies soon will decorate the immediate area. Their parents will set a frantic pace, delivering grubs to the fledglings.

But wait! What is that bluebird doing? He landed not on the house you installed for his use, but in a shrub! Young bird voices are heard greeting him. Could it be that your bluebird has nested in a shrub?

You investigate. Something is wrong here; this is definitely the twig cup nest of a Northern Mockingbird, not a bluebird nest of any kind.

You gather yourself and your camera, and settle into a lawn chair to watch. The scene plays out repeatedly! Both the adult mockingbirds and the male bluebird appear to be feeding the mockingbird nestlings.

The bluebird tends his mate as well in the nearby nest box. The adult mockingbirds appear furious at first with intrusion of the bluebird, dive-bombing him, screaming their insults. The bluebird seems oblivious to their protest, and continues his mission.

Finally, the mockingbird couple accepts their colorful neighbor's presence and apparently his help. Even after the young mockers fledge, the male bluebird regularly is seen stuffing their cavernous mouths. Both species are apparently indifferent to the odd arrangement.

House Wrens have a reputation for causing consternation around bluebird houses. The tiny, but spirited wren is frequently cited as reason for

bluebird nest failure. Neat pinholes drilled into each bluebird egg are the wren's calling card.

Given the uneasy relationship between the two species, what must a male bluebird have been thinking when he was observed feeding House Wren nestlings while his own mate was incubating their own eggs? The parent wrens protested, but the bluebird was not to be thwarted until his own family hatched, redirecting his parental urges.

These events are not as rare as one might think. Interspecific helpers (birds that assist species different from their own) have been observed for many years, but are not widely discussed in the birding community.

Mountain Bluebirds and Western Bluebirds join the Eastern Bluebird on a long list of birds, including at least 130 species, confirmed to be helpers at nest sites of other species as well as their own. These birds are known as interspecific helpers.

breeding status. In the interest of simplicity, the following examples demonstrate intraspecific (same species) situations only.

Juvenile helpers are juvenile birds that help their own parents feed and raise a second brood of young. This is quite common in the avian world.

Yearling helpers, less common than the juvenile helper, is the yearling bird that may help its parents build a nest the year following its hatch. Bluebirds have been documented as returning to their parents' nest site after having raised youngsters of their own to assist with the raising of the parents' new brood. In one documented case, a yearling male brought food to the nestlings as frequently as the father.

Non-breeding adult helpers are adults that have lost their mate and/or chicks to predation or natural disaster. They may function as an auxiliary parent for an active nest near their own territory. This is usually the case

ON THE COVER

Adult bluebird feeding young phoebes illustrates the 'helper' behavior of birds

Intraspecific helpers (birds that help their own species) are easier to understand for casual human observers. Nature works by offering survival advantages to the helper as well as the beneficiary. Helping one's own species would seem to have more obvious and immediate benefit.

Both forms of auxiliary nest helpers are classified by age or

when documented evidence exists that confirms the death of one parent bird. It is possible for a non-breeding adult, sometimes called a floater, to show up post haste to finish the rearing task.

Breeding helpers are adults with territories adjacent that may feed fledglings, not their own, in response to food-call vocalizations of the

BLUEBIRDS AS 'HELPERS'

Birds feeding and caring for other birds well documented

young. This helper also can assist at nests in which an adult has been lost.

The idea of birds acting as helpers at nests with a mated pair of adults already in attendance was first brought to light by noted ornithologist Alexander Skutch. In 1935, he published a paper in the ornithological journal *The Auk* simply titled, "Helpers at the Nest." Three tropical species, Banded-backed Wrens, Bushtits, and Brown Jays, were observed by Skutch as helpers at the nest of another species.

Nearly three decades went by before the rest of the ornithological world began to discuss the idea of helpers at the nest. Some scientists saw the concept as an anthropomorphic treatment of a previously undocumented behavior. Skutch was a pioneer with this topic, ahead of his time in the field of behavior.

By the mid-1960s, major advances in both ecological understanding and genetics bolstered avian research. The term "auxiliary" was instituted, making the phenomenon more palatable to researchers who felt the term "helpers" too simplistic or an anthropomorphic description. Already entrenched in ornithological literature, however, the term "helper" has remained a mainstay, at least in casual reference.

As science continues to evolve, so does the study of behavior and social evolutionary theory. "Cooperative breeding" is the current term that includes the behaviors Skutch observed and described nearly seven decades ago.

So, how does one document adults feeding young other than their own? The earliest methods entailed putting

a bit of paint on a tail feather or wing primary to identify the bird. Scientists were limited only by their own creativity in capturing specimens, combining colors, and in their dedication to patient observation.

Present day marking bands are colored anodized aluminum. The permanent color allows families to be given a specific color. Birds can wear multiple bands due to the lightweight nature of the material. Alphanumeric codes when added to the color band allow for the most specific identification. Radio telemetry with micro-transmitters and lightweight battery

packs provides the most reliable current identification scheme.

Biologists and wildlife rehabilitators have made use of the concept of interspecific and intraspecific helpers by increasingly using auxiliary or foster parents over the past 20 years.

For biologists working with endangered species, auxiliary parents have been the key to solving difficult behavior problems associated with human-reared birds. Foster parents now raise chicks hatched from incubated eggs, and there is not the fear of the non-related adults causing injury to the chicks.

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'HELPERS'

Recently, a once-wild California Condor that had ceased to breed in captivity was released to act as a role model for young condors. The young birds hatched in captivity had never experienced the release area that was their ancestral home. It is hoped the experienced adult condor can help juveniles make better survival choices than they might make without a parent present.

Avian rehabilitators recently have been permitted by the United States Fish and Wildlife Service to hold non-releasable indigenous birds for use as foster parents for orphaned or injured chicks coming into rehabilitation centers. This concept has helped to reduce human imprinting of the young birds and to increase release rates. Avian centers now can leave the feeding and nurturing of the young to the foster adult. The birds raised by foster parents benefit as well. Armed with survival techniques and behaviors best taught by their own species, the birds' survival rate is greatly enhanced following release.

As we move to deeper understanding of birds, it is comforting to consider one last thought from behavior pioneer Alexander Skutch. He writes, "An endearing aspect in a world of conflict is the helping behavior of birds."

(Marjorie Gibson is founder and director of Raptor Education Group, Inc., Antigo, Wisconsin, a non-profit organization dedicated to avian research, rehabilitation and public education. She is president of the International Wildlife Rehabilitation Council. She serves as associate editor of the IWRC Wildlife Journal. She can be reached at N2160 W. Rollwood Road, Antigo, WI 54409; e-mail dgib@newnorth.net.)

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The North American Bluebird Society serves as a clearinghouse for ideas, research, management, and education on behalf of bluebirds and other native cavity-nesting species. NABS invites all state, provincial, and regional bluebird organizations to become NABS affiliates in "a confederation of equals all working together toward a common goal ... a partnership in international bluebird conservation." No cost is associated with affiliating with NABS.

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Calgary, Alberta T2J 2M9

Ellis Bird Farm, Ltd.
Box 5090, LaCombe, Alberta T4L 1W7

British Columbia

Southern Interior Bluebird Trail Society
P.O. Box 494, Oliver, BC V0H 1T0 Canada

Manitoba

The Friends of the Bluebirds
3011 Park Ave.
Brandon, Manitoba, Canada R7B 2K3

Ontario

Ontario Eastern Bluebird Society
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Kitchener, Ontario, Canada N2P 1K3

Arkansas

Bella Vista Bluebird Society
c/o Jim Janssen, president
27 Britten Circle, Bella Vista, AR 72714

California

California Bluebird Recovery Program
2021 Ptarmigan Drive, #1
Walnut Creek, CA 94595

Colorado

Colorado Bluebird Project, c/o Bob Wilson
2654 Serber Lane, Grand Junction, CO 81506

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Bluebirds Over Georgia
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Stone Mountain, GA 30087

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15 Cedar Rim Trail, Galena, IL 61036

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Senecaville, OH 43780

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The Virginia Bluebird Society
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Cascade Bluebird and Purple Martin Society
3015 Squalicum Parkway, Suite 250
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