Table of Contents

Summer Message to our Affiliate Organizations - Brian Swanson ................................................................. 1

From the President - Jonathan Ridgeway ............................................................................................................. 2

From the Grants/Awards Committee - Anne Sturm .......................................................................................... 4

From the Managing Editor - Scott W. Gillihan .................................................................................................... 5

Eastern Bluebird Feeds Frogs to Young - Stan Tekiela .................................................................................... 6

Eastern Bluebird with Skink - Carl Lively ........................................................................................................... 8

How Green is Bluebird? ........................................................................................................................................ 9

Portable Mealworm Feeders - Mary Roen ............................................................................................................ 11


Birds and Climate Change - Scott W. Gillihan .................................................................................................. 13

Differences in Behavior and Nests Between Bluebirds and other Small Cavity Nesters - Bet Zimmerman ...... 14

NABS Notices .................................................................................................................................................... 17

Blue Never Fades: The View from 1907 ............................................................................................................. 18

Easy-to-make Sparrow Spookers - Mary Roen ................................................................................................. 20

Donating Stocks to Promote and Preserve Bluebirds - Jonathan Ridgeway ................................................. 22

New/Revised Children’s Bluebird Activity Book Available - Bob Niebuhr ....................................................... 23

Research Review - Scott W. Gillihan .................................................................................................................. 24

Affiliates of the North American Bluebird Society .......................................................................................... 27

Cover photo: Pat Ready took this photo of a contemplative Western Bluebird near Sedona, AZ.
Summer Message to our Affiliate Organizations

As the nesting season winds down, do you have questions about what happened or is happening with your nestboxes? Try the NABS website, www.nabluebirdsociety.org, for answers. There is a great deal of interesting and useful information posted there. Just click on “Bluebird Facts” and see what a variety of well-written articles you can find.

I would also invite you to go to the website of our Montana Affiliate, www.mountainbluebirdtrails.com. The folks from Montana, with help from people across the United States and Canada, have put together a wonderful “Children’s Bluebird Activity Book”. You can either download the 52 pages or order the book at a very reasonable price. With a forward by Julie Zickefoose and input from many long-time NABS members, this represents a labor of love for the next generation of bluebird enthusiasts. [Ed. note: See the notice on page 23 of this issue for more information.]

By now, I hope you have made your plans to attend NABS 2009 in Harrisburg/Hershey Pennsylvania. While you are at the meeting take the opportunity to share what your Affiliate is doing and help support our annual meeting at the same time. With a donation of $250 to NABS your Affiliate becomes a “True Blue Sponsor”. This is a sponsor level that is open only to NABS Affiliates. At this sponsorship level, your Affiliate will have a display table in the vendor area at NABS 2009 where you can highlight the interesting and innovative things that you are doing. In addition, your Affiliate will be listed in each issue of Bluebird for a year.

See you in September in Pennsylvania.

Brian Swanson
NABS Vice President for Affiliate Relations
Greetings of peace.

During the mid 1990s I was taking some courses in sociology and other law enforcement related subjects at the New York City Police Academy. I remember a story told by my chief instructor, Sergeant Anthony Derenzo, which has remained with me ever since. He talked about a crime in progress at a location where a myriad of witnesses were watching, many with cell phones in their possession, yet no one called for an emergency response. He explained the phenomenon. Everyone had relied on somebody else to call it in. He said it is better for too many people to call, rather than if no one calls at all. Each of us in the class was asked to learn from the lesson and not leave such intervention for other people.

Volunteerism is much the same. Even when so many people see that something ought to be done, they expect somebody else to do it. If it were not so in our organization I might not be writing this same plea again. NABS sends out nearly two thousand copies of its journal to almost 2,500 members. In one issue after the next my messages have included a cry for help. We know people read what I write because we get plenty of comments saying we seem to be doing better and a few pointing out things we still do not do to the writers’ satisfaction. We may not agree with every criticism we receive but there are often useful and important improvements that are needed and it helps when they are brought to our attention. I cannot adequately articulate how much we appreciate it when people send a contribution with a note saying they like our new direction, but it makes me sad that it is so uncommon for people to write or call because they want to help us do more.

I tried to be clear when I wrote before, to be sure you understand that they are not all big jobs. Not all the tasks are like carrying stones, literally or figuratively. Most of the help we need only requires a little common sense and a belief that bluebirds and other native cavity nesting species are precious creatures which ought to be preserved. After that, everything else can be figured out. Some people want to lead while many others want to be led by someone who will help them be productive and accomplish worthwhile objectives they care about. Some want to find their own way. Each person is welcome to contribute valuable energy and ideas as long as they are willing to be part of a team and respectfully recognize the sensitivities of their peers. It is hard to imagine what a grand spirit of cooperation and friendship we share on our Board of Directors. I assure you it is not because we agree on every choice we make, but most of the time after a vote is taken and a matter is settled, everyone turns the page to the next issue, even those who did not get their own way on the one before.

Putting out a broad and general plea like this one is not as effective as choosing a desirable target candidate and asking them individually. I am unprepared to do that because I really do not know enough bluebirders from all around the continent whom I would be able to approach. One of our clearly defined goals is to seek Board representation from a variety of different geographical areas, activists who have familiarity with a diversity of climate and habitat conditions. At present our 18-member Board is comprised of residents of 12 states and one Canadian province but only two are west of the Rocky Mountains where Mountain or Western Bluebirds dwell. I have no reason to believe that people out west care less about conservation issues like preserving bluebirds since eleven of our 48 Affiliate organizations are from the west.

So here I am again, coming to you hat in hand, asking you, the person reading these words at this moment, not to try to think about it so carefully, but simply to raise your hand to say you are willing to help. I am asking for your active involvement just the same, regardless of where you live. You can always change your mind later if it does not meet your expectations or you find it places too much demand on your time. Please pick up the telephone and call me right now, especially if it is currently during daylight hours.

Most of the help we need only requires a little common sense and a belief that bluebirds and other native cavity nesting species are precious creatures which ought to be preserved.
on the Atlantic coast, and let me know that you are willing to do what you can to help the bluebirds and the society dedicated to fostering their survival. If the hour is later than that, I prefer you wait until tomorrow morning or send me an email and I will call you back.

While our guidelines suggest that the chair of each committee ought to be a member of the Board, members of the Board need not chair a committee unless they want more to do. Other than the chair, those who serve on committees do not have to be on the Board. Members of the Board participate in up to 12 conference calls each year and while regular attendance is desirable, there is no objection when scheduling conflicts or other reasons cause individuals to miss a call. Board members are also encouraged to attend our annual conventions and are compensated for some of the expenses they incur to do so. For people who might attend the conventions either way, it would lower their cost and give them a seat at the table, a voice in the choices we make.

A lot of our challenges have already realized progress yet there is still so much more to do. Probably one our most pressing needs is in the development of our committees, some more than others. Some of our committees have regular assignments and work to do month after month. Others are more advisory in nature and only have activities when issues are put to them for consideration. By comparison, our Website Committee accomplishes most of its production excellently by our magnificent volunteer webmaster, Jim McLochlin. We cannot thank him adequately for all he does and how responsive he is to our calls. The role of our Website Advisory Committee would be to decide what needs to be done in that area and chart a course of action. Some examples might relate to merchandising or marketing issues involving our online storefront or bringing a Members Only segment online so NABS members can update their contact information if they move, make automatic dues payments and take advantage of other member benefits recommended by the Advisory Committee. The Advisory Committee would consider a variety of website policy issues and would report to and interact with the Board, not the webmaster. This would be similar to the Journal Advisory Committee.

And while I am mentioning the journal I will repeat another thing I have mentioned on earlier occasions. It cannot be overstated how beneficial it is for our members to contribute materials for publication, whether they be in the form of articles, research papers, short stories, letters to the editor, or images. This is an excellent opportunity for academics to earn recognition for having material published in an international periodical. Such initiative may not fit into the ordinary category of what is thought of as volunteering but on-topic journal submissions definitely fall under an important heading of member participation and are just as welcome, no matter who offers them to us.

Since our journal began to be published with so many beautiful color photographs there have been a few complaints when pictures displayed nestboxes with potentially inappropriate design features such as insufficient roof overhang or mounting on trees. If asked to do so by the Board, the Journal Advisory Committee might recommend a policy about how to deal with the climate and or predator exposure conditions exhibited in photographs without interfering with the choices regarding which pictures might or might not be published. That is a decision we leave for the judgment of our most competent Managing Editor, Scott Gillihan, who has already proven himself to be extremely satisfactory.

Our Technical Advisory Committee, might be asked by the Board to consider recommending a policy about such complex issues as how do deal with control of introduced predators like non-native House Sparrows. Of course such matters are no less complicated, controversial, or emotional than capital punishment or freedom of choice vs. right to life so a lot of care would be necessary to develop a policy that would engender a consensus. Others examples might not be so difficult or dramatic.

It would be quite useful if our Photography Committee prepared a comprehensive inventory of all the images in our collection with release forms that indicate what rights we have to use each of them. This committee needs a new chair now, since the health of our great friend, Maynard Sumner, took a turn for the worse and he asked to be relieved of his responsibility. I wrote at length previously about also needing a chair for the Speakers Bureau and what that committee might need to do. Surely there are new committees we need too but we do not have enough people to design their purposes and carry out the functions.

So there is my pitch. I can hardly imagine why very many people would be reading this publication if they did not care very deeply about bluebirds. I sincerely believe that most people like to be a part of
a successful endeavor that is growing and fulfilling worthwhile goals which they consider important. As you know, NABS is a well recognized international nonprofit charitable enterprise striving to maintain a fine reputation as well as the good will and respect of conservation organizations, universities, the business community, and people throughout our nations because of our standards of excellence, our character, and the invaluable contribution we make to preserve bluebirds, other native cavity nesting birds, endangered species in general, and the environment of our planet. The few volunteers we have now, probably less than 1% of our membership, cannot satisfy the demands we face without more help. If you truly share our aspirations, please answer the call. There is no doubt that you will find it to be an extremely rewarding experience. Thank you.

Yours in peace, Jonathan Ridgeway
NABS President
845-883-7908
jonathanridgeway@aol.com

From the Grants/Awards Committee
Anne Sturm

Greetings from Anne Sturm and the rest of the Grants/Awards Committee, which includes Greg Beavers, Sherry Linn, Dan Sparks, David Smith, and Stan Fisher. We are writing to ask your help in submitting nominations for our annual awards which recognize individuals and groups who have made major contributions to bluebird conservation. It would be most helpful if you would visit the NABS web site (www.nabluebirdsociety.org) and click on the Awards 2008 link. There you will get a good idea of all the award classifications and what good deeds individuals and businesses have done to merit this special recognition. Then think about your own bluebird organization or fellow bluebird conservationists. If you feel there is someone you would like to nominate, just fill out the form and send it along by June 30th. Don’t worry if you miss this year’s deadline, as we look forward to recognizing outstanding bluebird work annually.

We also would like your help in spreading the word that NABS is awarding grants for worthy proposals studying bluebirds and other native cavity nesting birds. The next grant application deadline is December 1, 2009. We are receiving grant applications twice a year—June 1 and December 1. The grants are reviewed by the Grants Committee and awards are made by August 1 and February 1, respectively. Please encourage interested individuals to write me at annets1@aol.com.

Thanks you so much for your time and consideration.

Anne Sturm
Chair, Grants/Awards Committee
One significant benefit of editing *Bluebird* is the opportunity to learn from the readers—NABS members have a tremendous amount of knowledge regarding bluebirds and other cavity nesters, and they are generous in sharing that knowledge. No sooner had an earlier issue presented information (in the Research Review feature) showing that Brown-headed Cowbirds do not lay their eggs in nestboxes, when several readers sent information about cowbirds laying eggs in their nestboxes, complete with photographic documentation. Ditto for my casual statement that raccoons are not a problem in much of the Rocky Mountains—several readers in the Rockies sent information about raccoons devastating their nestboxes.

I hope that even more of you will share your knowledge by sending articles or ideas for articles. By sharing your tremendous wealth of experience and knowledge you help to make *Bluebird* a source of “best practices” for bluebirders. Keep those cards and letters (and e-mails) coming!
Every now and then I come across something in nature that really grabs my attention. I have been concentrating on photographing birds feeding their young while the chicks are still in the nest. I have spent countless hours waiting (covered in camouflage and hiding so as to not disturb the family and also to catch natural behavior) at several nests.

While working with one of my favorite species of bird, the Eastern Bluebird, I photographed something very unusual. For days I watched as both bluebird parents came to the nest cavity with all sorts of insects—crickets, katydids, caterpillars of many species of moth and butterfly, spiders, and much more. Each trip the parents stuffed the insects, large and small, into the gaping mouths of their hungry nestlings. Nothing too unusual here.

Then one afternoon I saw the adult male bring in something fairly large. I wasn’t able to see at first what it was. As the male bluebird entered the nest cavity I took a series of pictures and he departed to gather up more food. I didn’t think much of it. Just another mouthful of protein-rich, six-legged goodness I thought.

Shortly afterwards the male bluebird came in again carrying another large food item. Again he entered the nest box to feed his youngsters and again I took a series of 8 to 10 images. Off he went again in search of more food. By the way, a male bluebird does most of the feeding of their young. Females also feed their babies but only at a rate of about half that of the male.

I quickly removed the flash card from my camera and placed it into my computer to take a quick look at the images and make sure my focus was accurate and exposure was correct. To my astonishment there on my laptop screen was the male bluebird feeding an adult Western Chorus Frog (Pseudacris triseriata) to his babies. Not just once but twice in less than two hours.

As I sat there with my jaw hanging open, many things raced through my head. This means that the male bluebird had to first find the frogs. If you have ever tried to find Western Chorus Frogs deep in the grass you will know what I mean. They are small frogs that don’t move around a lot during the day and they blend into the surroundings so well that I have been within two feet of them and still couldn’t see them.

So after locating the frog the bluebird needed to catch it, another difficult prospect, and then dispatch it. Larger birds wouldn’t have much trouble killing a frog of this size but frankly the Eastern Bluebird is not well equipped for such a task. I have watched bluebirds kill caterpillars and large insects thousands of times. They simply whack the prey item against a branch until dead. Somehow, I had trouble imagining these sweet bluebirds beating the stuffing out of this frog, but apparently it did because here it was and the frog was not kicking.
My mind then jumped to wondering about how the baby bird’s digestive system was going to handle the bones of the frog. Most birds of prey such as hawks for instance are unable to digest bones of the animals they eat. They regurgitate the undigested bones several hours after eating. As far as I know regurgitating is not something that bluebirds do.

Later after returning to my office I did some research on line and in my expansive library of natural history books. The only documentation I could come up with was some reports of bluebirds feeding their young frogs and salamanders back in the 1940s. This would have been before the nationwide population decline of the Eastern Bluebird.

So this experience proves the point that just about the time I think I know something about Nature she throws me a curve ball. In this case it was a curve ball in a frog’s skin. And this is why I love being a naturalist and wildlife photographer. Until next time....

Stan Tekiela is an author / naturalist and wildlife photographer who travels the US to study and photograph wildlife. He is also the author of the book Captivating Bluebirds, Exceptional Images and Observations, 2008, by Adventure Publications. He can be contacted via his web page at www.naturesmart.com
I always take my camera with me when I check the box next to my house. On April 9, 2008, I saw that the female had something in her mouth, but I assumed it was an insect. The parents always fly from the trees down to the power wire going to my house when I check the box so they can keep an eye on what I am doing. I did not know it was a skink until I downloaded the picture to my computer. The tail of the lizard is broken off. I’m not sure if they tried to feed the lizard whole to one chick or broke it into pieces. Maybe they just ate it themselves.

The pictures were taken in Columbus, Georgia. The adults were raising five nestlings, the first brood of the season. All five fledged. The photo of nestlings was taken the same day as the other two photos—three days before fledging.

The same nestbox has had two successful nestings in 2009. Something unusual happened with the second nesting: two chicks fledged on 3 June, but the last three did not fledge until 8 June. This is also the first time I have had three nestings in one year. After the fledge I always clean out the box and leave the door open to air out. Since it was the second nest of the year and I have never had three, I was in no hurry so just left the door open for a few days. I also have a Peterson box that I built myself in my backyard. A pair of bluebirds are building a nest in that box as I am writing this. I will never know, but I believe it is the same pair from my front yard. When they came back for the third nesting they found the door wide open so they just moved to my backyard. I also suspect that they may have started to build the third nest before all the chicks from the front yard were fledged since the timing of the fledge was unusual. Or maybe I am wrong and this is a new pair. Again, I guess I will never know.

Carl Lively retired from the Army after 20 years and has been retired now for 20 years. When it comes to bluebirds, he considers himself an “amateur’s amateur” because he did not put his first box out until 2006. He has had a fascination with bird nests since childhood. His backyard now includes several boxes that every year house Carolina Chickadees, Carolina Wrens, and Brown-headed Nuthatches. He has been a member of NABS for several years.
How Green is Bluebird?

Given NABS’s role as a conservation organization, it only makes sense that we employ measures to reduce our impact on the earth wherever possible. This journal plays an important part in these efforts.

When the journal is sent from the Editor to the printer, it is sent electronically, via the printer’s FTP site. The printer checks all the text, photo, and other files for proper formatting, then creates a proof—a mock-up of the journal. But rather than printing a paper copy and sending it via overnight courier to the Editor, the printer e-mails what is called a “soft proof”, which is an electronic version of the journal just as it will appear when printed. This saves the paper, ink, fossil fuels, etc, that would have been used to print and ship the hard-copy to and from the Editor. (Your Editor, by the way, works from a home office, thus saving fossil fuels and eliminating the vehicle emissions that would have come from commuting to an office.)

Bluebird is printed on New Leaf Paper’s Reincarnation stock, which is 100% recycled content, 50% of which is post-consumer waste. The paper is processed without the use of chlorine, and using electricity that is offset with renewable energy certificates. The paper is certified by the Forest Stewardship Council (FSC), which ensures that the forestry operations have met a strict set of environmental criteria including biodiversity conservation and maintenance of high conservation value forests, among other things. You can find more information on the paper and the certification process at www.newleafpaper.com and www.fscus.org.

Our printer, Colorado Printing Company, is among the greenest in the industry. Roughly 98% of the paper they use is FSC certified; in fact, the entire company is certified by the FSC through the Rainforest Alliance’s SmartWood program. They recycle all of their waste paper in partnership with SCA, a global leader in paper recycling—the World Wildlife Fund has named SCA as the highest rated paper company for the past three years. In addition, Colorado Printing:

- uses vegetable-based inks;
- recycles aluminum plating materials, solvents, wooden pallets, and cardboard;
- has implemented measures to reduce or eliminate the use of inks and other chemicals;
- conserves electricity, water, fossil fuels, and other resources at their plant;
- has an in-house mailing facility to address, sort, and prepare materials for mailing, thereby saving the resources that would have been used to ship the materials to an off-site mailing house.

For more information, visit their website at www.coloradoprinting.com.
Please join us for this exciting event that will feature an array of noted speakers, inspiring field trips, live auction, vendors, and raffles including the BSP annual quilt raffle.

A sampling of educational offerings at the conference includes presentations and field trips showcasing important birding and wildlife conservation areas in Pennsylvania, such as Gettysburg National Military Park and Hawk Mountain Sanctuary.

Nationally-recognized birders Clay and Pat Sutton will present "How to Spot Hawks and Eagles, Raptors in Time and Space," based on their book of the same name. Dick Tuttle will present "The Beaver Hypothesis," which entices bluebird enthusiasts back in time to America before European settlement to examine the connection between beavers, bluebirds, and tree swallows. Award-winning author Jane Kirkland will give her keynote presentation which will invigorate your enthusiasm for getting outdoors and connecting with nature.

**ONE-DAY REGISTRATION $40**

**FULL CONFERENCE: $60**

Plus the optional meals and tours

Advance Registration is required

Deadline for registration, tour and hotel reservations: July 18, 2009

Complete conference schedule & registration forms are available in the Winter 2008-09 issue of Bluebird or online at: [www.thebsp.org](http://www.thebsp.org) or [www.nabluebirdsociety.org](http://www.nabluebirdsociety.org)
Portable Mealworm Feeders
Mary Roen

Have you ever experienced days of cold, wet weather when your bluebirds were incubating eggs or brooding newly hatched chicks, and you wished you could put up a quick mealworm feeder to help them through the bad weather? This has often happened to me in western Wisconsin. We have had cold spells in late April or early May that have killed embryos and young chicks from hypothermia, when the parent bluebirds were out trying to find food in pouring rain, leaving the eggs and chicks vulnerable to the cold. I have too many boxes to help out all the bluebirds, but I have made portable mealworm feeders that I can place near nestboxes that are on our property.

All you need is a wooden garden stake, which you can find at most garden or hardware stores (mine are 48 inches), any small plastic container (I often use the small sour cream or cream cheese containers), one wood screw and washer, a rubber mallet, and a screwdriver. I use a cordless electric one.

I poke holes in the bottom of the container, around the edge, for drainage (I use a large nail), then one in the center to fasten it to the stake with a screw. You may want to drill the holes, since in some containers, the plastic may crack when punctured with a nail or screw. I pound the stake into the ground with the rubber mallet to keep from damaging the top of the stake, then screw the container to the top of the stake.

These mealworm feeders can be pulled up and moved at any time. I place them near the nestbox, but not too close, to avoid attracting other competitors or predators to the nestbox. It hasn’t taken my bluebirds long to find this banquet and they readily eat from the feeder and take the mealworms to their chicks. It makes me feel good to know that in this small way, I may be helping the survival of more of my beloved bluebirds.

Mary Roen lives in rural Wisconsin where she monitors 64 nestboxes. She is a member of NABS, the Bluebird Restoration Association of Wisconsin, and the Bluebird Recovery Program of Minnesota, and she recently helped start a new organization, the Saint Croix Valley Bird Club. She is a frequent contributor to Bluebird.
Scott W. Gillihan

In March of this year, the U.S. Department of the Interior released the first-ever comprehensive report on the status of bird populations in the U.S. The report, a collaborative effort of federal and state agencies and nonprofit organizations, documented that almost one-third of all bird species in the country are endangered, threatened, or declining significantly.

The report is based on data that scientists synthesized from the Breeding Bird Survey, Christmas Bird Count, and the lesser-known Waterfowl Breeding Population and Habitat Survey. The first two surveys rely heavily on data provided by dedicated amateurs, often called “citizen scientists.”

The situation is most critical on the Hawaiian Islands. There, nearly all native bird species are in danger of disappearing if conservation actions are not implemented. The threats to these native populations are all-too familiar: introduced non-native species (bird and otherwise) and habitat loss. Since humans first colonized the islands, 71 bird species have gone extinct and another 10 have not been seen in decades. The cavity nesting Akepa is listed as federally endangered, which means it is in significant danger of going extinct.

Bird populations in other areas are in trouble, too. Of significant concern are oceans, shores, and prairies—seabirds, coastal shorebirds, and grassland birds have all declined.

Although none of the three species of bluebird is mentioned in the report (presumably, their populations are doing well enough to warrant leaving them out), other cavity nesting species are mentioned. Elf Owl and Gilded Flicker, birds of the desert Southwest, are listed as species of conservation concern. Birds of eastern forests have shown steadily declining populations—overall, their populations have dropped by 25% since 1968. Eastern species of conservation concern include Red-cockaded Woodpecker (federally endangered), Ivory-billed Woodpecker (endangered and possibly extinct), and Brown-headed Nuthatch.

Western forest birds appear to have fared better, with only a slight decline since 1968. However, adequate data are not available for 40% of the species that live only in western forests. Cavity nesting species known to be in trouble include Northern and Mexican Spotted Owls (both listed as federally threatened), Lewis’s Woodpecker, Oak Titmouse, and Chestnut-backed Chickadee.

All is not gloomy, however. The report highlights the recovery of some bird populations when habitat is restored or other conservation actions are taken. Waterfowl and wetland birds have responded quickly and strongly to such efforts. (Although not included in this report, the recovery of bluebird populations in response to widespread installation of nestboxes would be another example.)

The value of the volunteer contributions cannot be denied: without them, long-term bird population data would not be available, so thorough population trend analyses would not be possible, and effective conservation strategies could not be developed. Clearly, volunteers have played a major role in conserving birds in the U.S. The report’s authors recognize this critical role and give a special thanks to volunteers: “Our understanding of the long-term health of birds depends largely on the thousands of bird watchers and biologists who volunteer each year for the Breeding Bird Survey, Christmas Bird Count, or many other monitoring programs. The dedication and skill of these citizen scientists reflects their love of birds and the natural world, as well as their concern for the health of habitats and our environment. Without the continued involvement of this army of volunteer observers, this and any future State of the Birds reports would simply not be possible.”

The complete report and information on how to volunteer to collect bird population data are available online at www.stateofthebirds.org
Questions about climate change are batted about with growing frequency in the press, radio talk shows, blogs, etc. Are humans contributing? Is it part of the natural variation of global climate? What are the consequences? Is it really even occurring?

The National Audubon Society opted to explore the question of global climate change and one of its potential consequences: Changes in wintering bird distributions. Audubon’s quantitative analysis of 40 years of Christmas Bird Count data was a response to the many casual observations of amateur bird watchers, who had noticed that some species were overwintering farther north than they had in the past.

The report comprises two parts: A general summary, which was released for use by the general public and policy-makers, and a technical report, which includes the math and methods for analyzing the data, along with a table of results for the 305 species Audubon analyzed.

Their overall finding: Birds in North America are clearly moving north. Nearly 60% of the 305 species they examined had shifted north—more than 60 had moved their winter center of abundance more than 100 miles, and some had moved it more than 400 miles.

During that same 40-year period, the average January temperature across the Lower 48 states increased about 4.5°F. This may not sound like much, but to a bird, it’s a significant change. The report’s authors say, “We’re seeing compelling signs that climate change has been with us and having serious biological consequences for the past 40 years. Little else could explain this kind of spectacular movement across such a wide range of birds.”

Of course, what is of interest to Bluebird’s readers is what changes, if any, have occurred among the three species of bluebird and the other cavity nesters. The Western Bluebird did not shift its winter range at all, the Mountain Bluebird actually shifted south 71 miles, while the Eastern Bluebird shifted north 115 miles. (About 1/4 of the species analyzed shifted to the south; the report’s authors suggest that these shifts were due to changes in the species’ total population count, habitat changes, or other factors.)

Changes in the winter center of abundance of some other cavity nesting species analyzed by Audubon:

- American Kestrel 55 miles N
- Northern Pygmy-Owl 164 miles N
- Northern Saw-whet Owl 168 miles N
- Lewis’s Woodpecker 231 miles S
- Red-headed Woodpecker 170 miles S
- Red-bellied Woodpecker 60 miles N
- Williamson’s Sapsucker 51 miles N
- Downy Woodpecker 29 miles N
- Hairy Woodpecker 135 miles N
- Red-cockaded Woodpecker 78 miles N
- Am. Three-toed Woodpecker 203 miles N
- Northern Flicker 193 miles N
- Pileated Woodpecker 125 miles N
- Tree Swallow 59 miles N
- Carolina Chickadee 14 miles S
- Black-capped Chickadee 90 miles N
- Red-breasted Nuthatch 244 miles N
- White-breasted Nuthatch 17 miles S
- Pygmy Nuthatch 266 miles N
- Carolina Wren 57 miles N
- House Wren 34 miles N
- European Starling 86 miles N
- House Sparrow 77 miles N

The report spells out solutions for addressing climate change, and the consequences to bird populations if we fail to act. The full report is available to download at www.audubon.org/bird/bacc/index.html.
# Differences in Behavior and Nests Between Bluebirds and other Small Cavity Nesters

Bet Zimmerman

| Bluebirds | • Very tolerant of monitoring  
• Female builds nest and incubates  
• Nest does not have layers (e.g., like chickadee)  
• Both parents remove fecal sacs right up to fledging (unless widowed/too busy)  
• Male often perches on box  
• Incubation may begin on last or next to last egg |
|---|---|
| Ash-throated Flycatcher | • Nest gets filthy  
• Adult may “explode” out of the nestbox when monitor approaches |
| Carolina Wren | • Often nests in weird places, not often in a box  
• May use snakeskin in nest  
• Male may build dummy nests |
| Black-capped Chickadee | • Very secretive during nestbuilding and egg laying—do not perch on box roof  
• Pull a “blanket” of fur/hair over eggs when leaving nests  
• Eggs are very fragile  
• Have a hard time defending nest  
• Unlikely to return to the site of a failed nesting  
• Can excavate their own nest cavity  
• May prefer nestboxes with some sawdust/wood chips in the bottom that they can then “excavate”  
• Generally only have one brood, often laying 6-8 eggs  
• Do not migrate |
| Carolina Chickadee | • Can excavate their own nest cavity  
• May start excavation or nestbuilding in several locations before choosing one  
• Do not seem to prefer boxes with sawdust in them (which they can “excavate”)  
• Pull a “blanket” of fur/hair over eggs when leaving nests |
| Downy Woodpecker | • Not known to use nestboxes for nesting, but will roost in a box  
• Excavate a new cavity for each nest  
• Both male and female develop a brood patch, both incubate, only males incubate at night  
• Males are primarily responsible for removing fecal sacs. Nestlings may only defecate after being fed 3-4 times.  
• Incubation time is short (12 days), but they don’t fledge for 20-25 days after hatching |
| European Starling | • Uses green vegetation in nest  
• Can build nest in 1-3 days  
• Fecal sacs pile up, fouling nest  
• Incubation begins with the next or next to last (penultimate) egg  
• Both sexes develop an incubation patch  
• 15-33% of nests are parasitized by other starlings |
| Great Crested Flycatcher | • Very secretive during nesting  
• May prefer nest sites very high up (up to 70 ft. off ground)  
• Both male and female build nest  
• May use snakeskin in nest  
• Female may hiss and strike (snake-like) when the nestbox is opened during incubation  
• Tend to nest in same site every year  
• One brood per year  
• After fledging, young may only stay in area 3-4 days |
<table>
<thead>
<tr>
<th>Animal</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>House Finch</strong></td>
<td>• Fecal sacs accumulate on rim of nest</td>
</tr>
<tr>
<td></td>
<td>• Do not migrate?</td>
</tr>
<tr>
<td><strong>House Sparrow</strong></td>
<td>• Can build a (bulky) nest very quickly (a couple of days)</td>
</tr>
<tr>
<td></td>
<td>• Tend to use trash (cigarette butts etc.) and many feathers in nest cup</td>
</tr>
<tr>
<td></td>
<td>• Nests very close to others of its species</td>
</tr>
<tr>
<td></td>
<td>• Do not tolerate sparrow spooker, avoid boxes with fishing line on them, may not prefer Gilberston nestbox</td>
</tr>
<tr>
<td></td>
<td>• Male also incubates</td>
</tr>
<tr>
<td></td>
<td>• Do not migrate</td>
</tr>
<tr>
<td></td>
<td>• Frequently attack nests (eggs, young adults) of other species</td>
</tr>
<tr>
<td><strong>House Wren</strong></td>
<td>• Male builds dummy nests</td>
</tr>
<tr>
<td></td>
<td>• Entirely removes prior nests and nests of other birds</td>
</tr>
<tr>
<td></td>
<td>• Frequently remove nests, eggs and very young nestlings from nests of other species</td>
</tr>
<tr>
<td><strong>Nuthatch</strong></td>
<td>• Seem to prefer a box under/on a tree</td>
</tr>
<tr>
<td></td>
<td>• May prefer a box with a chalet roof?</td>
</tr>
<tr>
<td></td>
<td>• May remain in box (up near roof) even after tapping/calling during monitoring</td>
</tr>
<tr>
<td></td>
<td>• During laying may cover eggs with feathers/fur</td>
</tr>
<tr>
<td></td>
<td>• Lay 5-10 eggs (typically 7-8)</td>
</tr>
<tr>
<td></td>
<td>• Pygmy Nuthatch may use snakeskin in nest</td>
</tr>
<tr>
<td></td>
<td>• White-breasted Nuthatch nestlings do not fledge until up to 24 days</td>
</tr>
<tr>
<td></td>
<td>• Do not migrate?</td>
</tr>
<tr>
<td><strong>Prothonotary Warbler</strong></td>
<td>• May nest in weird locations, generally over or near running water</td>
</tr>
<tr>
<td></td>
<td>• May be sensitive to human disturbance around the nest site</td>
</tr>
<tr>
<td></td>
<td>• Young can swim</td>
</tr>
<tr>
<td><strong>Titmouse</strong></td>
<td>• Seem to prefer a box mounted on a tree or under tree canopy</td>
</tr>
<tr>
<td></td>
<td>• Secretive during nestbuilding and egg laying—do not perch on box</td>
</tr>
<tr>
<td></td>
<td>• May use snakeskin in nest</td>
</tr>
<tr>
<td></td>
<td>• May hiss like a snake and strike wall during monitoring</td>
</tr>
<tr>
<td></td>
<td>• May abandon nest if disturbed, especially during construction</td>
</tr>
<tr>
<td></td>
<td>• Juniper Titmouse young tumble to ground when fledging, fledge all at once</td>
</tr>
<tr>
<td></td>
<td>• Do not migrate?</td>
</tr>
<tr>
<td></td>
<td>• Fewer blowflies?</td>
</tr>
<tr>
<td><strong>Tree Swallow</strong></td>
<td>• Will nest within 25 ft. of another pair of Tree Swallows (colonial)</td>
</tr>
<tr>
<td></td>
<td>• Take a very long time (2-4 weeks) to build a nest, with lots of (typically white) feathers recurved over eggs, feathers may introduce lots of mites into nest</td>
</tr>
<tr>
<td></td>
<td>• Egg laying often in synch (within 7-10 days) with neighboring Tree Swallows</td>
</tr>
<tr>
<td></td>
<td>• Usually only have one brood</td>
</tr>
<tr>
<td></td>
<td>• Stop removing fecal sacs about a week before fledging so nest gets filthy</td>
</tr>
<tr>
<td></td>
<td>• Tend to dive bomb monitors more</td>
</tr>
<tr>
<td></td>
<td>• Adults may refuse to budge when nestbox is monitored</td>
</tr>
<tr>
<td></td>
<td>• Often have head poking out of hole during incubation and brooding</td>
</tr>
<tr>
<td></td>
<td>• Older young may “hog” the hole to get more food</td>
</tr>
<tr>
<td></td>
<td>• Usually stay in box 18-22 days</td>
</tr>
<tr>
<td></td>
<td>• Young can feed themselves as soon as they fledge</td>
</tr>
<tr>
<td></td>
<td>• Young may occasionally go back in box to be fed by own parents/others</td>
</tr>
<tr>
<td><strong>Violet-green Swallow</strong></td>
<td>• May nest in colonies of up to 25 pairs</td>
</tr>
<tr>
<td></td>
<td>• Eggs may hatch over 2-5 days</td>
</tr>
<tr>
<td></td>
<td>• Young dependent on parents after leaving nest for unknown period</td>
</tr>
<tr>
<td></td>
<td>• Parents stop removing fecal sacs after eyes open</td>
</tr>
<tr>
<td></td>
<td>• Fledging may occur over a period of days, young may return to the nest over the next few days?</td>
</tr>
</tbody>
</table>

Bet Zimmerman maintains the very popular bluebird website www.sialis.com, from which this table is modified. She is a life member of NABS and a member of its Board of Directors.
“Feeding live insects to the wild birds in my yard has helped me build a special bond with individual birds.”

–Julie Zickefoose
Notice of Election at NABS Annual Meeting - September 12, 2009

The NABS Nominating Committee has nominated the following names and with the approval of the Board, this slate is hereby duly presented as the regular ticket.

**President**  
Jonathan Ridgeway

**First Vice President for Affiliate Relations**  
Brian Swanson

**Second Vice President for Community Relations**  
Sherry Linn

**Treasurer**  
Greg Beavers

**Secretary**  
Lynne Ridgeway

**Directors**  
Bob Benson  
Phil Berry  
Barbara Chambers  
Tom Comfort  
Bernie Daniel  
Walter Mugdan  
Terry Neumyer  
John Schuster  
Dan Sparks  
Anne Sturm  
Bet Zimmerman

For procedural reasons this list includes the names of all Board Members who are seeking to continue their service, regardless of whether or not their terms may be expired.

Article VIII, paragraph 3 of the current adopted NABS Bylaws specifies that, in addition to candidates selected by the nominating committee, names may also be submitted for the ballot by letter to the nominating committee at least 90 days in advance of the election and consent of the nominee must have been previously obtained. According to this specification, the deadline for nominations to be received this year was June 14 (this was announced in the Message “From the President” in the Spring 2009 issue).

If you do not plan to attend the 2009 NABS Annual Meeting in Pennsylvania and want to exercise your right to vote in the election, hand written, typed or printed absentee ballot may be submitted naming the candidates you care to vote for, or if you prefer, you can simply say you vote for the whole slate. Your absentee ballot should be posted by the beginning of August to be sure they are received in time for the election.

Notice of Proposed Bylaws Revisions

Article XIII - Amendments, paragraph 1 specifies that, “The Constitution and Bylaws of the Society may be amended at any annual meeting by two thirds (2/3) vote of the members present.” Paragraph 2 specifies “Any member of the Society may propose amendments to the Constitution and Bylaws of the Society. Proposed amendments shall be submitted to the President accompanied by an explanation for requesting the change(s).” Pursuant to these specifications, the members of the NABS Bylaws Committee and the Board of Directors as members of the Society are proposing to repeal all previously adopted Constitution and Bylaws, including all amendments and appendices thereto and any other authorizing documents which may exist, and to adopt a new set of Bylaws to supercede them and constitute the only valid NABS authorizing documents.

More details about this proposal may be found in the message “From the President” in the Spring issue.
Blue Never Fades: The View from 1907

[Editor’s note: This essay by William L. Finley originally appeared as “Two Studies in Blue” in the Sept-Oct 1907 issue of The Condor, published by the Cooper Ornithological Society. Mr. Finley’s enthusiasm and his love of bluebirds is obvious, even after 102 years. A section on the Steller’s Jay and Western Scrub-Jay appeared after the opening paragraph, but is not included here; the original quirky spelling of some words is retained. The “bluebird” referred to by Mr. Finley, who was writing from Portland, Oregon, is the Western Bluebird.]

Blue is not a common color among our birds. There are many more clad in neutral tints of brown and gray than in bright blue. But a list of birds could not be complete without our two commonest studies in blue, the bluebird and the blue jay. In all our woods from the Atlantic to the Pacific, one may find these two, one gentle and friendly, the other bold, boisterous and untrustful.

Throughout the East the bluebird is known as the forerunner of spring. The bluebirds are the first to return and they bring the spring with them. But in the West where the winters are not so cold, a few always stay the year around. They fly together in small flocks during the day and sleep together at night. One evening I saw four huddled in one of my bird-boxes. During the hard days of rain and snow they were continually together and returned at night to stay in the box. I think they were partly drawn to return each day by the food I put out. When I first saw them in the back yard, I tossed a worm out of the window and it had hardly struck the ground when it was snapped up. They ate half a cupful of worms.

The bluebird, the wren and swallow have taken remarkably to civilization. They formerly built in holes in old trees in the midst of the woods, but now they prefer a house in the back yard. In one locality near my home we used to find the bluebirds nesting every year in some old stumps. Now several residences have been built nearby and in three of the yards there are bird-boxes, and the bluebirds have abandoned the stumps and taken to modern homes. A bluebird has better protection in a back yard and he knows it. Then if the owners like him, he grows fond enough of them to perch on the hand, and he pays rent in the quality of his song and by ridding trees of harmful worms.

Altho the bluebird often lives about the city, I associate him with country life. I imagine he likes a farm home better than a city flat. I have a friend in the country who has bird-boxes up in various places about his farm. Most of them find occupants every year. An old square box that is set in the crotch of an apple tree is ahead in the record. The box was put up in the spring of 1897 and was taken by a pair of bluebirds. It is only four feet from the ground and has a removable top so that the owner may readily make friends with the tenants. When I opened the box and looked in, the mother sat quietly on her eggs and was tame enough to allow us to stroke her feathers.

The box is now covered with moss and lichens, but it is famous in bluebird history. It has been occupied every year since it was put up, and not a single year has there been less than two broods reared and several times three. The record year was in 1904 when the bluebirds had two families of seven and one of five birds, and succeeded in raising them all. Seven is a large family for bluebirds and it is more remarkable that there should have been seven in the second brood and then a third brood. In the eight years there have been over one hundred and ten young bluebirds hatched in this box in the apple tree. One would think the bird world would soon be overcrowded with bluebirds about the farm. There seem to be no more bluebirds there than eight years ago, altho there are generally two or three other broods raised in other boxes nearby. It all goes to show how the bird population decreases in numbers. The new birds of each year take the place of the numbers that die during the winter. Birds have so many enemies that we know not of. Many die of disease, many starve or die of cold, and many are killed by birds of prey and animals that hunt small birds.

It would be interesting to know whether the same pair returns each year to the box in the tree, or how many different pairs have lived there. Sometimes the same pair have returned, but it is improbable that

Bluebird
they have lived longer than three or four years. If one of the birds died, the other may have taken another mate and returned to the same home.

In the side of our tank-house we bored two holes about four feet apart and nailed up boxes on the inside. One of these was soon taken by a bluebird. The female went in and looked the box thru and in a moment came out and perched on the wire while the male took a look. The next day the female began carrying straws. She had a devoted husband, but he was merely an attendant when it came to work. He watched and applauded, but he didn’t know whether his wife wanted him bothering while she was building to suit herself. It looked to me as if he were ornamental without being useful. But after watching awhile, it seemed that it was her duty to build and his to watch and encourage. When she carried in the material and fixed it, she popped out of the hole and waited while he went in to look, and then out he would come with words of praise and away they would fly together.

I had a splendid arrangement to watch the builders at close quarters. I could go in the tank-house and close the door and then in the darkness I could look thru a crack in the box, and with my eyes less than a foot away, could watch every movement the birds made. While the mother was sitting on the eggs, she became very tame and we often reached in and stroked her feathers.

When the young birds came, I watched the mother come to feed and brood her young. The father was the ever-watchful admirer, but the mother was all business and paid no attention to him except to knock him out of the way when he was too devoted. The mother always brought in the food, and the father kept staying more and more until the young birds were grown.

One day while I was watching, the mother was feeding the youngsters on maggots almost entirely. She would be gone quite a while, but each time would return with a large moutful which she fed to the young. Occasionally one of the young failed to get all of them and if one dropped, the mother picked it up and ate it herself.

One of the eggs was addled and did not hatch, but the mother was very fond of it. She would look at it almost every time she returned and would turn it over and then hover it a few moments as if she were sure it contained a baby bird.

The nest was lined with horsehair and once when the mother fed one of the chicks, the food caught and the little bird swallowed the hair too, but both ends stuck out of his mouth. He kept shaking his head, but could not get rid of it. I waited to see if the mother would assist him, but she didn’t seem to notice his trouble, so I had to reach in and dislodge the hair. Otherwise I am afraid it would have fared hard with the chick.

These bluebirds had five young in their first brood. When the first youngsters left the nest, the father became more attentive and helped care for the little ones that were just starting out in the world. They all stayed about the yard till the young knew how to hunt for themselves. Finally three of them disappeared; I suppose they went off with the other bluebirds, and two of the young still stayed with us. The parents themselves seemed to disappear for a few days and I thought they had left for good. Then one morning I saw the mother enter the house again and the father was there too, perched on the wire. He was more attentive then formerly. The next day I found a fresh egg in the nest. They had returned to raise a new family.

There were only three eggs in the second setting, and all hatched. The two young birds of the first brood followed the father about while the mother was sitting. Then when the mother began feeding her second family, I made some interesting observations. Her older children began following her about to hunt food, and to my surprise, I saw one of them bring some worms and after the mother fed, the young bluebird went into the box and fed her small brothers and sisters. After that I watched closely and often saw the birds of the first brood feed the little ones of the second brood. Perhaps the two birds of the first brood were girls and took readily to housework. They may have been learning for the next season when they themselves expected to have homes.

One of the young birds was very enthusiastic in helping her mother. Several times when the latter brought food, the young bird flew at her and tried to take the morsel she had in her mouth, as if saying: “Let me feed the children.” And twice I saw the mother yield and let her older child feed the younger ones. It was a very pretty bit of bird life to watch these bluebirds. We were anxious to get a photograph of the mother and the young bird helping her. We tried by getting on top of the house and focusing the camera on the wire where the birds often alighted. We finally got one view of the two as the young bird was just in the act of jumping for the worm the mother held.
Bluebird has printed articles about “sparrow spookers” to deter House Sparrows from destroying bluebird eggs and/or killing nestlings or parent bluebirds. In the past I have not had a reason to try them, as I have not had problems with House Sparrows, until last year. I have one pair of nestboxes in the yard at church that has had many successful nestings of bluebirds. Last year, House Sparrows found it and destroyed a nest of eggs. It is not close enough to home to monitor it daily. This year, I am going to try a “sparrow spooker” before I give up and remove the nestboxes, and had to figure out how to make one.

**Step 1**

First, I sawed a ¾ inch PVC pipe into 14-inch lengths. I drilled two holes through one side of an end with a ½ inch drill bit, having them off center each way. I then sawed two 10-inch lengths of 3/8 inch plastic pipe and drilled three holes through each length with a 3/16 inch drill bit, close to one end and 3 and 6 inches away from the first hole.

**Step 2**

I pushed the smaller “arms” into the holes of the PVC pipe and glued them with a heavy-duty glue, so that the holes of the arms are vertical.

**Step 3**

I cut strips from a mylar foil “Happy Birthday” banner, 1 inch wide and 13 inches long.
After allowing the glue in the pipes to dry overnight, I threaded one end of the foil strips through the holes in the plastic arms, and tied a knot in the end.

To fasten the spooker to the nest box, I used a ¾ inch, two-hole EMT strap. This can be attached to the back of the nest box with screws, being careful not to shake the box, and damage the egg.

The materials cost about $2 per spooker. A great resource for more information on spookers is Bet Zimmerman’s website: www.sialis.org/sparrowspooker.htm

I will wait until one bluebird egg is laid before placing the spooker on the nest box, to be sure the bluebirds have bonded to the nest. I will remove it as soon as the nestlings fledge, so the House Sparrows don’t get used to it, causing it to lose its effectiveness. If I can do this project, it is easy enough for anyone to do!
Donating Stocks to Promote and Preserve Bluebirds

Jonathan Ridgeway

The first and most important thing you need to understand before you read this article is that I am not a tax professional. While the information I am sharing with you here is certainly offered in good faith, I truly encourage anyone who cares to help NABS with this program to speak to their own professional tax advisor to be assured that they understand the actual ramifications.

Now about the Program
Given the recent downturn in the market you may have some stocks worth far less than you originally paid for them but their value would still be very high when it comes to helping the North American Bluebird Society. By donating such securities to NABS you may be able to claim a charitable deduction for the gift and take another tax write-off for the amount you lost. For example, if you donate stock that cost $1,000 and it is now worth $550, you can claim a charitable deduction for the $550 gift and write off the $450 you lost, together the full amount you paid for the investment.

What if you bought stocks, bonds, or mutual funds a long time ago and they increased in value? If you sell them for a profit you have to pay Federal income tax on the gain but there is a very significant tax rule that can save you a lot of money and provide an excellent benefit to NABS. If you bought the securities, a year ago or more, their value increased and you give them to NABS which is a 501(c)(3) tax exempt organization, you will not have to pay tax on the gain, plus you can deduct the full market value from your taxes as itemized charitable contributions.

Contribute Stock and Become a NABS Life Member
This example focuses specifically on NABS Life Membership at the current rate of $500 plus a $50 transaction fee. If you bought stocks over a year ago and their current value is at least $550, you could donate them to NABS and not pay any tax on the gain. Say you bought stock for as little as $50. If you were in a 25% bracket, you would not pay the $125 tax on your $500 earnings, plus you would save another $137.50 for your charitable contribution. You can deduct the full appreciated value of the stock from your gross income so it is a double win for you as our benefactor and a great win for NABS and the bluebirds because the money goes directly into our Zeleny Endowment Fund where it can do the most good.

Normally when you sell stocks you pay broker’s fees based on the number of shares, the total value of the transaction, plus a premium if the lots being sold are less than 100 shares of each company’s issue. NABS has negotiated a very favorable arrangement with a particular trader who has agreed to sell small odd lots, regardless of the number of shares, for a fixed rate of $50 per transaction. That is why the total stock value needs to be at least $550 to meet the value of the Life Membership, $500 for NABS and $50 for the agent. By the way, if your stock is worth less than $550 the balance may be paid in money to bring the total to the specified amount for Life Membership.

Limitations for the Most Generous Benefactor
We at NABS think of a $500 gift as extremely generous and we appreciate every contribution we receive, no matter how small it may be. Nonetheless, I would like to explain one of the limitations of this tax incentive, just in case there might be an incredibly generous benefactor who wanted to donate an enormous sum to NABS or any other charity or group of charities. You are not permitted to deduct stock donations in an amount greater than 30 percent of your adjusted gross income, except that, any excess deductible amount can be carried over for as long as five years to offset income or capital gains taxes.

If you care to participate in this program, please contact NABS Treasurer, Greg Beavers at (812) 824-2431. He will call you back with the necessary details. Before embarking on these types of gifts, please consult with your attorney or tax advisor to determine the actual current impact on your own personal income tax situation. Thank you for your generous consideration.

Yours in peace,
Jonathan Ridgeway
NABS President
New/Revised Children’s Bluebird Activity Book Available
Bob Niebuhr

When the original version of Mountain Bluebird Trails’ Children’s Bluebird Activity Book was created as an online book, people loved it, BUT there was great demand for two things: more information on Eastern and Western Bluebirds, and the ability to purchase printed copies.

With these goals in mind, MBT asked Myrna Pearman and Pauline Mousseau, the writer and graphic designer of the first book, to revise and increase the size of the book from 40 to 52 pages to include information on all three species. The book contains fascinating facts, puzzles, pictures, coloring pages and more. An electronic version of the book is available on the MBT website so parents, teachers and other youth leaders can print the entire book or individual pages for children to color, work puzzles, or copy a favorite picture. The book is 8 1/2”x 11” in size and written at the 4th grade level.

MBT wants to thank the California Bluebird Recovery Program and the New York State Bluebird Society for their help and cooperation by providing information and pictures of Eastern and Western Bluebirds, and to Julie Zickefoose for writing the Foreword. The California Bluebird Recovery Program also made a very generous contribution towards producing the book.

The book is dedicated to Art Aylesworth, founder of Mountain Bluebird Trails, and Don Yoder, founder of the California Bluebird Recovery Program. Both men were great believers in educating adults and children about the conservation of bluebirds and other cavity nesting birds. This book was created for that purpose.

You can view the book on the MBT website (www.mountainbluebirdtrails.com), where you will also find information on how to order paper copies. Buy extras as gifts for children or educators you know!

NABS 2009 IS COMING SOON

It won’t be long now!

September 10 and the beginning of our great annual event will be here before you know it. The Pennsylvania Affiliate has laid out a program of fantastic field trips and interesting speakers. Places on the field trips and discounted rooms at the host hotel are going fast so if you want to attend, this is the time to register. We are working to extend the discounted room rate deadline beyond July 18, but don’t delay, sign up today!
Research Review
A Summary of Recent Scientific Research on Bluebirds and Other Cavity-nesters
Scott W. Gillihan

Can flying squirrels be good for woodpeckers?
“The enemy of my enemy is my friend.” That might be the take-home message from this study, which looked at the complex interactions between three species that compete for cavities: Red-cockaded Woodpecker, Red-bellied Woodpecker, and southern flying squirrel.

Previous research had shown that Red-bellied Woodpeckers are dominant over Red-cockaded Woodpeckers, and will take over their nest cavities; however, both species are at risk of losing their cavities to flying squirrels. The authors of this study hypothesized that Red-cockaded Woodpeckers actually benefit from the presence of flying squirrels, because the squirrels suppress the population of Red-bellied Woodpeckers. They tested this theory by removing flying squirrels from eight known territories of Red-cockaded Woodpeckers and monitoring the response of the woodpecker populations.

As expected, Red-bellied Woodpeckers increased in areas where the squirrels were removed, and the number of Red-cockaded Woodpeckers declined (although only slightly). In the absence of flying squirrels, both woodpecker species have the potential to increase because more cavities are available. The fact that only the Red-bellied Woodpecker numbers increased (even though Red-cockaded Woodpeckers could have moved in from adjacent territories) indicates that the Red-bellied Woodpeckers took over the vacant cavities faster and with more authority than could the Red-cockaded Woodpeckers. The subsequent decline in Red-cockaded Woodpeckers suggests that the Red-bellied Woodpeckers then took over some of the Red-cockaded Woodpecker-occupied cavities. Ordinarily, this doesn’t happen because the flying squirrels suppress the Red-bellied Woodpecker population and keep it low enough that those birds don’t need to push out Red-cockaded Woodpeckers.

To sum up: Flying squirrels benefit Red-cockaded Woodpeckers slightly, by keeping Red-bellied Woodpecker numbers down. Even though the squirrels keep Red-cockaded Woodpecker numbers down, too, they don’t suppress them as much as the Red-bellied Woodpeckers alone would.


What influences woodpecker predation on insects?
The emerald ash borer is an Asian insect that feeds on the inner bark of ash trees. This pest was introduced into North America with devastating results: in southeastern Michigan alone, it has killed an estimated 20 million ash trees.

Woodpeckers are known to dine on emerald ash borers, sometimes removing most or all of the larvae from an infected tree. But in previous studies, the level of woodpecker predation on borers was highly variable from one tree or one forest stand to the next. The authors of this study wanted to find out what factors influence borer predation by woodpeckers.

The researchers monitored woodpeckers as they foraged, to see how they used different tree species. In addition, they selected 164 ash trees and painstakingly counted the number of distinctive D-shaped holes made by the borers and the number of woodpecker-made holes in 5-10 areas of each tree.

Their results suggest that woodpeckers spend five times as much time foraging on ash trees than other trees in areas of borer infestation, and the more borers in a particular tree, the more foraging by woodpeckers on that tree. Many questions remain, however, about the specific factors that influence woodpecker predation. For example, the researchers often found trees with all of the borers removed by woodpeckers right next to trees with none of the borers removed. What would cause a woodpecker to pick one tree over the other remains a mystery.

The authors conclude by encouraging land managers with ash trees to maintain conditions favorable to woodpeckers in order to take advantage of the birds’ appetite for borers. Woodpecker-friendly conditions include dead and dying trees, and large trees afflicted with heartrot-causing fungi.

How do parasites affect nestlings?

Nestling birds are susceptible to infestation by various external parasites such as blowflies and blood-feeding mites. Such infestations might harm or even kill nestlings. The author of this study wanted to document the effects of these parasites on Eastern Bluebird nestlings by comparing infected birds with uninfected birds.

Using a pyrethrin-based insecticide (which is considered safe to use on birds), the author eliminated parasites from half the nests in his study, while leaving the other half to become infested. He repeated the application of insecticide at 3-4 day intervals. When the nestlings were 12 days old, he weighed them and took small blood samples for testing; he also monitored the young through fledging, to measure fledging success.

In comparing the infested chicks with the uninfested, he found no difference in weight or the amount of white blood cells or red blood cells. The lack of a difference in white blood cells indicates that the immune systems of the infested chicks was not fired up in response to the parasites. However, the infested chicks did have more immature blood cells, an indication that the birds had lost blood and were manufacturing more to replace it. Happily, all of the nestlings in the study fledged (even the infested ones), suggesting that infestation does not lower fledging success.

Even though there didn’t appear to be any negative results from mite infestation, the author recommends removing all nest materials after fledging, so that the birds can start with a parasite-free nestbox.


Do male and female bluebirds respond differently to predators?

The instinct to defend a nest is a basic behavior that birds are born with (it is sometimes said of this kind of behavior that it is “hard-wired”). Bird parents will risk death to protect their eggs or young from a predator—this instinct allows them to successfully pass their genes on to subsequent generations.

Because passing along genes should be equally important to both parents, it would seem that the mother and father would be equally committed to defending the nest. But a number of tests have shown that one parent defends the nest more vigorously than the other. Since this had never been tested in bluebirds, the authors of this study decided to explore it.

They set up a blind 12 meters (about 40 feet) from a Mountain Bluebird nest with nestlings (they did this with 17 different nestboxes). After the birds had settled down, one researcher walked from the blind to the nestbox and placed either a stuffed bobcat or a cardboard box of roughly the same size in front of the box. Then she returned to the blind to videotape the parents’ response and to take notes.

What they found, first of all, was that bluebirds view a bobcat as more of a threat than a cardboard box. Both parents spent more time near the nest when the bobcat was in position than when the cardboard box was in position. The birds also vocalized more in response to the bobcat. But the parents differed in that, when the bobcat was present, the males spent more time close to the “predator” than did the females; the females stayed farther away, but vocalized more.

The bolder, more aggressive males expose themselves to greater risk of injury or death. Some scientists believe that the parent that is least able to raise the young alone would be more aggressive about defending the nest. That suggests that female bluebirds are better at being single parents than are male bluebirds. However, the study wasn’t detailed enough to determine this, so the authors suggested additional research to get a clear answer.


How does clutch size impact bluebird parents?

The authors of this study (which is part of a larger, long-term study of Eastern Bluebird breeding) wanted to find out how clutch size affected these factors:

- The likelihood and timing of a second clutch
- The size of a second clutch, and its hatching and fledging success
- The survival of the parents to the following year
- Plumage coloration of the female in the following year

The authors manipulated clutch sizes in 44 nestboxes by moving two day-old nestlings around—they moved two nestlings from half the nests and added...
them to the other half. This resulted in an average of 2.2 chicks in half the nests and 5.6 chicks in the other half. Because the parents were all marked with unique combinations of colored leg bands, the authors were able to keep track of each bird and its subsequent nesting attempts.

What the authors found was this:

• Parents that had raised an artificially large first clutch were less likely to produce a second clutch; when they did produce a second clutch, it was initiated later than the second clutches of birds that had small first clutches. This could be a result of the extra time needed to care for the large number of fledglings, or the extra energy needed to raise the large family.

• The size of the first clutch had no effect on the size of the second clutch or its hatching or fledging success.

• Females that raised an enlarged brood were less likely to survive to the following year than females with a normal-sized brood. Also, the females that raised large clutches were less likely than the males to survive to the following year.

• Clutch size had no effect on the coloration of females, i.e., females that had raised large clutches were just as colorful the following year as the females that had raised small clutches. This contrasts with the authors’ previous research, which showed that males are less colorful in the year following the raising of a large clutch.

Overall, it appears that male and female bluebirds have different “investment strategies” when it comes to breeding, with females investing more in the care of young (hence the females’ lower survival rate after raising a large brood) while males invest more in the things that allow them to attract and compete for a female (specifically, their coloration). In essence, the females worked harder to raise the large brood, while the males saved their energy for mating with other females.


A great big THANK YOU to these NABS Sponsors!

Our sponsors support the work of NABS through an annual contribution

Silver Level (at least $1,000)

True Blue Level (at least $250; available only to NABS Affiliates)
The North American Bluebird Society serves as a clearinghouse for ideas, research, management and education on behalf of all 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 further partnership in international bluebird conservation. No cost is associated with affiliating with NABS. Your affiliated organization will be recognized and listed on the NABS website and in Bluebird. If your organization has a newsletter, please forward a copy to our headquarters. To find out more about becoming a NABS affiliate, read our Affiliate Letter. Notice: If you are listed below, please check listing to see if it is current. If not, please contact web@nabluebirdsociety.org with correct information.

**Affiliates of the North American Bluebird Society**

**Alberta**  
**Calgary Area Bluebird Trail Monitors**  
George Loades  
167 Canterbury Dr, SW  
Calgary, AB T2W-1H3 - CANADA  
bluebird@creb.com

**Ellis Bird Farm, Ltd.**  
Myrna Pearman  
PO Box 5090  
Lacombe, AB T4L-1W7 - CANADA  
403.885.4477  
403.887.5779  
mpearman@telus.net  
www.ellisbirdfarm.ab.ca

**Mountain Bluebird Trails Conservation Society**  
Gwen Tietz  
PO Box 401 Stn Main  
Lethbridge, AB T1K-3Z1 - CANADA  
403.553.2780  
mtnblue@telus.net

**Arkansas**  
**Bella Vista Bluebird Society**  
Jim Janssen  
83 Forfar Drive  
Bella Vista, AR 72715  
479.855.4451  
J-G_Janssen@sbcglobal.net

**British Columbia**  
**Southern Interior Bluebird Trail Society**  
Sherry Linn  
18588 Old Richter Pass Rd  
Osoyoos, BC V0H-1V5 - CANADA  
250.495.7891  
goldstrm@vip.net  
www.bcbuebirds.org

**California**  
**California Bluebird Recovery Program**  
Jim Semelroth  
24591 Kings Road  
Laguna Niguel, CA 92677  
408.257.6410  
dick@theblaines.net  
www.cbrp.org

**Colorado**  
**Colorado Bluebird Project**  
Audubon Soc of Greater Denver  
Kevin Corwin - 720.482.8454  
9308 S Wadsworth Blvd  
Littleton, CO 80128  
303.973.9530  
303.973.1038 f  
bluebirdproject@denveraudubon.org  
www.denveraudubon.org/bluebird.htm
Florida
Florida Bluebird Society
Bill Pennewill
P.O. Box 1086
Penney Farms, FL 32079
floridabluebirdsociety@yahoo.com
www.floridabluebirdsociety.com

Idaho
Our Bluebird Ranch
Leola Roberts
152 N 200 E
Blackfoot, ID 83221
208.782.9676

Rocky Mountain Blues
David Richmond
HC 67 Box 680
Clayton, ID 83227
208.838.2431
fowest@custertel.net

Illinois
Jo Daviess County BBRP
Dick Bach
9262 Fitzsimmons Rd.
Stockton, IL 61085
815.947.2661
kiritemoamwci.net
www.naturalareaguardians.org

East Central Illinois Bluebird Society
Loren Hughes
1234 Tucker Beach Rd
Paris, IL 61944
217.463.7175
lghughes@join.com

Indiana
Indiana Bluebird Society
Ken Murray
PO Box 134
Rensselaer, IN 47978-0134
219.866.3081
ibs@indianabluebirdsociety.org
www.indianabluebirdsociety.org

Brown County Bluebird Club
Dan Sparks
PO Box 660
Nashville, IN 47448
812.988.1876
360.361.3704 f
b4bluebirds@yahoo.com

American Bird Conservation Assoc.
Merlin Lehman
60026 CR 35
Middlebury, IN 46540
574.825.8739

Iowa
Johnson County Songbird Project
Jim Walters
1033 E Washington
Iowa City, IA 52240-5248
319.466.1134
james-walters@uiowa.edu

Iowa Bluebird Conservationists
Jerad Getter
PO Box 302
Griswold, IA 51535
712.624.9433 h
712.527.9685 w
jgetter@hotmail.com

Bluebirds of Iowa Restoration
Jaclyn Hill
2946 Ubben Ave
Ellsworth IA 50075-7554
515.836.4579
jaclynhill@netins.net

Kentucky
Kentucky Bluebird Society
Philip Tamplin, Jr.
PO Box 3425
Paducah, KY 42002
502.895.4737
kbsnews@yahoo.com
wwwbiology.uky.edu/kbs

Louisiana
Louisiana Bayou Bluebird Society
Evelyn Cooper
1222 Cook Rd
Delhi, LA 71232
318.878.3210
emcooper@bayou.com
www.labayoubluebirdsociety.org

Minnesota
Bluebird Recovery Program
Audubon Chapter of Minneapolis
Lance Krog
22035 Penn Ave
Lakeville, MN 55044
952.469.2054
lancek@frontiernet.net
www.bbrp.org

Michigan
Michigan Bluebird Society
Kurt Hagemeister
PO Box 2028
Ann Arbor, MI 48106-2028
734.663.9746
810.736.8713 f
khagemeister@michiganbluebirds.org
www.michiganbluebirds.org

Mississippi
Mississippi Bluebird Society
Jack Dodson
3926 Old Hwy 179
Jefferson City, MO 65109
573.636.3313 w
jackdodson@missouribluebird.org
www.missouribluebird.org

Montana
Mountain Bluebird Trails, Inc.
Johnny Hanna
P.O. Box 14
Wapiti, WY 82450
307.587.7064
president@mountainbluebirdtrails.com
www.mountainbluebirdtrails.com
Nebraska
Bluebirds Across Nebraska
Derry Wolford
705 9th Ave
Shenandoah, IA 51601
info@bbne.org
derrywolford@prodigy.net
www.bbne.org

New Hampshire
NH Bluebird Conspiracy
Bruce Burdett
5 Upper Bay Rd
Sunapee, NH 03782-2330
603.763.5705
blueburd@myfairpoint.net

New York
NY State Bluebird Society
John Ruska
3149 Witaker Road
Fredonia, NY 14063
716.679.9676
ruskhill@adelphia.net
www.nysbs.org

Orleans Bluebird Society
Dennis Colton
10967 Ridge Road
Medina, NY 14103
585.798.4957
dcolton001@rochester.rr.com

Schroharie County Bluebird Society
Kevin Berner
499 West Richmondville Rd
Richmondville NY 12149
518.294.7196
bernerkl@cobleskill.edu

North Carolina
NC Bluebird Society
Helen S. Munro
22 Bobolink Road
Jackson Springs, NC 27281
910.673.6936
president@ncbluebird.org
www.ncbluebird.org

Ohio
Ohio Bluebird Society
Bernie Daniel
9211 Solon Dr
Cincinnati, OH 45242
513.706.3789
ohiobluebird@acmail.net
www.ohiobluebirdsociety.org

Oklahoma
Oklahoma Bluebird Society
Herb Streator
6400 E. Commercial St
Broken Arrow, OK 74014
918.806.2489

Ontario
Ontario Eastern Bluebird Society
Bill Read
24 Brandt Place
Cambridge, ON, N1S 2V8 - CANADA
519.620.0744
info@billreadsbooks.com
www.oeb.ca

Oregon
Prescott Bluebird Recovery Project
Charlie Stalzer
PO Box 1469
Sherwood, OR 97140
email@prescottbluebird.com
www.pescottbluebird.com

Pennsylvania
Bluebird Society of PA
Kathy Clark
PO Box 756
Mechanicsburg, PA 17055-0756
717.671.0700
KCBSP@aol.com
www.thebsp.org

Purple Martin Conservation Assoc.
John Tautin
Tom Ridge Environmental Center
301 Peninsula Dr., Suite 6
Erie, PA 16505
814-833-2090
jtautin@purplemartin.org
www.purplemartin.org

Tennessee
Tennessee Bluebird Trails
Louis Redmon
381 Liberty Rd
Wartburg, TN 37887
423.346.3911
bluebirdtrails1@yahoo.com

Texas
Texas Bluebird Society
Pauline Tom
PO Box 40868
Austin, TX 78704
512.268.5678
ptom5678@gmail.com
www.texasbluebirdsociety.org

Virginia
Virginia Bluebird Society
Anne Little
726 William St
Fredericksburg, VA 22401
540.373.4594
vbs@virginiabluebirds.org
www.virginiabluebirds.org

Washington
Cascadia Bluebird & Purple Martin Society
Michael Pietro
3015 Squalicum Pkwy #250
Bellingham, WA 98225
360.738.2153
mpietro@hinet.org

West Virginia
Potomac Valley Audubon Society
Peter Smith
PO Box 578
Shepherdstown, WV 25443
304.876.1139
psmith@frontiernet.net
www.potomacaudubon.org

Wisconsin
Aldo Leopold Audubon Society
Larry Graham
918 Arts Lane
Stevens Point, WI 54481
715.344.0968
lgraham@uwsp.edu
www.aldoleopoldaudubon.org

Bluebird Restoration Assoc of Wisconsin
Patrick Ready
1210 Oakwood Ctr
Stoughton, WI 53589
608.873.1703
pready@tds.net
www.braw.org

Lafayette County Bluebird Society
Carol McDaniel
14953 State Rd. 23
Darlington, WI 53530-9324
Renew Today! Give a friend the gift of bluebirds!

Date _________________

- New Membership
- Renewal
- A gift subscription from: ________________________________ for:

- 1 Year
- 2 Years
- 3 Years
- 4 Years

  | Subscribing | Household | $30 | $50 | $85 | $110 | $500 |
  | Supporting  |         | $20 | $40 | $75 | $100 | $500 |
  | Contributing|         | $40 | $75 | $100 | $500 |
  | Guardian    |         | $60 | $95 | $120 | $600 |
  | Life        |         | $70 | $105 | $140 | $700 |

  - Organization: $50
  - Small Business: $50
  - Corporation: $125

Additional Donation

- $30
- $50
- Other: __________

- “Friend of NABS” for current calendar year (does not include quarterly Bluebird) $15

- Check enclosed (in U.S. funds)
- Visa
- MasterCard

Card #: ____________________________
Expiry: _______ Signature: ________________________________

We do not share or sell NABS’s membership list.
$10.00 of each annual membership is designated for subscription to Bluebird, the quarterly journal. The remaining portion of payment is a contribution. Payment must be in U.S. funds.

Mail to: NABS Treasurer, P.O. Box 7844, Bloomington IN 47407
An online membership form with payment through PayPal is available online at www.nabluebirdsociety.org