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Cover photo © Steve Byland / Dreamstime.com  
Table of Contents photo: Martjan Lammertink (www.pbase.com/PicidPics) & J. Sartore provided this image of a female Prothonotary Warbler nesting in a cavity made by a Downy Woodpecker. The cavity is in a knee of Bald Cypress in the Cache River National Wildlife Refuge, Arkansas.
Spring Message to our Affiliate Organizations

Let me start off with the biggest news of the month. NABS has been given an offer we couldn’t refuse! The NABS Affiliate, Bluebirds Across America, Jackson, Tennessee, has offered to host our annual meeting/convention in September, 2011. I would like to thank Colonel Farrell Roe of that organization. He has done the remarkable by putting together the plans for our getting together and meeting new and old friends in Tennessee. I asked him in early January — barely two months ago — and he has amazed me by the results. We look forward to seeing you there, September 15-18, 2011, at the Doubletree Hotel, Highway 45 Bypass, Jackson, Tennessee. If you have always wanted to see Elvis’ Graceland, or the Shiloh Battlefield and Military Park, this is your chance. See the insert in the center of this issue of Bluebird for more details. Farrell promises it to be educational and diverse. Farrell has asked only that you make your reservations as early as possible, both for the hotel and the exciting field trips he has arranged for, so transportation can be arranged far enough in advance.

Looking forward, we have NABS 2012 in the works also, with a surprise meeting in the western part of the country. More information on next year’s convention as soon as we can work out the details, but I can promise you it will be a great meeting. We will learn more about the Western Bluebird. On that note, I would like to ask those of you who are familiar with the Western or the Mountain Bluebird to educate those of us who live in the east. The Eastern Bluebird is the only one I have ever seen. Let me encourage you to write an article for Bluebird and send it to our editor, Scott Gillihan.

I am currently working with several new Affiliates: the Southern Illinois Audubon Society; one in New Jersey, to be called the New Jersey Bluebird Society, with details yet to be worked out; and one in Washington state that is in its nestling stage (well, we hope it’s about to fledge). With the start of nesting season coming very soon, hopefully we can get some of the less-active Affiliates on their feet and joining us in a successful 2011 season.

Phil Berry
NABS Vice President for Affiliate Relations

The North American Bluebird Society, Inc. is a non-profit education, conservation and research organization that promotes the recovery of bluebirds and other native cavity-nesting bird species in North America.

www.nabluebirdsociety.org
Greetings of peace.

Clint Eastwood said, “A man’s got to know his limitations.” For the most part, I would like to think I know mine, at least with respect to being President of the North American Bluebird Society. The nature of the job I do is organization management. I certainly have no fantasy that I might be any kind of a scientist, least of all not an ornithologist or anything like that, nor do I believe I have any scientific knowledge about birds, their behavior or habitat, much as I might wish I did. Being president of such an organization gives me plenty of opportunity to meet with brilliant scientists who understand that stuff, but next to them I am just a cat in a butcher shop and I know it very well. This does not mean I cannot conduct intelligent conversations with them. It simply means I do not have a clue about their area of enlightenment before they share it with me.

I find it rather curious that some scientific issues can be political and just as controversial as any other political issues. Even when everyone agrees with all the facts, which is not very often, factions still come away with a very wide array of differing conclusions. Many individuals with scientific backgrounds have very deep emotions about the claims they stake. The opposing feelings some people have about global warming is as powerful as what others feel about capital punishment. There are times that reasonable people are well served if they just agree to disagree.

Of course there is a particular controversy that I intend to write about here, the matter of nestboxes for bluebirds and other cavity nesters. Before I say more about the subject I want to explain to the many folks who have written to me about nestboxes; the reason I did not respond to your passionately articulated presentations was because it seemed appropriate to express opinions before deliberating over what a wide variety of masters had to say and being ready to determine my own position. I do not feel highly qualified to decide on the features that constitute a better nestbox, aside from what seems to be a personal preference.

I suspect that most of our readers know we have had a nestbox approval process since before I was elected NABS President four years ago. Our Board has a Nestbox Approval Committee and currently Bob Benson and Barbara Chambers are its Co-Chairs, each serving admirably in their station. I have nothing but appreciation for their efforts in this area and I regret that they have not yet been able to achieve more of the progress they seek. Perhaps they will in time if they continue to persevere.

In our May 2007 Board conference call, just 5 months after I became the president, Bob who was then the lone Nestbox Committee Chair reported, in essence, that Walmart was displaying the NABS logo on a nestbox they were offering for sale. The product bore the claim that it had been approved by NABS but the nestbox was particularly unsatisfactory. I received communication from a number of people across the US within the next several weeks. As far as I was concerned it did not matter so much if the product was good or bad; the real issue to me was whether or not it had actually been approved. I asked Bob to perform a due and diligent check of our records and absolutely confirm whether we had approved this particular box or not. When I was amply confident that we had not granted our approval for this nestbox I wrote to Walmart’s lawyers and advised them that they were violating our trademark. I asked them to stop selling this product labeled with our approval and to reply within 14 days. They did not answer at all.

A month or two passed and I suppose I was beginning to feel that they were ignoring me. Then I realized I had sent my letter in July and nesting season was becoming a thing of the past. I must say I felt a lot better the next spring when I looked in at a couple of their stores here in the Hudson River Valley and they seemed to no longer have that item on their shelves. I never again got another report that Walmart was still selling a nestbox like that with our logo on it or claiming to have our approval.

Three years ago during our April 2008 Board conference call Bob reported his opinion that we ought to revise the basic NABS requirements for nestbox approval and that he intended to start working on them. Since then nestboxes and nestbox standards have been discussed on more than 20 of our calls, they have been a topic of more than 30 committee reports and I would reasonably estimate that the Board has spent a sum of between 3 and 4 hours talking about them during the various calls. Plenty of other people’s time has been devoted to trying to resolve the issue yet the committee has still...
not arrived at a conclusion.

From my vantage point the NABS seal of approval is fundamentally a trademark and marketing issue. The name of North American Bluebird Society is a registered trademark. I believe it is important for us to be vigilant to protect the unauthorized use of our trademark and object to anyone who claims our approval if we have not granted it. The reason merchants make such a claim is because they believe that doing so might enhance their sales. I believe it is in our interest in cases where various nestboxes have been approved by NABS, for their vendors to print our name and logo on their products because the message also indicates that the merchants consider North American Bluebird Association to be a properly recognized authority and it gives us good publicity. It is good for them and for us.

I doubt the complexities of the issue were adequately appreciated, either when Bob reported his plan to revise the basic requirements for nestbox approval three years ago, or especially back when NABS first established the approval process in 1998. I think the most important aspect people need to remember is that the absence of the NABS mark of approval is not an indication that a nestbox is unsatisfactory. That said, the singular first requirement for a nestbox to receive NABS approval is that it must be submitted for approval. Without the application there can never be a legitimate claim of approval. That much seems clear enough but from there the controversy begins. There is one measure which seems to me an obvious basis for granting NABS approval, i.e., any nestbox which has been field tested, monitored and which has proven to successfully fledge bluebirds. I assert this opinion based upon my own empirical review of the random collection of nestboxes I assembled over about ten years since we began attending NABS and Affiliate bluebird society meetings and others which have been sent to me by people who live in a variety of parts of North America. There in one thing all of the nestboxes in my collection have in common. They have been field tested successfully, even some that our Nestbox Committee found unworthy of NABS approval. As long as the current standards remain in place, I believe my opinion has no standing and I do not see fit to interfere with the judgement of the committee.

The first nestboxes to which my wife, Lynne and I became familiar with were the signed, Herm Bressler nestboxes distributed by our initial organization, the New York State Bluebird Society. Up to the present time, these are the only ones we ever installed on our property.

I find it curious that many such as the Gilwood, the Gilbertson, the Peterson or the Looker Slot Box only have a floor area of about 10 square inches compared to 16 square inches or more of the Bressler, several built by members of the Bluebird Society of Pennsylvania or the “Worley’s Slippin’ Silo”. This peculiar model has a large plastic jar that hooks into a roofed cylindrical outer sleeve (the silo). It bears a label which reads “An innovative and unique nest box for birds” as well as “The Bluebird’s palace and a landlord’s dream”. The inside of the silo proudly bears the NABS logo and the text “North American Bluebird Society Approved”. I read a very interesting piece by Texas Bluebird Society’s Keith Kridler about the merits of a 25 square inch floor being safer for tree swallows when they successfully compete for a particular nestbox. Tree Swallow fledglings in more crowded nestboxes are exposed to injuries because they do not have enough room to exercise and develop their wings. Keith, if I have misunderstood, please write us an article about Texas size bluebird nestboxes and set me straight.

My collection comprises front opening models with a door that swings down for monitoring, including the Bressler and others with a door that swings up or opens on one side. The Gilberson is a simulated White Birch cylinder suspended from its roof by two screws. The cylinder can be easily removed for monitoring with a top down view without even taking out the screws. To monitor the Worley one simply removes the insert from the silo. Almost every one of them is signed by its maker and many of them are also dated. I personally consider those to be very attractive features but the bluebirds are not likely to care one way or the other.

Since long before the first blue robins were sighted in the New World they have been choosing a very wide variety of cavities in which to nest. The most successful survivors selected cavities that provided the best shelter from predators and unfavorable weather. When so much land was cleared for development that the number of natural cavities removed from our national landscapes was interfering with bluebird populations people began putting nestboxes up to offset the trend and organizing societies to help like minded people put them up too.
I believe that if NABS is to maintain a nestbox approval process it ought to be rational and it should not consist of arbitrary specifications. I believe it should be based on performance guidelines which enumerate beneficial features, e.g., drainage, ventilation, and predator resistance and undesirable features like a perch which may be attractive to predators, etc. I definitely am in favor of NABS continuing the Nestbox Approval Program and vigilantly enforcing the NABS trademark and I am pleased that I had yet another opportunity to do that again this season.

Several weeks ago I received a number of emails objecting to a nestbox on Amazon which claimed to be approved by the North American Bluebird Society. After looking at the ad I posted a comment about the product explaining that their claim was false and describing some of the features which would have precluded NABS approval. Then I contacted some other vendors of the same product as well as the manufacturer and within 24 hours I was notified some significant improvements were already being made to the design. I believe that the Nestbox Approval Program is the most tangible application of the NABS trademark, a true opportunity to have an impact in the commercial marketplace. It is a very powerful tool we can use to influence nestbox makers and venders to produce better quality products.

I am confident that there will be plenty of continuing discussion, both about good and bad nestbox designs and also about the nestbox approval process. We certainly welcome comments on these and other issues and we are grateful for your attention and support. Thank you.

Yours in peace,
Jonathan Ridgeway
NABS President
From the Membership Committee

First I would like to welcome all our new members who have joined NABS since my last journal message. I hope you enjoy our quarterly journal and make many new friends through your relationship with us. If you can make it to a future NABS conference (how about Tennessee in September?) I would love to meet you and share stories of bluebird trails and learn about your area of the country.

Thank you all for keeping the Membership Committee busy for these past months and for answering our call to check those mailing labels for messages about pending expiry of memberships. We have had a strong response to our reminder messages and a marked increase in renewals that are at least one quarter early. This action on your part allows us more time to work on other aspects of membership while increasing our base at the same time.

This last quarter we also tried something new. We had our website guru, Jim McLochlin, set up a NABS-based e-mail account for us to send out renewal notices. It really helps when you can see “nabluebirdsociety” in the sender address and hopefully our messages won’t go into your spam folders! Of the 203 e-mails we sent, 25 were rejected. This has allowed Tena to clean up our database some more. Though certainly not an exact scientific trial, I tracked the incoming renewals for one month after the e-mail was sent. Each return was checked against our database (time consuming but worth it). Of course some members may have responded to the journal message rather than the e-mail, but of the 178 e-mails out there in the ether 56 have resulted in a renewal. It appears that this exercise has had positive results so we will build e-mail reminder notices into our quarterly work schedules. When you renew, please take a moment and add your phone number and e-mail address so we can update our records. Phone numbers are very helpful if for some reason we need to contact you quickly about your membership.

Memberships has worked closely with our Affiliate VP, Phil Berry, to assist our newer Affiliates in their establishing a presence in their communities and States. Our collaboration is ongoing to ensure everyone is aware of the Affiliate Plus membership program that helps all of our organizations grow and prosper. Of course we are always hopeful that members will “up-grade” their membership to a higher level when renewing as the “A+” barely covers the cost of the quarterly journals with nothing left over for administration or general operations of NABS. The “A+” also enables members who have been stressed in these hard economic times to stay with us.

If you have any comments or ideas to share with your Membership Committee, please do not hesitate to e-mail or call us. (I am in Canada but am happy to take your number and call you right back on my dime!).

Sherry Linn  goldstrm@vip.net  250-495-7891

North American Bluebird Society Grants

North American Bluebird Society Grants are funded by an endowment named for our founder, Dr. Lawrence Zeleny. The Zeleny Fund was established to award educational, conservation, scientific, or other grants that further the purpose and mission of the society: to promote the prosperity of bluebirds and other native cavity-nesting species and engage in such pursuits as may be beneficial to the prosperity and well being of the three species of bluebirds and other native cavity-nesting bird species in North America. NABS contributes a portion of Life Memberships directly into the endowment and encourages further donations earmarked to the Zeleny Fund in order to help finance worthy research.

NABS accepts and reviews grants twice a year. The deadlines for submitting grants are June 1 and December 1. The review process is usually completed by August 1 and February 1, respectively. Priority is given to research regarding bluebirds but grants involving all native cavity-nesting birds will certainly be considered. Since 2007, eleven NABS grants have been awarded for research pertaining to Eastern, Western, and Mountain Bluebirds, Prothonotary Warblers, Barn Owls, American Kestrels, Purple Martins, etc. The NABS grants have ranged from $500 to $5,000 and the average has been approximately $1,800.

Please email your questions and grant applications to NABS Grants Committee, Chair, Anne Sturm. (There is a link from our website at www.nabluebirdsociety.org/grants.htm.) If you prefer, you can mail them to: Anne Strum, PO Box 341, Barnesville, MD 20838. To assist applicants who may be applying to multiple funding sources, NABS does not have a formal application form.
From the Managing Editor
Scott W. Gillihan

Do you remember those little puzzles with the sliding tiles? They had 15 tiles and one open space, and you had to move the tiles around one space at a time and think three steps ahead in order to (eventually) get all the tiles where they belonged. Putting together an issue of Bluebird is a lot like that. To get a particular article where I want it in the journal, I often have to move three others. Plus an advertisement. This rarely works on the first try, so I have to put one or two articles back where they were and try moving something else. It’s challenging but an awful lot of fun, and I get a great sense of satisfaction when everything is finally in place.

My thanks to all who submitted puzzle pieces this time around — I’m sorry there isn’t room to publish them all. Thanks to my editorial assistant (my wife Brenda) for rescuing me from several editorial and design corners I had painted myself into. And thanks to Nancy Fraser (Prescott Bluebird Recovery Project President) for allowing us to reprint an article from their newsletter.

If you represent one of the NABS Affiliates, please keep me on your mailing list and send me any notices that you’d like to share with NABS members. Please send me any photographs, articles, ideas for articles, trivia, poems, etc. — e-mail them to NABSEditor@gmail.com or mail them to me at 5405 Villa View Dr., Farmington, NM 87402. And as always, keep up the great work you do for bluebirds and other cavity nesters!

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Trace the steps of the soldiers who fought in the Civil War Battle at Shiloh’s National Military Park.

Jackson TN
Wisconsin’s Lafayette County Bluebird Society to Celebrate 30 Years

The Lafayette County Bluebird Society (LCBS) will be celebrating 30 years of bluebirding on April 17 at the Super 8 Motel in the meeting room in Darlington, Wisconsin. The event will be held from 2:00 to 4:00 p.m. Steve Hubner, Zoning Administrator and a member of the Prairie Enthusiasts, will present a program on prairie plants common to southwest Wisconsin. Lori Cwynar, owner of Nature’s Gifts Greenhouse, will talk about plants that attract birds. Bluebirds and other cavity nesters will be discussed. The event is open to the public. There will be door prizes and refreshments. For more information contact lafayettecountybluebirdsociety@yahoo.com

The Lafayette County Bluebird Society got its start on March 7, 1981 when Carol and John McDaniel invited a few Darlington area folks to meet in the basement of the Methodist Church with the intent to bring the bluebirds back to Lafayette County. Since that time, members have fledged many bluebirds. Over the past two years, around 1000 were fledged from the trails in the county. The largest trails are at Yellowstone Lake State Park and the rural areas of New Diggings and Lead Mine, Fayette township, Darlington and Blanchardville. Over the past two years, the Society has expanded to include helping other cavity-nesting birds. The Society has placed Purple Martin housing near Darlington and Yellowstone Lake State Park in an effort to bring the martin back to the county. Currently, a project is underway to study the populations of the Red-headed and Pileated Woodpeckers in Lafayette County. Member Marilyn Chambers oversees the LCBS bird feeding station at Yellowstone Lake State Park. Member Sue Cashman writes a monthly article called “Nature Notes” for the local paper. The officers of the LCBS are: President Carol McDaniel, Vice President Jane Walter, Secretary Velma Klenke, Treasurer John McDaniel, and Director Sue Cashman.

Announcing the 2011 Missouri Bluebird Conference!

Date: Sept 30th through Oct 2nd, 2011
Location: Double Tree Hotel in Chesterfield, Missouri (St. Louis area)
       www.stlouishotelandconferencecenter.doubletree.com (there are special rates for “Missouri Bluebird Society”)

Our theme for the conference is “Cavity-nesters in Public Spaces”

Speakers include:

• Bob & Judy Peak, coming to us from their nest box trails at Land Between the Lakes and the John James Audubon Park in Henderson, KY (bluebirds, Tree Swallows, and Prothonotary Warblers).
• John Miller, manager of the Purple Martin housing in Forest Park and the Missouri Botanical Gardens in St. Louis. John also assists at the martin colony at the Cahokia Mounds State Historic Site in Illinois.
• Dana Ripper & Ethan Duke, founders of the Missouri River Bird Observatory, will be speaking about their many “Citizen Science” programs and their Backyard Banding projects.

There will be a box lunch in the hotel meeting room on Saturday during the seminars, included in the conference registration fee.

Optional Events will include:

• A Friday evening program and get-together at the hotel meeting room.
• A Sunday field trip to Shaw Nature Reserve in St. Louis.

Look for more information on our conference website: www.missouribluebirdconference.org/

In the meantime... mark your calendar for Sept 30 through October 2, 2011 to attend the 2011 Missouri Bluebird Conference!
Until recently, scientists knew little about songbird migration. They speculated and hypothesized based on the rare recoveries of banded birds on wintering grounds. Although these discoveries were exciting, they did little to reveal the mysteries or details of the actual migration. Banding studies could not answer questions such as “How long did it take?” or “How often do they rest?” Without exact migration data, conservation of critical rest and refuel stopover points for songbirds was only a distant dream.

In 2007 that dream took a step towards reality. In a groundbreaking study (published in Science, February 2009), Dr. Bridget Stutchbury of York University in Toronto tracked songbird migration using tiny geolocators harnessed on the backs of Purple Martins. During the spring migration, one bird flew approximately 4400 miles in 13 days! Another bird took a more leisurely 27 days, but was recorded traveling approximately 600 miles in one day! The data gained from these two little pioneering birds may rewrite the textbooks!

The geolocator works by measuring light levels every minute and recording the highest level every 5 minutes. Once the geolocator is recovered and data downloaded, software calculates the latitude and longitude allowing analysis of where and when the bird travelled. Geolocators have some limitations. Because of their tiny size, tiny battery, and tiny battery life, birds have to be re-tagged annually. Additionally, geolocators do not use GPS and must be removed from the bird to retrieve the data.

The biology of Purple Martins makes them ideal candidates for this type of study. They are neotropical migrants with a relatively long migration. Because they are dependent on man-provided housing and have strong site loyalty, they can be relatively easy to recapture. Although on average, one can only expect a 50%-60% migration survival rate, approximately 92% of the surviving birds return to the colony from which they started, making the retrieval of geolocators possible.

Studying birds from different regions is important for determining the influence of geographical location of breeding colonies on migration routes. To date, geolocators have been used on Purple Martins in Pennsylvania, Texas, and British Columbia. In 2010, I was able to add Virginia to this effort. With mentoring assistance from the Purple Martin Conservation Association and the Smithsonian Conservation Biology Institute, I drafted a scientific proposal and obtained the necessary permits. Then, with help from several grants, including a very generous one from NABS, I purchased 40 geolocators.

On June 19, 2010, with a team of experienced bird banders (and a Washington Post video news team), we harnessed the first 20 geolocators on Purple Martins from my colony in Woodbridge, Virginia.

Deployment of the last 20 geolocators later in the season was complicated by the devastating role nature played. To minimize the possibility of site abandonment after being trapped and handled, geolocators are placed on adult birds with young. However, last summer when daytime highs soared above 106°F for 6 days in a row, reaching up to 113°F, parents quit feeding and babies were jumping out of their oven-like cavities. Despite water-misting the colony during the heat of the day, I lost 44 babies in three days, leaving no suitable birds for the last three geolocators.

What’s in the future? Spring is fast approaching and I’m looking forward to recovering geolocators from the returning birds to see where they’ve been. I will be re-tagging them for a second year, later in the season when they have babies. Tracking consecutive migrations can provide insight into the question of whether migration routes are genetically hardwired or more opportunistic. As a bonus this year, I am very
fortunate to be collaborating with Dr. Stutchbury, who has initiated some very fascinating migration research. Backyard science just doesn’t get much better!


Nanette Mickle is a long time Purple Martin advocate in Woodbridge, Virginia where she lives with her husband and three children. She is a volunteer research assistant at the Smithsonian Conservation Biology Institute and an experienced bird bander who is using her knowledge to further Purple Martin conservation.

Nanette’s project is a fine example of your NABS dollars at work—any donations made to the Zeleny fund go into research and educational programs to promote the prosperity of bluebirds and other native cavity-nesting species.

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### North American Bluebird Society Award Nominations

Do you know of an individual, group, or business that deserves to be recognized for their outstanding contributions to bluebird conservation? If so, we want to hear from you! Please complete the NABS Award Nomination Form by June 30, 2011. The 2011 Awards will be presented during the NABS-2011 Convention, hosted by Bluebirds Across America in Jackson, Tennessee, September 15 through 18, 2011.

The Award Nomination Form is available from our website: [www.nabluebirdsociety.org/awards/award.htm](http://www.nabluebirdsociety.org/awards/award.htm)

Please submit your nomination online or mail the form by June 30, 2011, to Awards Chair Anne Strum, PO Box 341, Barnesville, MD 20838.
I have been a “collector” for many years. You know, you acquire two things that share a theme (e.g., bluebirds), and then, suddenly you must find another and another and more…

This was my habit as I prowled around antique stores. Not particularly interested in “old stuff”, I spent time riffling through the big boxes of old sheet music and shoeboxes full of postcards of every description, looking very specifically for pictures of bluebirds. And I was hugely rewarded, at very little expense.

Postcards began as advertising tools and as souvenirs. The earliest postcard was dated 1873. At first, it cost two cents to mail as opposed to government printed postcards for one cent. But when it was approved that all postcards go for one cent, the use of postcards was greatly enhanced. Most cards today are of local scenery, souvenirs of your trip. In the early decades of the 20th century, cards were of historical and scenic interest, often of fine art quality, and for use as greetings on all occasions.

My concentration and preference were for pictures of bluebirds, with handwritten greetings and messages on the back.

Also, sheet music was tremendously popular, beginning in the early 1900’s. People were able to make their own entertainment at home, on their upright piano. And as radio came into every home, sheet music was in demand to play the music they were hearing over the air. Movie music also enhanced sales, and often movie and radio stars graced the covers. Covers were often done by skilled painters. For my interest, bluebirds on the cover of the sheet music, or titles and lyrics with bluebirds, were my particular choice. And bluebirds, as we all know, have always been popular in poetry and song.

Pity the poor collector! One accumulates more and more items and is faced with a houseful of material filling all the available space, but is too precious to the collector to ever unload.

This collector, Joan Harmet, founded The Bluebird Recovery Program of Jo Daviess County (IL) about twenty years ago. She has been active with the program, working with bluebird workshops and talking about bluebirds to young and old. Joan was the co-coordinator for NABS 2000, the convention held in Illinois with 300 people. She has attended many conventions and has wonderful memories of friends, bluebirds, and awesome field trips. She also served on the NABS Board of Directors.
Blue Bird Of Happiness

Words by EDWARD HEYMAN
Additional words by HARRY PARR DAVIES

Music by SANDOR HARMATI

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“Feeding live insects to the wild birds in my yard has helped me build a special bond with individual birds.”

—Julie Zickefoose
Bluebirds and Pelletted Fertilizers
Karen Russell

I had some experiences last season that have caused me to be concerned about the possible danger of using pellet fertilizers in areas where bluebird nestboxes are placed. I wanted to share this information with banders, monitors, and property owners.

In my experience, under certain circumstances this fertilizer can result in the death of bluebirds. In a previous season, adult bluebirds were seen taking fertilizer pellets into a nestbox, and presumably were feeding them to nestlings. The adult bluebirds probably ate some pellets also. Later, all the birds (adults and nestlings) were found dead in the nestbox. My investigations found pelleted material in their stomachs.

In 2010, on a property with multiple active bluebird nestboxes for 10 years, there were unexplained deaths of nestlings and adults in the nestboxes. This was not the pattern in the numerous broods produced in other nestboxes on my route in this same area. I talked to the property owner, and he identified seeing (kicking it as he walked) pelleted fertilizer. He also described mowing shorter than usual, with the pellets more visible. Recalling the previous incident and considering this unusual pattern of deaths in multiple boxes on this property raised my suspicion about the birds’ mistaken use of the pellets as food items for their brood and themselves.

If pellet fertilizers are used on yards, gardens, crops, or other open areas, bluebirds may mistake it for food or insects (grubs, etc.), and feed their nestlings the pellets, as well as eat pellets themselves. It could be fatal to all of them—among other things, fertilizers and weed killers contain a form of arsenic (arsenic trioxide). The birds are especially vulnerable during the spring when weather is poor, and insects are not plentiful.

Pellet fertilizer must be watered well immediately to dissolve it, or must be worked into the soil so it is not visible to the birds. These practices are precautions but could prevent deaths of bluebirds. Pellet fertilizer use belongs on the list of possible (and preventable) risks to bluebird survival and nesting success when investigating losses.

I suggest banders and monitors might inquire if property owners use pellet fertilizers, especially if there is an unusual pattern of bluebird loss that is not consistent with any other known cause and not typical of the losses being experienced elsewhere on your routes at the same time. If they do use pellets, ask about their method of application and watering, or working it into the soil. Explain your concerns for the bluebirds, and then an appropriate decision can be made as to whether nestboxes should be relocated.

Property owners love and enjoy the bluebirds as much as we volunteers do. They are always willing to help in any way they can. This is appreciated very much by banders and monitors! We are working together for the bluebirds’ continued recovery from adverse changes in our environment by restoring their nesting habitat. The rewards are so great when we work together to enhance bluebird success! Our project, property owners, and volunteers are making a difference!

Karen Russell has been involved with Prescott Bluebird Recovery Project for 12 years. She and her husband William are retired and live in Newberg, Oregon. They devote the months of March through September to the needs of Western Bluebirds. Karen does the monitoring and banding for 78 nestboxes, which she likes to place on private property to engage the owners—they become a part of the project and enjoy being involved. In addition to her birding activities, Karen enjoys gardening, photography, puzzles, and church activities.

This article originally appeared in a slightly different format in the Fall 2010 newsletter of the Prescott Bluebird Recovery Project, a NABS Affiliate. It is reprinted here with permission.
The Empty Nest Syndrome: Extra Nest Building and Nest Destruction by Wrens

Benjamin E. Leese

Many bluebird enthusiasts have been frustrated by the House Wren’s gift for filling up more nestboxes with sticks than it actually uses to nest. Those extra nests, popularly called dummy nests, take up cavities that could be used by other birds. But wrens don’t only fill up cavities; they also sometimes destroy nearby eggs and young of their own and other species, even species that do not nest in cavities (Belles-Isles and Picman 1986, Quinn and Holroyd 1989). This behavior makes House Wrens a regular source of mortality for bluebirds, swallows, and other species. The behaviors aren’t limited to House Wrens, but have also been observed in other members of the group, including the Cactus Wren (Simons and Simons 1990), Marsh Wren (Picman and Picman 1980), and Bewick’s Wren (Picman 1994). As common as these behaviors are, they still represent an abiding puzzle for students of bird behavior. What advantages do wrens obtain by filling up neighboring cavities with sticks and destroying neighboring nests?

The two behaviors—building extra nests and destroying nearby nests—must be considered together. Although many studies treat them separately, each behavior has the same consequence—an empty nest in or near the wren’s territory. Therefore, the two should be considered together to get a full picture of its possible meanings. The possible functions of the behaviors fall into three broad categories; empty nests may function: 1) as a display of male fitness, 2) to destroy competition for nest sites or food, or 3) as decoys to prevent predation.

Empty Nests as Displays: Birds use a wide variety of ways to display their fitness as a potential mate. Most often, this means that the male develops a characteristic or behavior that females then choose preferentially as they pick a mate. Female choice thus drives the evolution of male traits. Examples of these traits can range anywhere from the peacock’s beautiful tail to the number of songs a mockingbird can mimic. One trait serves as an indicator of a bird’s overall quality as a mate. So this hypothesis proposes that male wrens with more empty nests in its territory should appear as a better mate to females.

There may be another additional advantage to males having multiple empty nests in their territories. House Wrens, along with many other wren species, are polygynous—meaning that a male may mate with more than one female. That system results in a variety of unique consequences for the species (Poirier et al 2003, Czapka and Johnson 2000), including the occurrence of asynchronous polygyny, a male guarding two nesting attempts that are at different stages of development (Quinn and Holroyd 1992). Therefore, by maintaining multiple empty nests in its territory, a male is increasing its chances of becoming polygynous (Belles-Isles and Picman 1986, Quinn and Holroyd 1989). That benefit is even more apparent when males destroy nests of other wrens; they might increase the possibility to usurp a mate from the neighboring territory (Belles-Isles and Picman 1986). That suggestion is supported by the fact that House Wren males in territories supplemented with nest boxes are more likely to become polygynous than males with only natural cavities (Johnson and Kermott 1991). Similarly, among Marsh Wrens, polygynous males tend to have more nests than monogamous males (Verner and Engleson 1970).

Although the “empty nests as display” hypothesis is attractive, there is substantial evidence against it. First of all, the long standing assumption that male wrens fill cavities with sticks and females only finish the nests does not appear to be correct. In fact, one study showed that females carried almost three times as many sticks as males (Alworth and Scheiber 2000). Second, both males and females destroy neighboring eggs and young (Belles-Isles and Picman 1986) and participate in territorial aggression against conspecifics, even usurping territories (Alworth and Scheiber 1999). If empty nests function as displays of male fitness, a female should not be expected to display that behavior, especially not if it increases the chances of her mate becoming polygynous, which could affect her own reproductive output (Czapka and Johnson 2000). Also, since wrens destroy nestlings and eggs even in open-cup nests, the behavior does not provide an advantage by increasing a male’s chances of becoming polygynous (Simons and Simons 1990). While the link between multiple nests and polygyny remains intriguing, it does not fully explain nest destruction among wrens.

Because male wrens return first to the breeding ground and initiate nest building before females, one could argue that it is just this initial display of empty nests that serves in sexual selection. However, empty nests do not appear to contribute to mate choice in House Wrens (Alworth 1996, Dubois and Getty 2003). In other wren species, the verdict is split, with the number of empty nests affecting female choice in Winter Wrens (Evans and Burns 1996 in Dubois
and Getty 2003) but not in Marsh Wrens (Leonard and Picman 1987). In most cases, empty nests do not appear to function as displays of male fitness for attracting a mate.

Another option, which has not received much consideration thus far (Finch 1990), is that the empty nests function not as a display to females, but as a display to other males. Much as a wren’s song establishes territory and discourages incursions of neighboring males, empty nests may serve as displays to other males. Empty nests might serve as territorial markers, but they might also serve to decrease a male’s chance of being cuckolded by a neighbor. By having to search more nests, a neighboring male has less chance of finding the resident female to mate with her. This hypothesis merits more testing to see if empty nests are displays against neighboring males and confusion to their attempts to copulate with resident females.

**Competition for resources:**
Wrens may be attempting to exclude conspecifics from the area surrounding their nest site in order to compete for resources, either food or nest sites. By keeping other nests further away, wrens should have access to more food resources for their own nesting attempt. Simons and Simons (1990) suggest that Cactus Wrens destroy eggs in order to compete for food resources, which limits nest productivity in that species.

Competition for nest sites has been much more difficult to quantify because most studies of cavity-nesting birds, including wrens, rely on artificial nest cavities, thus greatly increasing the availability of that resource and decreasing the need for competition. For instance, by adding nestboxes, Pribil and Picman (1991) increased the House Wren population on their study site from 2-4 pairs to 38-45 pairs. However, in most habitats, natural cavities are limited so fierce competition for those nest sites makes a great deal of sense. The fact that nest destruction is often followed by a cavity takeover makes this hypothesis quite plausible.

However, the tendency of wrens to destroy the nests of other species, especially those that do not nest in cavities, is not explained by this hypothesis. For the most part, species that live in the same habitat have specific feeding niches to avoid competition for food, so destroying the nests of other species probably does not increase the availability of food the wrens rely upon. And more nesting cavities clearly do not become available when the eggs of an open-cup nest are destroyed. While likely a factor in some cases, competition for resources does not seem to offer a full explanation for wren’s behavior.

**Empty nests as decoys:** Empty nests might also function to deter predators. This hypothesis suggests that a predator, finding a number of nests without the reward of eggs or nestlings, should modify its behavior and move away from the area before finding the real nest (Metz 1991, Finch 1990). Many empty nests might simply make it inefficient for a predator to search for nests in the area. This hypothesis seems especially plausible because of recent insights that visually orienting predators use parental activity to find nests (Weatherhead and Blouin-Demers 2004).

This hypothesis has the support of a number of studies. Leonard and Picman (1987) found that Marsh Wren nests surrounded by more empty nests were more successful. Simons and Simons (1990) found that the addition of experimental nests containing eggs near the territory of Cactus Wrens increased predation markedly. Finch (1990), studying Tree Swallows and House Wrens, found that House Wrens suffered greater predation risks with increasing occupancy of surrounding nest boxes. There was an even greater negative effect for House Wrens when Tree Swallows shared the same plot. Thus House Wren destruction of Tree Swallow nests may be an adaptation to decrease the risk of predation. Finch’s finding that predation risk increases with the density of nests or nest sites has also been recorded in other species, including the Snowy Plover (Page et al 1983), Northern Cardinal (Watts 1987), and Hermit Thrush (Martin and Roper 1988).

Unlike the previous two hypotheses, this one potentially explains why both males and females engage in empty nest behavior and why even open-nesting species have their nests destroyed. Both males and females benefit from reducing predation, so there is no disadvantage for the behavior for the female as in the display hypothesis. Because parental activity at nests increases the possibility of predation in open-nesting species (Martin et al 2000), and proximity likely increases the possibility of predation, it makes sense that wrens would destroy neighboring nests of other species in order to decrease the possibility of predation at their own nest.

This hypothesis could be tested by bluebird
enthusiasts by adding empty nest boxes around active wren nests (Finch 1990). Nests with added empty boxes around should have less predation if this hypothesis is correct.

Conclusions: The last word has yet to be written on why wrens destroy neighboring nests and create extra nests on their territory. There are certainly more hypotheses that could explain the behavior than those removed above. Perhaps adults are building dormitory nests for the newly fledged young, as is the case in some species of tropical wren (Gill and Stutchbury 2005). There is even evidence that clutch size and sex ratio are affected by the presence of these extra nests (Johnson et al. 2009, Dubois et al. 2006). Whatever the case, wrens are up to something important for their survival when they engage in these behaviors, so bluebird nestbox monitors should just get ready for more sticks in nests and more questions as scientists continue to figure out what benefits wrens obtain by doing so.

LITERATURE CITED


Ben Leese is pastor of Holy Trinity Lutheran Church in York Springs, Pennsylvania. He volunteers as a nature educator with the York Audubon Society and at Camp Kirchenwald in Colebrook, Pennsylvania. His backyard nestbox hosted a family of Tufted Titmice last spring, and after the chicks fledged, the box was filled with sticks and became an empty nest for House Wrens.
Hosted by Bluebirds Across America

September 15-18, 2011
Doubletree Hotel, Highway 45 Bypass, Jackson TN

The 2011 Convention Committee invites you to attend the 33rd Annual Convention of the North American Bluebird Society at the Doubletree Hotel in Jackson, Tennessee. As long-time friends and helpers of the North American Bluebird we welcome you to this year’s opportunity to “Remember the Past, Enjoy the Present and Plan the Future.”

Jackson, Tennessee, the “Hub of West Tennessee”, sports a history of conservation and there is proof our help for the North American Bluebird has succeeded. Jackson, located between Memphis, Nashville, Kentucky, and Mississippi, is a melting pot for Southern culture and ingenuity.

Please join us at this annual event and experience exciting fellowship, interesting tours, and enjoy an experienced group of speakers from the South. We will continue the tradition of the silent auction, raffles, and vendors galore.

Bluebirds Across America is a conservation, education, and environmental venture which promotes the continued recovery of bluebirds. The project uses U S Highway 70 as a backbone route to contact communities across the country to be involved with bluebird recovery. As an Affiliate of the North American Bluebird Society, we join many other Tennesseans across our state to enjoy the bluebird and work to involve other individuals and organizations. We connect with school children wherever possible to teach and get them to take part in this venture. Where possible we encourage those on the trail to be conscious of the environment.

We work with adults who have cancer through Camp Bluebird. This is a three-day camp for them two times a year and part of their time is spent building bluebird nestboxes. Each year for the last 18 years these campers have built 180 nestboxes to be placed in their community.

One-Day Registration $40*
Full Conference Registration $60**
Plus optional meals and tours.
Advance Registration is required.
You must complete the Registration form included.
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<th>Date</th>
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<td><strong>Wednesday September 14</strong></td>
<td>4-8PM</td>
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<td>4-8PM</td>
<td>Get Acquainted</td>
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<td><strong>Thursday September 15</strong></td>
<td>1-4PM</td>
<td>Tour</td>
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<td>Cash Bar</td>
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<td>7PM</td>
<td>NABS Welcome Dinner</td>
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<td>8-10PM</td>
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<td>Tour Breakfast</td>
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<td>8AM-12N</td>
<td>Walking Tour</td>
<td>Riverside Cemetery</td>
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~Thursday Dinner~

“Mardi Gras Buffet”
Mixed Field Greens
Hearts of Romaine Caesar Style with Cajun Croutons and Parmesan Cheese
Spicy New Orleans’ Shrimp Gumbo
Chicken Etouffee
Shrimp Jambalaya
Creole Mustard Short Ribs
Dirty Rice
Collard Greens
Black Eyed Peas
Apple Beignets w/ Vanilla Bean Ice Cream
Freshly Brewed Coffee & Iced Tea with Lemon

~Friday Dinner~

“House of Blues Buffet”
Southern Style Potato Salad
Mixed Field Greens with Fried Okra, Red Peppers, Crumbled Bleu Cheese and Barbeque Dressing
Southern Style Baked Chicken with Spiced Pecan Dressing
Fried Catfish with Herb Remoulade Sauce
“Memphis Style” Barbeque Slab of Ribs
Red Beans and Rice
Braised Collard Greens
Smothered Green Beans
Cornbread
Assorted Hot Fruit Cobbler
Freshly Brewed Coffee
Iced Tea with Lemon

~Saturday Dinner~

Your Choice of:
Apple Walnut Raisin Stuffed Pork Chop with a Veal Demi Red Wine Glaze Reduction
OR
Oven Roasted Fillet of Salmon
With:
House Salad with two dressings
Smoked Corn Risotto
Broccolini
Hot Yeast Rolls & Butter Rosettes
Guest Selection of Dessert
Freshly Brewed Coffee & Tea
Doubletree Hotel Jackson
Highway 45 Bypass, Jackson, Tennessee 38305
Tel: (731) 664-6900 “Group Code BLU”
$89/night + occupancy tax + local tax (taxes subject to change)
Fax: (731) 668-0474
Call 1-800-222-TREE
www.Doubletree.com

Location: On Highway 45 Bypass 0.5 mile south of I-40, Exit 80A. Convenient to Carl Perkins Civic Center and Oman Arena. McKellar Sipes Airport is 6 miles. Near Lambuth University, Lane College, Union University, and Jackson State Community College. Casey Jones Village is 1 mile. Old Hickory Mall is 2 miles.

Room Amenities: Complimentary wireless high-speed Internet access; Sweet Dreams® by Doubletree sleep experience with plush-top mattress, luxurious linens, down comforter and jumbo pillows; refrigerator and coffee maker with complimentary coffee; hair dryer, iron and ironing board; electronic door locks.

Facilities: Heated indoor/outdoor pool; fitness facility on site; business center with complimentary high-speed Internet access, computer, printer, copier; Ezra’s Grill features an award-winning Sunday brunch, a variety of American favorites, a full bar, and room service; over 6,200 square feet of event space for up to 500 guests.

Services: Complimentary wireless high-speed Internet access throughout the hotel; express check-out; complete conference services staff; professional meeting/event planners; valet cleaning and laundry.

About the Tours

~ Shiloh National Military Park ~
1055 Pittsburgh Landing Road (Highway 22 between Tennessee 57 and US 64); Shiloh, TN 38376; (731) 689-5696; www.nps.gov/shil
For two days in April 1862, Civil War troops clashed in the fields and woods near Pittsburg Landing in the first major battle in the war’s western theater. When the battle ended, General Grant had pushed Southern troops back to their base at Corinth, MS. The battlefield features 152 monuments, 229 cannons, and more than 450 historic tablets. The battlefield tour starts at the visitor center with exhibits and a brief film. The Park will host several special events this year that will offer visitors a unique look at civilian life in and around Pittsburg Landing in the 1860s; infantry, artillery, and cavalry tactical demonstrations; and a glimpse of the military camp life shared by thousands of Civil War soldiers. The Visitor Center/museum/bookstore is open every day from 8 a.m. to 5 p.m.

~ Graceland Platinum Tour ~
Ticket Office: 3765 Elvis Presley Blvd., Memphis, TN 38116; 800-238-2000 (toll-free in North America);
www.elvis.com/graceland
Elvis Presley’s Graceland in Memphis offers the ultimate rock ‘n’ roll experience for any Elvis or music fan. Explore Elvis’ home and follow his amazing journey to superstardom through exciting videos, personal mementos, displays of authentic clothing, an amazing showcase of awards, and much more. The Platinum Tour offers a great way to enjoy the full Graceland experience.

Experience Life at Graceland Mansion. Enjoy an audio-guided tour featuring commentary by Elvis and his daughter, Lisa Marie, and experience what his life was like at his beloved home. The Graceland Mansion tour includes the Jungle Room, Music Room, Racquetball Building, Meditation Garden, the Hall of Gold with an amazing display of gold and platinum awards, and more.
Cruise Through Elvis' Car Museum. Discover Elvis' love of cars as you stroll down a tree-lined street and see over 33 vehicles owned by Elvis. Highlights include his famous Pink Cadillac, Harley-Davidson motorcycles, Stutz Blackhawks, a 1975 Dino Ferrari, the red MG from Blue Hawaii, two Rolls Royce sedans, a 6-door Mercedes Benz limousine, and his John Deere 4010 tractor.

Board Elvis' Custom Jets. Climb aboard Elvis' customized Lisa Marie airplane which includes a living room, conference room, sitting room, and private bedroom, as well as gold-plated seatbelts, suede chairs, leather-covered tables, and 24-karat gold-flecked sinks. After that, take a glimpse inside Elvis' smaller Lockheed Jetstar, the Hound Dog II.

Explore Elvis Presley: Fashion King. At Graceland Crossing, take a step inside the King of Rock’n’Roll’s closet and explore the fashion trends set by Elvis with his own unique style and custom-made clothing. This new exhibit for 2010 showcases everything from Elvis' handmade shirts and suits to his flashy jewelry and shoes, giving visitors a first-hand look at how to dress like royalty.

~ Casey Jones Railroad Museum ~
56 Casey Jones Lane, Jackson, TN; (731) 668-1223, 800-748-9588; www.caseyjones.com
In April 1900, a brave railroad engineer named John Luther “Casey” Jones sacrificed his life for the lives of his passengers in the now-legendary train wreck just outside Vaughn, Mississippi. Today, Casey Jones Village—one of Tennessee’s top ten tourist attractions—celebrates the life and times of Jackson’s favorite son. Within the Village, visitors can relive the “Steam Age” of railroading by touring the Casey Jones Home and Railroad Museum, featuring the restored home of the engineer himself, as well as a life-size replica of Casey’s 382 locomotive. Open 7 days a week. Small admission fee for Casey Jones Home/Museum.

~ Cypress Grove Nature Park ~
Located four minutes from downtown Jackson on Highway 70 West; (731) 425-8316
Established in 1984 to preserve part of Jackson’s natural river bottom habitat, Cypress Grove consists of 165 acres of Cypress forest and features trails, more than two miles of elevated boardwalk, a pond and a lake, home to various mammals, frogs, fish, turtles, and more than 175 species of birds. The site also features the Aerie Trail Raptor Center, a haven for birds of prey that have been injured and cannot survive on their own in the wild. Restrooms and picnic facilities. Free admission. Open daily April-October 8 a.m.-7:30 p.m.

~ International Rock-a-Billy Hall of Fame & Museum ~
105 N. Church Street, Jackson, TN 38301; (731) 427-6262; E-mail: rock@rockabillyhall.org; www.rockabillyhall.org
Located in Rock-a-Billy Complex, the International Rock-a-Billy Hall of Fame and Museum is a resource center dedicated to preserving and promoting Rock-a-Billy Music. The Hall of Fame recognizes the pioneers of music while the Museum Complex includes the Hall of Fame & Museum, Rock-a-Billy Alley, and Rock-a-Billy Park where a Rock-a-Billy History mural showcases Jackson’s music history and outdoor concerts are held. International Rock-a-Billy Music Festival featuring the pioneers and the developing artists of Rock-a-Billy Music is held each year. Mon-Fri 10 a.m.-4 p.m.; Sat 10 a.m.-2 p.m.

~ Historic Riverside Cemetery ~
Corner of Riverside Drive and Sycamore Street, Jackson, TN 38301; (731) 424-1279
REGISTRATION REQUIREMENTS

Advance Registration is required. Deadline for tour reservations is **August 1, 2011**; deadline for conference, meals and hotel reservations is **August 25, 2011**.

- Save $10 per person off the Conference fee by registering before May 25, 2011.
- Online registration will be available.

PAYMENT TERMS: Full payment is due at the time of reservation. Please make all checks payable to BAA (Bluebirds Across America) and mail with reservation form enclosed. Reservations by phone or online can be processed with a credit card (Visa, MasterCard only please). Please note there is a $20 charge for returned checks or denied credit cards. Please send registration and payment to: BAA/NABS 2011 Registration, P.O. Box 244, Jackson, TN 38302. Reservations will not be accepted without payment. We will send you a confirmation within 6 weeks.

REGISTRATION ON DAY OF EVENT(S): Walk-In registration is available for conference meetings/speakers only. Advance reservations are required for all meals and tours.

HOTEL ROOM RESERVATIONS: Can be made by calling:

Doubletree Hotel directly at 800-222-TREE (credit card required), Group Code: BLU

$89 night + occupancy tax + local tax (taxes subject to change)

CANCELLATION POLICY: All cancellations must be made in writing. Changes to tour reservations must be made no later than August 5, 2011.

RESPONSIBILITIES: Bluebirds Across American and North American Bluebird Society (hereafter referred to as NABS) and Beverly’s World Travel (hereafter referred to as BWT), act as agent in arranging your transportation and/or any tour selections. BAA, NABS and BWT nor any suppliers shall be held liable for personal injury, death, property damage or accident, delay or irregularity arising out of any act or omission of these suppliers. BAA, NABS or BWT, the agent or agency, is acting as a mere agent for suppliers in selling travel-related services or in accepting reservations or bookings for services that are not directly supplied by this travel agency (such as air and ground transportation, hotel accommodations, meals, tours, cruises, etc.) BAA, NABS or BWT, therefore, shall not be responsible for breach of contract or any intentional or careless actions or omissions on part of such suppliers, which result in any loss damage, delay, or injury to you or your travel companions or group members unless the term “guaranteed” is specifically stated in writing on your tickets, invoice, or reservation itinerary. We do not guarantee any of such suppliers’ rates, bookings, reservations, connections, scheduling, or handling of personal effects. BAA, NABS, or BWT shall not be responsible for any injuries, damages, or losses caused to any traveler in connection with terrorist activities, social or labor unrest, mechanical or construction failures or difficulties, diseases, local laws, climatic conditions, criminal acts or abnormal conditions or developments, or any other actions, omissions, or conditions outside BAA, NABS or BWT control. Traveler assumes complete and full responsibility, and hereby releases the agent from any duty of checking and verifying any and all passports, visa, vaccination, or any other entry requirements of each destination, and all safety and security condition at such destinations, during the length of the proposed travel. By embarking on his/her travel, the traveler voluntarily assumes all risks involved in such travel, whether expected or unexpected. Traveler is hereby warned of such risks and is advised to obtain appropriate insurance coverage against them. By making a deposit for the conference hotel, the tour, air, or cruise, traveler acknowledges and accepts these responsibilities and terms and conditions outlined herein. Not responsible for lost/stolen items.

CONTACT INFORMATION:

Bluebirds Across America: President: Farrell Roe (731) 424-6161 Email: ROERockingR@aol.com
Registrar: Ann Dowdy (731) 423-3880
Travel Agent/Tour/Hotel/Air: Beverly’s World Travel (731) 423-0434
Advance registration is required. Deadline for tour reservations is **August 1, 2011**; deadline for conference, meals and hotel reservations is **August 25, 2011**.

Save $10 per person off registration fee of $60 when you register before May 25, 2011.

Payment by check or money order ______ forward to Bluebirds Across America, P O Box 244, Jackson, TN 38302

- or -

Please have BAA charge the following credit card in the amount of $____________________

Card type: VISA MC Card Number__________________________ Exp. Date ______ SEC Code ______

Name of card holder (On card) _____________________________________________________________

Card holder billing address (if different from below)___________________________________________

Indicate your name(s) as desired on your badge:

REGISTRANT#1 __________________________________________________________________________

ADDRESS ______________________________ CITY___________________ STATE______ ZIP___________

PHONE: DAY (____)______________ EVE (____)______________ EMAIL_____________________________

I would like to be recognized as:

___1st Timer  ___ NABS Board Member  ___ Attendee of 10+ Conferences
___ Former Board Member  ___ Affiliate Board Member  ___ Affiliate Member  ___ Other

Is it OK to release your name to: other attendees? Yes No vendors? Yes No

REGISTRANT#2 __________________________________________________________________________

ADDRESS ______________________________ CITY___________________ STATE______ ZIP___________

PHONE: DAY (____)______________ EVE (____)______________ EMAIL_____________________________

I would like to be recognized as:

___1st Timer  ___ NABS Board Member  ___ Attendee of 10+ Conferences
___ Former Board Member  ___ Affiliate Board Member  ___ Affiliate Member  ___ Other

Is it OK to release your name to: other attendees? Yes No vendors? Yes No

____Yes, I would like to volunteer for the conference:

Name____________________________ Interests_________________________ Date available_________

Please complete both sides of this registration form
33rd Annual North American Bluebird Society Conference
September 15-18, 2011

I/We have received the terms of payment, cancellation and responsibility flyer regarding the 33rd Annual North American Bluebird Society Conference for September 15-18, 2011 in Jackson, Tennessee. Please confirm the following for registrants indicated above.

CONFERENCE ATTENDANCE

<table>
<thead>
<tr>
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<th>#PEOPLE</th>
<th>X RATE</th>
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<tr>
<td>__ 1-4 Days @$60*</td>
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* $50 if registered by May 25, 2011

Special notes to conference registrar: ____________________________________________________

__ I do not need hotel reservations.
__ I made my reservations directly to the Doubletree Hotel in Jackson, Tennessee.

Arrival Date ___________ # nights ______

NABS 2011 TOURS/MEALS

THURSDAY 9-15-11

__ Casey Jones Railroad Museum and Cypress Grove Nature Park 1PM-4PM@$30
  ___ # X $30 = $____

__ Buffet Dinner at the Hotel 7PM @ $30 per person
  ___ # X $30 = $____

FRIDAY 9-16-11

__ Tour Buffet Breakfast 7AM @ $15 per person
  ___ # X $15 = $____

__ Shiloh Battlefield tour 8:30AM-4PM @ $50 per person w/lunch __Turkey__Ham
  ___ # X $50 = $____

__ Platinum Graceland tour 8:00AM-4PM @ $72 per person w/lunch __Meat __Salad
  ___ # X $72 = $____

__ President’s Dinner 7:00PM @ $30 per person
  ___ # X $30 = $____

SATURDAY 9-17-11

__ Old Timers Bluebird Breakfast 7:30AM @ $15 per person
  ___ # X $15 = $____

__ Buffet Lunch at Hotel 12Noon @ $22 per person
  ___ # X $22 = $____

__ Banquet Dinner at Hotel 7:00PM @ $30 per person. Choice: Salmon__Pork Chop__
  ___ # X $30 = $____

TOTAL PAYMENT (US CURRENCY) $____

If you would like to donate an auction item please indicate here:

DONOR’S NAME ________________________________ ITEM __________________ VALUE $________

I WILL BRING OR MAIL ITEM (CIRCLE ONE) — Mail to BAA, P.O. Box 244, Jackson, TN 38302

NOTE: Items must be received at the conference no later than Saturday September 17, 2011

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INTRODUCTION
Disturbance has played a major role in structuring and maintaining diversity within many ecological communities (Bond et al. 2005). Generally, disturbance can support diversity by creating a mosaic of habitats or successional stages within a landscape (Askins 2001, Brawn et al. 2001). In an effort to restore diversity and ecological function, many land stewardship plans now call for the increased use of prescribed fire in southeastern pine forests. However, the effects of restoring fire within these forest systems on wildlife are largely unknown. Thus, questions such as appropriate application of fire intensity and intervals between fires remain.

Many bird species may benefit from the return of fire to the southeastern pine forests. These species include Bachman’s Sparrow, Northern Bobwhite, Red-cockaded Woodpecker, Prairie Warbler, and Golden-winged Warbler (Hunter et al. 2001). However, for many species relationships with fire may not be clearly positive or negative (Lang et al. 2002, Tomcho et al. 2006). This ambiguity suggests that it might be difficult to detect relationships with all members of an avian community. Thus, the application of fire should be based on understanding current forest conditions, historical disturbance regimes, and desired ecological endpoints for individual species.

Within a species, variation in habitat use is often associated with differences in fitness components (Fretwell and Lucas 1970). The ability to maximize reproductive potential is a key life-history trait that can carry important fitness consequences (Sockman et al. 2006). Birds can adjust the magnitude and pattern of their breeding effort to environmental conditions by adjusting reproductive investments such as clutch and egg size. Further, experiments have shown that birds breeding in prey-poor habitat may spend more time off nests, allocating additional time to foraging (Ardia and Clotfelter 2006). Consequently, changes in habitat can affect the reproductive investment and productivity of individuals within that habitat (Mänd et al. 2005).

The Eastern Bluebird is a ground-feeding and cavity-nesting species that forages in open habitats with little or no ground cover (Gowaty et al. 1998). This species occurs in abundance across an array of habitats that were historically influenced by differing fire regimes. Thus, this species has likely evolved an array of reproductive strategies for dealing with the dramatic temporal and spatial heterogeneity found in its habitat after a fire. However, the success of efforts to restore and maintain high-quality habitat for Eastern Bluebirds requires an understanding of how vital rates respond to habitat management. Much of this information is currently unknown. Our research investigates how variations in fire regime can affect Eastern Bluebird reproductive traits in the pine forest of the southeastern United States. Specific objectives of the present study are: 1) to examine variation in egg and clutch size of Eastern Bluebirds relative to a 2-year fire regime, and 2) evaluate differences in parental investment measured as incubation constancy, or the amount of time females spend incubating eggs. This project was initiated in 2009. During the second year of this project (2010) we obtained a research grant from the North American Bluebird Society. While this project is ongoing, preliminary results are presented here.

METHODS
We monitored Eastern Bluebird nestboxes at the 1,500-acre Wehle Forever Wild Tract in Bullock County, Alabama (N32.036°, W-85.475°), a property purchased for land conservation and public usage. It is located in the Southeastern Plains ecoregion of Alabama and is characterized by open short-leaf pine (Pinus echinata) forested uplands with pine/hardwood bottomlands. Nestboxes have been in place on the tract for many years prior to Forever Wild’s (Alabama’s land trust program) acquisition in the early 1990s.

During 2009 and 2010, we monitored nestboxes at least once every 10 days. All boxes were labeled with a unique number allowing for organized data recording. The basic information recorded during nest checks included the number of eggs and/or chicks present and the ultimate fate of the nest (e.g. fledged, depredated, abandoned). A nest attempt was defined as a nest...
having at least one egg or young or the presence of broken eggs or dead young. If a nest was successful, it would often contain dried fecal material in the nest and on the sides of the box as well as a powder residue from the feather sheaths of the nestlings. If a fate could not be determined, which often occurred when extended time passed between nest checks, it was given an “Unknown” fate. Nestboxes were cleaned at the end of each nest attempt.

We divided nestboxes into two treatments for analysis: unburned and burned. The upland pine forests have generally been burned on a two-year rotation in recent years. The variables measured to detect potential differences in reproductive investment between treatments were clutch size, egg volume, and time allotment to incubation. We recorded clutch size for a nest only when we were certain it had a full clutch. In order to calculate egg volume, we used digital calipers to measure the length and width of the eggs. Egg size was estimated in (cm3), based on the measurements of the length and width and applying Hoyt’s (1979) formula: egg size = 0.51 * length * width2. After the eggs were measured they were immediately returned to the nest within approximately one minute.

To measure time allotment to incubation, we placed temperature data-loggers (Thermocron iButtons: Maxim Direct, Healdsburg, CA) in the cup of the nest, underneath the eggs. We ensured the iButton was not obstructing the resting egg clutch by burying it slightly within the nest itself, so the top of the iButton was flush with the bottom lining of the cup. At the beginning of the season, iButtons were set to record at 30 second intervals, giving nearly three days of data before memory was at full capacity. Later in the season, time intervals were lengthened to 60 seconds providing nearly six days of data. We also video recorded a sub-sample of nests containing iButtons to verify the temperature readings corresponded with our interpretations of the changes in temperature in relation to actual adult activity. These data will be analyzed to determine the proportion of time females spent off the nest foraging compared to the time spent incubating, a possible indicator of habitat quality.

RESULTS
We monitored nestboxes for 19 days in 2009 (22 March to 11 August) and 24 days in 2010 (9 April to 2 August). In both the burned and unburned treatments, a total of 126 boxes were monitored in 2009 and 109 in 2010. The number of young confirmed fledged was higher in the unburned than in the burned, with 169 and 110 fledged bluebirds, respectively (Table 1).

The mean clutch size for the burned treatment was 4.18 (n=56) while the unburned was 4.23 (n=75). After accounting for annual and seasonal differences mean clutch size did not differ between burned sites and those sites that were unburned. The mean volume of bluebird eggs was however significantly larger in unburned sites (2.8 cm3) than in burned sites (2.7 cm3).

We collected a total of 84 temperature readings from iButtons in 2010---54 readings (64%) from the unburned treatment and 30 (36%) from the burned treatments. Analysis of the iButton data is pending, but Figure 1 provides an example of the temperature data collected from within the boxes (see Discussion below).

DISCUSSION
After adjusting for seasonal effects, we found that egg volume was significantly larger in the unburned treatment. The difference in egg volume between these burned and unburned treatments, independent of year, provides evidence that fire regime, and subsequent habitat characteristics may affect this
species’ reproductive potential. While additional research is needed to identify the specific drivers involved we believe that habitat differences may translate into reproductive constraints whereby females breeding in recently burned habitat may incubate for shorter periods of time, spending significant time off nests searching for food. This hypothesis and others are being explored through the ongoing analysis of the iButton data collected in 2010 and additional research planned for the summer of 2011.

Our ongoing analysis of data collected by the iButtons deployed in 2010 has already begun to show some interesting patterns. For instance, Figure 1 provides an example of the data collected with the iButton sensors. This result provides a glimpse into the Eastern Bluebird egg-laying process from start to finish. When the iButton was inserted, the completed nest was empty with anticipation that the female would be laying soon. Initially, only the ambient temperature inside the box was recorded. During the egg laying process, the relatively smooth curve of the ambient temperature is interrupted by spikes in temperature from short visits by the female to lay eggs. Eastern Bluebirds lay one egg per day often in the morning (Gowaty et al. 1998). By the onset of incubation (typically when the ultimate or penultimate egg is laid), the curve becomes less varied as she remains on the nest extensively. It is not completely clear if the female reflected in Figure 1 fully started incubating on the 17th. There may have been a “settling in” period where she did not fully commit to incubation until the 18th. Also note the large dip in temperature on the morning of the 18th. This is typical of a long foraging bout common in the early morning hours. This nesting attempt was ultimately successful, with four young fledged.


<table>
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<tr>
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<td>Confirmed young fledged</td>
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<tr>
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</tr>
<tr>
<td>Egg volume</td>
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ACKNOWLEDGEMENTS
We would like to thank the North American Bluebird Society for awarding a grant to SR that supported the purchase of materials needed for this research. Additional funding and equipment was provided by the Alabama State Lands Division.
LITERATURE CITED


For more information contact: John Trent, AL State Lands Division, 64 N. Union St., Montgomery, AL 36104. e-mail: john.trent@dcnr.alabama.gov

John Trent has been a Biologist for the Alabama State Lands Division since 2007. He received his B.S. degree from the University of Tennessee at Knoxville in Wildlife & Fisheries Science.

Scott Rush is currently a post-doctoral fellow at the University of Windsor’s Great Lakes Institute for Environmental Research, Windsor, Ontario. Since completing his Ph.D. at the University of Georgia in 2009, Scott’s research has focused on the structure and organization of ecological communities across both terrestrial and aquatic landscapes.

Eric Soehren attended Jacksonville State University in northeast Alabama for both his Bachelor’s and Master’s degrees in Biology. He has been with the Alabama Department of Conservation and Natural Resource’s State Lands Division since 1997 as a Terrestrial Zoologist for the Natural Heritage Section. Some of his responsibilities include conducting field surveys for rare and poorly known faunal species, wildlife restoration initiatives, and numerous nongame monitoring and research projects, all on conservation lands acquired through Alabama’s Forever Wild Land Trust Program.
The practice of pairing boxes for native cavity nesting birds is not a new one. Traditionally, boxes are spaced 12–15 feet apart to accommodate Eastern Bluebirds (EABL) and Tree Swallows (TRES). When the birds cooperate, this is a beautiful thing. They work in tandem to defend both nestboxes. If EABL are off the nest feeding, the TRES will sound the alarm and attack any nestbox intruders. EABL will do the same. Unfortunately, these two species do not always cooperate.

More aggressive, territorial EABL will oftentimes thwart a TRES attempt to inhabit the paired box and House Sparrows (HOSP) take it. Other times, TRES may inhabit a box and find themselves with HOSP neighbors. Nonnative, aggressive HOSP nesting this close to any desirable native cavity nester seems a risky proposition, but can be dealt with effectively.

When HOSP claim a paired box, one’s first instinct may be to decry the paired-box concept altogether, but you have to realize that HOSP will attempt to claim your nestboxes regardless of whether they are paired or not. If EABL or TRES occupy an isolated box without an empty one nearby, HOSP will attempt to usurp this box. In doing so, they often corner and kill the adult birds, their eggs, and/or young. With an empty paired box next door, they are much more likely to try to use this one rather than expend the energy necessary to fight their native neighbor. I view a paired box as an added line of defense in the HOSP wars, but how you proceed once they are there is tricky. Your action or inaction can result in success or disaster.

What works? The very best course of action, as soon as a HOSP is seen in or on a nestbox, is to trap him/her with an inbox trap. The Van Ert Universal Sparrow trap is a wonderful tool to have in your arsenal (www.vanerttraps.com). Trapped HOSP should be humanely dispatched and the trap reset if you have seen evidence of a mate near the nestbox. The male HOSP generally claims the nestbox, and you can sometimes trap him before he attracts a mate. As soon as the male is dispatched, trap is removed, nestbox is scraped clean and ready for a desirable native cavity-nesting bird or for the next HOSP that tries to use it. This is the way I manage all my paired nestboxes on my trails and I have never had any problems with “retaliation.” Once the HOSP is gone, the threat is gone.

If you cannot bring yourself to trap HOSP, another more risky method is to allow the HOSP to nest, but render their eggs nonviable. I did experiment with this method one season when I was new to bluebirding. My favorite way of rendering eggs nonviable is to take half the clutch, mark eggs with permanent marker (so you know which ones are nonviable), and refrigerate them for at least 24 hours. Now remove the remainder of HOSP clutch and replace it with the nonviable eggs. Make sure to allow eggs to warm back up to room temperature or a little above so female does not realize they are cold when she sits on them. You can warm them in your hands. Monitor the box weekly and remove any new, unmarked eggs, replacing them with your marked nonviable refrigerated ones as you like. I have had HOSP sit on a nest for a month before realizing the clutch is nonviable. Of course, once they realize this, they will abandon the box and nest elsewhere, raising a successful brood and they can cause you problems in the future.

There are other methods for rendering HOSP eggs nonviable. Although freezing eggs works, I do not recommend this because recently laid eggs with high water content will crack when frozen. Shaking the eggs is unreliable. Piercing eggs with a pin or finger lance is effective if you make sure the pin goes into center and you pierce the yolk with it, but this method often results in egg contents leaking into nest and HOSP abandoning for a more successful (box next door?) nesting site.

I have also heard of people having success replacing HOSP eggs with plastic craft eggs that look similar to theirs. Whether or not they will accept these or realize something is amiss, I cannot say for sure as I have never tried it myself. I have used plastic craft eggs as a trapping tool, however. HOSP will actually try to remove these from the nest if they have not started their clutch yet.

What doesn’t work? Pulling nests and/or eggs is a standard method of...
discouraging HOSP, but I do not recommend it. The theory is that removing the nest and eggs will drive them away from your nestboxes. This does happen in some instances, but for the most part, HOSP are extremely tenacious and will not abandon the box for quite some time, rebuilding their nest again and again. At some point, they will finally abandon the site, but will successfully nest somewhere near. They may return, along with their breeding-age young, to your nestboxes next year.

My mentor, Darlene Sillick, and I conducted a limited experiment on a paired-box trail one spring where we pulled HOSP nests and discontinued inbox trapping of HOSP. Nestboxes were checked every seven days. For the first month or so, HOSP left their TRES or EABL neighbor alone. After about a month, HOSP stepped up their nesting timetable, building an entire nest and laying eggs in a week’s time. Once we began removing nests and eggs, they killed the adult TRES and young in the adjacent paired nestboxes. The term “retaliation” is often used to describe this behavior, but I believe as nesting season wore on, they saw their nestbox was unsuccessful and observed the adjacent bird’s box was successful. Testosterone levels were soaring and aggressive response was inevitable. I will say that during field observations of HOSP/TRES and HOSP/EABL interactions, EABL are much better at defending their lives and their nestboxes than TRES are. Their superior size and direct flight path makes them a formidable foe against a marauding HOSP.

Another common mistake is when people leave the HOSP alone in fear that they will “retaliate” or because they do not believe HOSP are a problem. This is the very worst course of action. It is very important that you never let them raise a family, as the HOSP and their young will return the following nesting season to use your nestboxes. Allowing HOSP to propagate is a recipe for disaster as native cavity nesters will abandon your nestboxes for safer nesting sites.

If native cavity nesters are successful raising young in your nestboxes, they will return to nest with you brood after brood, season after season. If they are unsuccessful, they will not. The same rule applies for HOSP with the exception that new pairs will be an ongoing problem, even with trapping. However, with active HOSP control, you will see an impressive decrease in their numbers in a very short time.

Paula Ziebarth is the Delaware County Area Contact for the Ohio Bluebird Society. She monitors a number of Eastern Bluebird and Tree Swallow trails in central Ohio. On summer weekends, you will find her on South Bass Island on Lake Erie enjoying the Purple Martins and Tree Swallows.

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Bluebirds Everywhere

“Bluebirds Everywhere” is a feature that celebrates the widespread and creative uses of bluebird images and the word itself. We invite you to submit your own images and ideas — simply e-mail them to me at NABSEditor@gmail.com or mail them to me at 5405 Villa View Dr., Farmington, NM 87402. Let’s see what bluebirds you can find!

The Vought VE-7 Bluebird biplane was built as a two-seat trainer for the U.S. Army in World War I; a single-seat version was adopted by the U.S. Navy as its first fighter plane. It was the first plane to successfully take off from a U.S. Navy aircraft carrier. This photo shows a Bluebird with Brigadier General Billy Mitchell, considered to be the “father” of the U.S. Air Force.

Tom Comfort of Bellaire, MI shows his support for bluebirds, and for Bet Zimmerman’s excellent website, with his license plate and white “backer” plate.

Don’t Forget International Migratory Bird Day

International Migratory Bird Day (IMBD) is an annual event in the Americas to celebrate birds—especially migratory birds and their seasonal movements between their breeding grounds and wintering grounds. IMBD is typically celebrated on the second Saturday in May (which is May 14th this year), but events are held throughout the spring to coincide with local peaks of migration. Look for events scheduled in your area, or ideas for hosting your own event, on the IMBD website (www.birdday.org).

NABS member Jim Prenger of Jefferson City, MO sent this tasty photo. According to the Blue Bird bakery website, the brand dates back to 1923 and includes cookies, snack cakes, and Danish. The brand is available in the Southeast, Southwest, and mid-Atlantic states.
Hanging above the bed in my bluebird room is a needlepoint picture of four bluebirds sitting on a wire. Three of the birds are facing me, the other one is facing away from me, looking like it is ready to fly away. The birds' feathers are a turquoise color, like a September sky and their breasts are the color of ripe peaches. The words on the needlepoint are these: “To love and be loved is the greatest joy on earth.”

I started to work on that needlepoint in 1982 while I was sitting in a hospital room at the bedside of my five year old son. I needed something to do with my hands while I sat and watched the toxic chemotherapy drugs dripped into his veins. With every stitch I made, I prayed. My prayers were desperate, heart wrenching prayers.

When I found that pattern, I stood with tears streaming down my face and looked at it for a long time. It reminded me of my four children. In my heart I knew the little bird in the picture getting ready to fly was like my son. Soon, he would take off and fly heavenward from me. The other three little birds on the wire were like my little girls who were eight, six, and eighteen months at the time. They would be left behind.

I worked on the picture for several months, and then my son did fly away. The picture went into a drawer as I struggled with my grief and tried to put our family back together for our three little girls. But that wasn’t the end of bluebirds for me.

Several years later, I came across the picture again and decided to finish it and frame it. As I worked on it, I wondered if there really were birds with feathers that brightly colored. I had never been a bird watcher, so how would I know? Or were they fictional, like the ones I saw in my little girl’s story books?

Working afresh on the picture also reminded me of those precious last days with my son. It reminded me that loving and being loved by him and my daughters has been my life’s greatest joy. I hung the tear-stained picture on my kitchen wall when it was finished. It stayed there for years.

Fifteen years passed and then it was Mother’s Day 1997. The day had been a good one. Two of my daughters were with me and the other one was 1800 miles away, getting ready to bring my second grandchild, a little boy this time, into our lives. As I sat at my kitchen table that evening, I thought about how blessed I was to have three wonderful daughters. They had grown up smart, beautiful, sensitive, and kind. But here they were, all grown up, and my nest was about to be completely empty.

My mind wandered back over the years and, as always, it floated back to my “other child.” Like so many times before, I wondered what he would have looked like, what he would be doing now, what kind of man he would have grown up to be. Fifteen years after his death, the tears still ran down my cheeks. I always miss him so much on Mother’s Day.

As I wiped the tears away, I looked up, and sitting on my deck railing, not six feet from my kitchen window was the bird from my picture. At first I thought it was a robin and my tears were making it look more colorful, but the colors were real. I looked up at the picture on the wall and then at the bird on my deck railing. They were the same! I could not move as I watched it on the rail. My first thought was that on this Mother’s Day, God and my son had sent me a special gift of comfort. It was like he was saying, “It’s okay Mom. No matter where I am, I will always love you.”

The summer before, my husband had bought me a rough looking little bird house at an auction just because I liked birdhouses and he put it on a pole beside my deck. As I watched the bird, he hopped around a little, and then began to explore that bird house. I had no idea what was about to happen right in front of my eyes, but that little bird had lofty ideas for that house and he was about to teach me some lessons about loving and living.

After a few minutes, he flew away and I went immediately to the computer and began to search for information about birds with brilliant blue feathers. I discovered that he was an Eastern Bluebird and they were rarely seen. In fact, for a time, their population had dwindled to a dangerously low level. An organization called the North American Bluebird Society was doing all it could to help preserve the Eastern Bluebird and they were coming back. The box I had was built of cypress wood, specifically for bluebirds, and we didn’t even know it.

I wondered all night if that bird had just been a Mother’s Day gift to me or if he would return. The next morning, I was back at my kitchen table, drinking my coffee and I saw my bird fly to the house again. Once again, he went in and out of it. Then he settled on top of it this time and began to sing. My kitchen window was open and his song was like no other that I had ever heard. He didn’t chirp, his song was a warble.
Then I saw her, drawn by the sound of his love song. Her colors were not as bright. Her feathers were a bluish gray in color but she had that same peach colored breast. Then it was her turn to go in and out of the box. He sat and watched her. Was she pleased with the home he had found for them? Then together they flew away.

Not knowing the habits of the bluebird I did not know what to expect, but in the days to follow I learned not only about bluebirds but a lesson about life and how God had created every living creature with similar habits and instincts.

Momma and Daddy Bluebird must have decided that the cypress house was an appropriate spot to begin new life and with in a few days they began to bring in grass. They were diligent, focused, determined. I watched one day as a sparrow tried to claim the box. It was all-out war that day and in the end, my bluebirds won. Several days later, the nest was completed.

The bluebird house has a lift-up lid on it. After reading about the bluebird, I discovered that they are not only willing to let you help them, they welcome it. One day I lifted the lid and peeked in.

What I saw was a teacup-size nest of soft grass, with two little blue eggs in it. Daily, I watched, fascinated, until there were four eggs. Then the wait began.

Momma bluebird sat on that nest with the patience that only a mother has. Daddy bluebird did what every good, expectant dad should do. He sat in a tree nearby, singing his love song to her and bringing her food.

One day, they both flew away, so I peeked again. Inside, I saw four little orange beaks at the end of four very long necks. They were eagerly waiting for lunch. Day after day the parents came and went, working tirelessly to feed and care for their little ones. I had read that bluebirds are partial to mealworms so I sent my husband out to the pet store to buy some. I couldn’t go; I was babysitting for the bluebirds! I was just one mom helping another.

About three weeks later, while sitting at my kitchen table drinking my coffee and watching the morning activity around the bluebird house, I saw a little head peek out of the hole. It was one of the babies. I wanted to tell the little bird to go back inside the house where it was safe and Momma and Daddy would feed and protect it. The world held all kinds of dangers for her and I wanted her to be safe. But even if I could have spoken her language, she would not have listened. She had a world to explore! Within a couple of days all of them were gone --- Mom, Dad, and babies. My nest was empty again!

I watched the sky in the days that followed their departure. Occasionally I would get a glimpse of a blue wing, but that was all. It was okay, the bluebirds had left their nest and were flying as God had created them to do!

After the bluebird family left, I wondered if I would ever see them again. Thirteen years have passed and every year right around Mother’s Day I see the flash of blue wings and know that my bluebirds have come home again. They are not the same birds as that first year, but the children, grandchildren, and by now the great-grandchildren!

The birds aren’t the only ones who come home to me on Mother’s Day now! This year, I had eight grandbabies come home too. I love babies and bluebirds. When they are all around, I am at my happiest. When the bluebirds are here, they not only bring me joy but they teach me lessons about life. Lessons that I can pass on to my grandbabies. One year a blackbird got into the nest and destroyed the eggs. I will never forget the sound of those parents as they fluttered around their nest, protesting the unfairness of life as the blackbird was inside destroying those eggs. That summer they produced a second nest of eggs, so life could go on. We made sure that the hole of the bluebird house was made smaller so the blackbird would never again destroy our baby birds.

Some years the bluebirds remind me of the people who come into our lives for no other reason than to renew our spirits for a season. Or perhaps so we can help renew theirs!

Every year, it seems like I need my bluebirds for a different reason too. On this Mother’s Day, as I sit and think about my mom and my son who are both gone, I need the bluebirds to come and remind me that people like bluebirds come into our lives, and sometimes leave before we are ready for them to. But when they leave, we have memories of the joy they gave us.

Last summer, the bluebirds gave me the ultimate experience! On a clear sunny day, I opened the bluebird house. I picked up a tiny baby bluebird, and placed it into the open palm of one my grandchildren. Five other grandchildren looked on.
with awe and wonderment on their faces as we all experienced one of my life’s most precious treasures.

Today, I sit at my kitchen table and watch three of my granddaughters and a little white haired grandson with blue eyes stand on chairs at the kitchen window. They are watching and giggling as Momma and Daddy bluebird fly in and out of the box. I am in my own little paradise of babies and bluebirds. God has blessed me more that I ever expected. In return for His blessings, I intend to make sure that my grandchildren know that God delights in us, just like we delight in our bluebirds.

Brenda Young and her husband Ed have been married for 39 years and have lived in the same house for 36 of those. They are parents to four children, a son Jason who died in 1983 and three daughters. They are grandparents to eight. Brenda has been a registered nurse for forty years and has worked the past seven as a hospice nurse—a career she describes as “wonderful.” In addition to watching her bluebirds, she loves to play with her grandkids, read, write, and go hiking. She is currently writing a monthly column for a local women’s magazine and working on a book of short stories.

God’s World is Blue Today
Roger Brock

Early Spring.
Time for the pair to find a home
Both look at the box and all around
Has to be perfect for the young ones
Looks good – need to claim this one
Back later to build the nest
A few weeks pass
Both parents arrive
So busy
Beaks filled with pine straw
In an out of the box
Like a blur really
No time to stop for food
We can finish this today
Get this process started
Nature’s ritual
What birds do
Flashes of blue everywhere
Both mom & dad sharing the load
An inspiration to us all
Hard work & family are important
Instinct, yes; programmed, yes;
a thing of beauty and wonder, yes
The bluebirds are here again
and this time to stay
God’s world is blue today.
Research Review
A Summary of Recent Scientific Research on Bluebirds and Other Cavity Nesters
Scott W. Gillihan

The downside of living close to your parents

The Brown-headed Nuthatch is a cavity-nesting species found in pine forests of the American Southeast. Populations of the species have been in decline for some time. It needs large, old, long-leaf pines for its foraging and nesting (only large trees can provide an adequate nest cavity), but large, old, long-leaf pines are a valuable timber resource, so they are cut for lumber. Additionally, fire suppression by landowners and land managers has allowed the growth of dense stands of small pines and hardwoods, which do not meet the habitat needs of the nuthatch. Both logging and fire suppression have reduced the availability of large snags, which are an important source of nest cavities.

But there’s a second factor in play, which could compound the problems of habitat loss. The nuthatch is a cooperative breeder, which means that a young, unmated male “helper” often assists a mated pair by helping build the nest and keep it clean, and provide food to nestlings and fledglings. Species that are tied to a specific habitat type and employ cooperative breeding usually do not move far from home. After young male nuthatches grow up, they establish a territory within 300 meters (about 330 yards) of their parents’ territory; females move a bit farther, but still only about 1500 meters (about 1600 yards).

This lack of long-distance dispersal could be contributing to the species’ decline. As stands of large pines are cut, Brown-headed Nuthatch populations may become more isolated from each other. Isolated populations are at a higher risk of being wiped out by extreme weather events or by a lack of genetic diversity. And, once a local population dies off, it’s unlikely that nuthatches will disperse far enough from healthy populations to recolonize vacant areas.

The best hope for the species is for land managers to maintain large tracts of healthy old pine forest, with the tracts close enough together that dispersing nuthatches will find suitable habitat and mates from other, genetically distinct populations. The alternative is the costly capture and relocation of nuthatches into suitable unoccupied habitat, a process that would need to be repeated on a regular basis to ensure a thorough mixing of genes.


Do birds alter their alarm calls according to the threat they face?

Most of us have seen hungry birds at our feeders, grabbing a seed or two while remaining vigilant for threats. Among the most common visitors to feeders are cavity-nesting chickadees, titmice, and nuthatches, which often come to a feeder together. These species, like many others, sound an alarm call when they see a predator nearby. See a predator, sound the alarm. Simple, right? But like so many other things in nature, the details about that alarm call are more complex than one might think.

A typical songbird alarm call is high-pitched and short, often just a single “chip”, which sends a clear signal to other songbirds about the presence of a threat but is difficult for a predator to locate. (Any birder who has ever tried to locate a chipping bird in thick vegetation can commiserate.) On the other hand, a typical mobbing call is low-pitched and longer—these types of calls are easier for other birds to locate, which is what they want since this is a call for help, a plea to other songbirds to come together to drive off a predator.

The authors of this study recorded calls made by Carolina Chickadees, Tufted Titmice, and White-breasted Nuthatches in the presence of either a Cooper’s Hawk model or a Mourning Dove model. The chickadees and titmice both called more frequently and at a higher pitch when the “hawk” was near the feeder than when the “dove” was, and some of the acoustic qualities of their calls changed again when the “hawk” was placed closer to the feeder. Surprisingly, the nuthatches never changed the
tone or frequency of their calls. The authors proposed three explanations:

- Chickadees and titmice are “core” species in winter flocks—nuthatches and other songbird species follow them around while foraging, presumably to take advantage of their distinctive alarm calls, which provide more information about the type of threat and its proximity.
- Chickadees spend much of the year interacting with each other in complex social groups. Such interaction would require a complex vocal “language,” which is also useful for sending different alarms for different threats. Nuthatches, on the other hand, spend most of the year in pairs and do not engage in the complex social interactions of chickadees. As a result, they never developed a complex “language.”
- Nuthatches don’t bother to change their calls when chickadees and titmice are nearby, because those species do a better job of communicating the threat anyway.


**What’s happening to populations of birds that feed on flying insects?**

Something strange happened in the mid 1980s, which triggered declines in populations of aerial insectivores that continued through at least 2006. Whatever it was, it has had a devastating effect on populations of nighthawks, swifts, swallows, and flycatchers, including cavity-nesting species such as Purple Martin, Tree Swallow, and Violet-green Swallow. This group of birds, as a whole, has experienced significantly steeper declines than other songbirds during the same period. The declines are more prevalent in northeastern North America, and among species that migrate to South America.

The authors propose three possible explanations:

**Acid rain.** The Northeast is a region of heavy industrial activity and the pollution that accompanies it. Atmospheric pollutants fall to earth as acid rain, which reduces soil calcium. Lower calcium in the environment results in fewer aquatic insects, an important food source for these birds.

**Climate change.** Variation in large-scale climate factors, such as the Pacific’s El Niño Southern Oscillation and the North Atlantic Oscillation, has been shown to affect bird populations, but these effects are complex and not well understood. One demonstrated outcome is a shift in the life cycles of flying insects such that they may no longer be abundant when birds need them for feeding young.

**South American pesticide use.** Organochlorine pesticides are extremely toxic to birds. Such pesticides are widely used in South America, and could be causing bird deaths through direct exposure or by limiting insect prey populations.

However, none of these factors changed markedly in the mid 1980s, when the bird populations started to nosedive. Whatever it is that’s causing the declines remains a mystery.


**What happens to bluebirds that survive West Nile Virus infection?**

When West Nile Virus (WNV) first appeared in North America in 1999, all the news about its effects on birds was grim. Populations of the hardest-hit species, like American Crows and Blue Jays, started dropping right away. Even bluebirds were affected—Eastern Bluebird populations very clearly declined across their range after WNV appeared.

Over time, we learned that WNV exposure is not automatically a death sentence for birds. Some birds exposed to WNV may become ill but not die. The authors of this study examined the “sublethal” effects of WNV on bluebirds by comparing nesting success and long-term survival of bluebirds that had survived WNV infection with those that had never had it.

As it turns out, being exposed to WNV has no negative effect on either nesting success or long-term survival. In the words of the authors, “If an Eastern Bluebird is not killed by exposure to WNV, it appears to make a full recovery.” This is very good news, and a marked contrast to the dire forecasts that accompanied the initial news about WNV.

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 and NABSeditor@gmail.com with correct information.

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