

OKLAHOMA NESTBOX PROJECT

Summary for the 2010 Season



Photo taken by Ann Freeman of Elk City. Thanks Ms. Freeman!

Lands and Wildlife Diversity Program

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INTRODUCTION

The Oklahoma Nestbox Trails Project was initiated in 1985 to enhance habitat for cavity-nesting birds in Oklahoma and reverse the population decline noted for the Eastern Bluebird (*Sialia sialis*). The project depends entirely upon volunteers to place the boxes in suitable habitat, monitor usage, control competition from House Sparrows, alleviate predation problems and report the nesting season's results. The Oklahoma Department of Wildlife Conservation's Wildlife Diversity Program would like to especially give credit to those trail reporters who take the time and have the dedication to establish extensive trails and report on them. The database of the Oklahoma Nestbox Trail Project provides a "window" into the conservation of cavity-nesters particularly bluebirds in Oklahoma.

The Wildlife Diversity Program would also like to express our sincere gratitude to the **Oklahoma Bluebird Society** (OBS) for promoting bluebird conservation in Oklahoma. Many of the bluebird nestbox reports we received for the 2010 breeding season listed they were affiliated with OBS. If you wish to learn more about bluebirds please consider joining this important conservation organization. They have already made a significant contribution to conservation by encouraging trail monitors to provide us with their data. Membership includes receiving their excellent newsletter, *The Hole Story*, which provides good information about monitoring bluebird nesting activities and habitat enhancement. Heart-warming stories provided by members will offer inspiration!

The staff of the Oklahoma Wildlife Diversity Program wishes to extend our sincerest "thank you" to all trail monitors who know the work, the joy and the frustrations of maintaining a bluebird trail. Last year one of our trail monitors who had been working for bluebird conservation since 1989 passed away. His wife has now taken up the responsibility of monitoring the bluebird trail which includes 9 nest boxes. This is an example of the passion our trail monitors have for bluebird conservation and how their passion is passed on! Thank you for helping bring back the Eastern Bluebird.

RESULTS

The number of nestbox trail reports received for the 2010 breeding season (25) reflected a decrease from the 2009 (35). Accordingly, the number of nestboxes monitored decreased (471) as compared to 2009 (488). Twelve (12) counties are represented for the 2010 breeding season, a decrease over the 18 counties in 2009. Table 1 provides a ten year comparison (2000-2010) of survey results. Please note that the comparison focuses primarily on Eastern Bluebird breeding activities.

The top four species in frequency of nesting attempts and occurrence on trails were the **Eastern Bluebird, Carolina Chickadee, Tufted Titmouse** and for the first time the **Tree Swallow**. Eleven (11) identified bird species were reported nesting in nestboxes. Nesting attempts of these cavity-nesting bird species by year is provided in Table 2. In 2009, the House Sparrow was again an unwelcome species on the list. However, NOT ONE CHICK fledged out of the 7 nesting attempts reported! This demonstrates how continual monitoring helps to alleviate competition from these non-native species. Congratulations!

As in previous years, not all nesting attempts were monitored throughout the breeding season, and therefore, the number of eggs laid, hatched, and young fledged represent the minimums

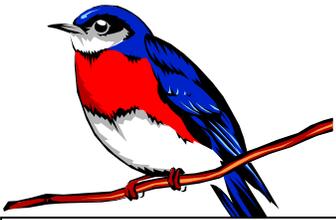
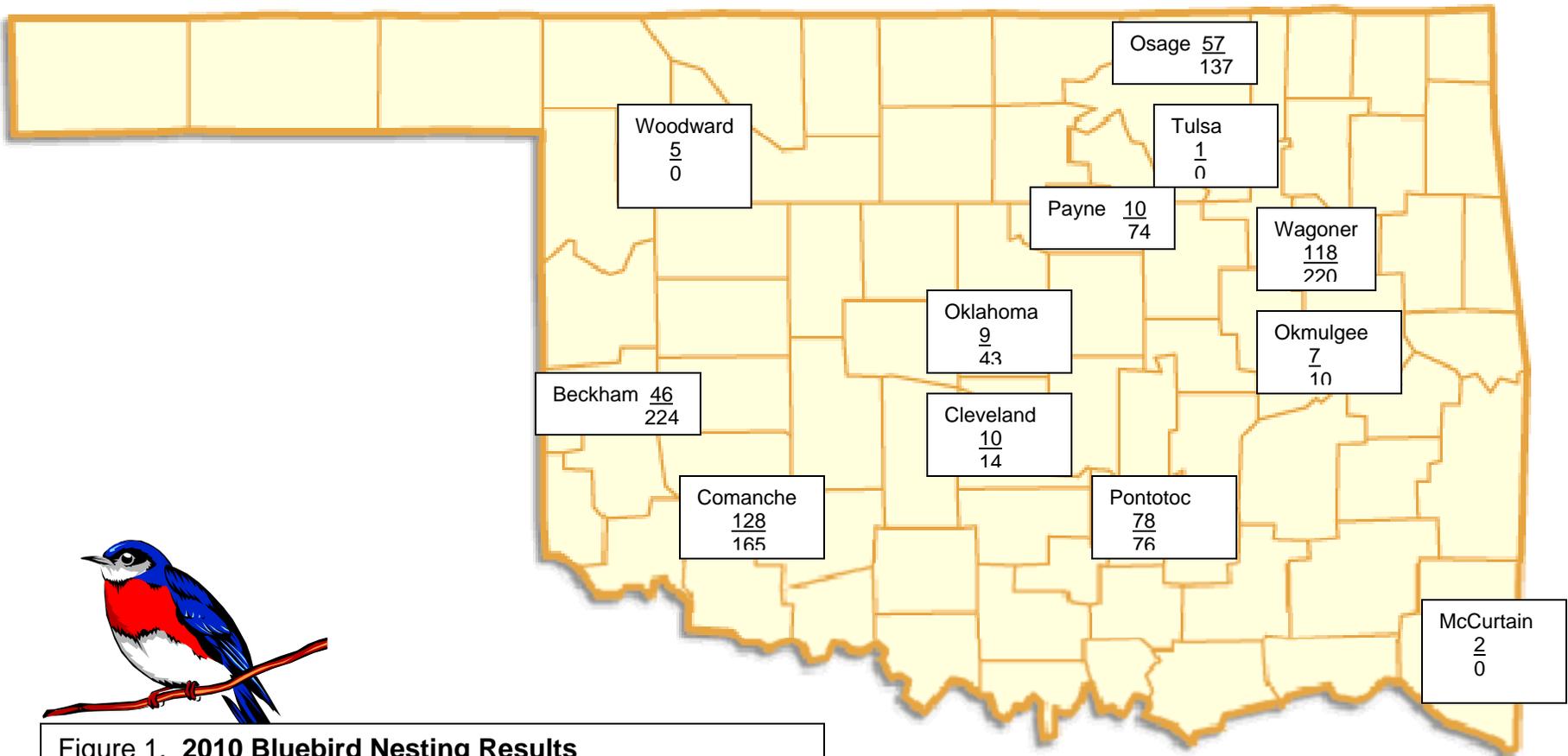


Figure 1. 2010 Bluebird Nesting Results

The top number is the number of nestboxes monitored;
 Bottom number is the number of bluebirds fledged

for the species (Table 3). Monitors reported at least **963 Eastern Bluebirds** fledged from **286 clutches**. Figure 1 is a map of Oklahoma showing bluebird data by county for the 2010 breeding season. Included are the number of monitored nestboxes and the number of fledgling bluebirds reported by county.

DISCUSSION

The data, based on submitted reports, reflects the Eastern Bluebird breeding success rate for 2010 is 3.4 fledged per clutch, the same as in the previous year. This is in accordance with previous years.(See Table 1.) It is also noteworthy that monitors reported much less House Sparrow activity than previously experienced with their nestboxes.



Darold Hunter

The **total number of fledgling bluebirds reported** to the Oklahoma Nestbox Trails Project since 1985: **59,485**

TABLE 1. Ten year comparison of breeding success reported for Eastern Bluebirds using monitored nestboxes.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Counties Reporting	24	25	22	21	21	28	21	15	19	18	12
Reports Submitted	47	47	40	44	51	71	48	31	39	35	25
Species*	11	11	7	9	10	12	10	12	13	9	10
# Nestboxes Monitored	871	803	714	780	767	973	744	545	628	566	471
Nesting Attempts	879	703	650	664	110	734	754	386	467	483	318
Clutches	811	649	588	641	612	736	715	367	434	419	286
# Eggs	3592	2847	2611	2863	2676	3309	3253	1653	1885	1892	1321
Eggs/Clutch	4.4	4.4	4.4	4.5	4.4	4.5	4.5	4.5	4.3	4.5	4.6
# Chicks	3002	2019	1998	2250	2165	2708	2519	1203	1609	1409	1017
Chick/Clutch	3.7	3.1	3.4	3.5	3.5	3.7	3.5	3.3	3.7	3.4	3.6
Chicks/Eggs	83%	71%	76%	78%	81%	82%	77%	73%	85%	74%	77%
# Fledged	2789	1907	1879	2128	2092	2551	2317	1133	1530	1406	963
Fledged/Clutch	3.4	3	3.2	3.3	3.4	3.5	3.2	3.1	3.5	3.4	3.4
Fledged/Eggs	77%	67%	72%	74%	78%	77%	71%	68%	81%	74%	73%
Fledged/Hatched	93%	94%	94%	94%	97%	94%	92%	94%	95%	99%	95%

* Includes all species reported using the monitored nestboxes.



TABLE 2. Nesting Attempts by Year.

Species	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Eastern Bluebird	879	686	690	664	654	734	634	386	467	483	318
Carolina Chickadee	47	49	39	40	59	92	60	38	53	30	18
House Sparrow	78	90	70	105	89	59	38	76	13	18	7
Bewick's Wren	13	6	11	16	17	20	4	11	8	5	7
Carolina Wren	12	6	5	11	9	7	6	1	15	9	6
House Wren	3	2	1	0	0	7	2	1	3	0	2
Tufted Titmouse	71	20	18	40	27	32	22	22	29	15	16
White-breasted Nuthatch	1	1	0	0	0	0	0	0	1	0	0
Great-crested Flycatcher	4	6	5	4	4	2	5	3	5	4	1
Tree Swallow	1	0	0	0	0	4	4	4	6	7	9
Eastern Phoebe	0	0	0	5	2	0	2	2	2	2	1
House Finch	0	1	0	0	0	0	0	0	0	0	0
Eastern Wood-Pewee	1	1	3	0	3	0	0	0	0	0	0
European Starling	0	1	4	4	1	2	0	0	8	0	1
Ash-throated Flycatcher	0	0	0	0	1	1	0	2	0	0	0
Prothonotary Warbler	0	0	0	0	0	0	0	1	2	0	0



TABLE 3. Nesting Success by Species in 2010
PC = per clutch

Species	Clutches Monitored	Eggs Laid		Eggs Hatched		Young Fledged	
		Total	PC	Total	PC	Total	PC
Eastern Bluebird	288	1329	4.6	1025	3.6	971	3.4
Carolina Chickadee	18	117	6.2	108	5.3	132	4.7
Tufted Titmouse	15	84	6.1	61	5.2	54	5.0
Tree Swallow	9	44	4.8	36	4.0	30	3.3
House Sparrow	7	22	3.1	10	1.4	0	0
Bewick's Wren	7	31	4.4	24	3.4	24	3.4
Carolina Wren	6	30	5.0	26	4.3	22	3.6
Great-crested Flycatcher	1	7	7.0	6	>1	6	>1
European Starling	1	4	4.0	4	4.0	4	4.0
House Wren	0	0	0	0	0	0	0
Eastern Phoebe	2	8	4.0	8	4.0	8	4.0

COMMENTS

Following are the comments provided by the trail reporters. Thank you so much for taking the time to provide some thoughts, ideas, and concerns:

- Other than having more cowbird eggs than usual laid in our boxes, this was a fairly typical year for bluebird nesting on our trail. (Beckham)
- I learned that the sparrow pecks a small hole in the eggs and carries them out with his bill. He got 6 eggs. (Payne)
- Slowest year ever. (Okmulgee)
- Again this year no successful attempts, reason unknown. However 5 young bluebirds appeared at the backyard birdbath. Was encouraged to see this. (McCurtain)
- My husband Dean Cunningham passed away April 3, 2010. I took over his bluebird trail starting April 29. At that time there were already either babies or eggs in 6 boxes. I entered these babies in my egg count. One of those boxes had bad eggs which I threw out and cleaned the box but it was not used again this year. There were also 3 other boxes that were not used. I plan to relocate these boxes. In the past, relocation has been very successful. There were no problems with predators and I have seen very few sparrows. (Oklahoma)
Note from Wildlife Diversity Data Compiler: Thank you for monitoring this trail!
- Had a bat hang out a few days in an empty house. First time that has happened. (Osage)
- One house sparrow killed bluebird and was building a nest on top of the dead bluebird. Another bluebird laid 2 eggs but had marks on them and bluebird did not come back to nest. (Cleveland)

- Not so good as 2009. Cold wet spring, late start to nesting season. Trapped and eliminated 16 house sparrows. (Wagoner)
- A perfect year for bluebirds. Also found and killed a Texas rat snake in an empty bluebird box. (Beckham)
- We had wrens only this year. We saw bluebirds but none tried to nest. This was the first time since I put up the boxes that they were not used by at least one bluebird. (Woodward)
- This nesting box is in our backyard and hung on a 5 ft metal pole. We observed the pair of birds from mid-March until 2 weeks ago. We did not open the box to actually observe the nest or the birds because we were afraid of bothering the birds. But we have learned that it is OK to do so, so next time they make a nest, we will observe them more closely. Since the birds have left, we opened the box and found 1 infertile egg. The nest has been removed and the box cleaned. (Tulsa)



Photo taken by Ann Freeman. Elk City

Wanda Hebard, a true Bluebird advocate, passed this story on to the Wildlife Diversity Program Staff. Ms. Hebard has provided numerous bluebird boxes throughout the town of Cushing in Payne County. What a lady and what a story! Thank you, Ms. Hebard and of course, thank you Mr. Ethridge for sharing.

An Encounter With a Night Stalker

As told to Wanda Hebard by Don Ethridge, Cushing, OK

In the spring of 2009, on an early Sunday morning I was approached by Ms. Wanda Hebard with a proposition. She proposed she would give our family a little wooden birdhouse if we would agree to hang it in a proper location, monitor regularly and give it our utmost attention throughout the summer. We were assured if we did this we would see little birds emerging from the small hole cut in the front of it throughout the summer months. Her proposal was accepted and we carried the little home back to our house. Before spring had officially arrived we had little bluebird houses now at not only our home but each of the grandchildren's homes. Little did we know that Ms. Wanda, as the grandkids called her, had started our family on a bird watching experience.

Sure enough as the summer went by we watched from our kitchen window as mother and father bluebird came and went from the little house hanging in the tree. We, on occasions, cautiously opened the side door to peek at little eggs waiting to come to life and through the summer the grandchildren got to see two sets of fledglings, nine in total hatch and leave the nest. It was just a very good experience for all of us.

So it was with great anticipation that we entered the spring of 2010 wondering what little miracles we had in store, as we watched new life erupting all around us. We watched as new bluebirds arrived to check out our little birdhouse and as they got busy making their new nest we relaxed thinking all is well. But as we had been cautioned a year earlier we needed to be more vigilant because after a few weeks we discovered that sparrows had taken over what was intended to be a bluebird home. Once discovered we did a good job of cleaning out the house and leaving it for the bluebirds to return which they did, just to be ran off by the sparrows again.

During this same period we had the opportunity to observe the life of a pair of cardinals as they set up housekeeping just outside one of our windows. Often as we were observing them they were also looking back at us. Then one day we noticed the mother had started her long wait for the eggs to hatch. Unfortunately later on we discovered that the nest was empty and thought that probably that was too soon for hatching and fledging. It was then that I noticed a fully intact snake skin about six foot long that was interweaved amongst the limbs of the tree with the head of the skin ending up on the limb directly in front of our cardinals nest. It did not require much imagination to know what had taken place just outside our window. I recalled then that the barn swallow nest that had been under the eave of our garage on the security lights had been found on the ground and the birds were gone. I was not too concerned then because the parents immediately started a new nest in the same place.

One evening as we returned late from church, we parked at the garage doors and stepped out. The automated security light came on and I continued to enter the garage. For some unknown reason I looked up to observe 10-15 inches of a large black snake's head and body hovering out of the guttering just above my head. He apparently had climbed up the downspout and into the guttering and was reaching out directly over the barn swallow nest. As panic set in, because I do not like to see snakes especially above my head and in the dark, I immediately sprung into action. I raced to my shop and returned with a hoe. My thought was to knock him out of the guttering and onto the ground where I could finish him off. As I got ready to swing a thought crossed my mind about what would happen if I swung too close and damaged the guttering that had been installed recently. So I repositioned my feet and gave one great swing. I missed and the swish in the air caused the snake to withdraw his body back into the guttering. I then rushed into the house, grabbed my 20-gauge shotgun and returned to the scene. At this point I probably hadn't fully thought through what was happening but would later better understand my thought process. In the past seeing a snake around the house during the day wouldn't bother me and maybe he would eat a few mice and rats. But now that I discovered that he was a night stalker and his favorite meal were baby birds, he was no longer welcome. It also could have been the shock of seeing him in the night sky hanging above my head, in either case, I was on a mission.

Now I stopped for a moment to contemplate what a shotgun blast might do to the new guttering. As I approached, the snake had its head visible. I determined to slip the gun as close to its head as possible. I closed my eyes as I pulled the trigger. To my surprise the guttering was fine and I could hear loud squirming within the gutter. I returned to the house to get a good night's sleep and remove the night stalker in the morning. Next morning it was evident that I had done some damage as I observed blood on the sides of the guttering. When I climbed up to peer cautiously into the guttering I was surprised to find nothing but dried-up blood. I looked up and down the guttering, climbed down and looked all over. There was no way he had gotten away from me, the hunter, with a 20-gauge shotgun. Later in the day, still looking around for the snake, I looked up to discover the snake had retreated from the guttering into a group of security lights at the far end of our house. It was still alive with part of its head missing but intertwined amongst the light bulbs. A shotgun would not work, so I went in and retrieved my 22 rifle. After sizing up the situation I determined a single shot should work without damaging the lights. When the gun went off my strategy proved to be a little flawed as I heard one of the light bulbs break but the night stalker also fell to the ground and at least for the summer of 2010 baby birds around our house were much safer and had a much better chance of survival.

2011 UPDATE

Enclosed please find a survey form that can be used to submit 2011 results.

HEY BLUEBIRDERS! DID YOU KNOW THAT...

In September 2010, the Lazy E Arena was transformed into the state's largest indoor and outdoor recreation event Oklahoma Wildlife Expo. In 2010, over the three day event more than 48,000 people from across Oklahoma and even some from neighboring states converged at the Lazy E for three days of outdoor and indoor fun!



So, what is the Oklahoma Wildlife Expo and

WHY SHOULD BLUEBIRDERS CARE?

It's an outdoor experience where visitors fish, shoot, kayak, mountain bike, see and touch wildlife, learn about recreation in the great outdoors. And it's **FREE!**

Presented by the Oklahoma Department of Wildlife Conservation and a coalition of conservation organizations, agencies and sponsors, Expo celebrates our great state's natural diversity and opportunities for the sporting enthusiast. From camping and outdoor skills to shooting sports and fishing, from bird-watching to kayaking, Expo visitors have an opportunity to try their hands at three days of fun in the outdoors.

New in 2007 was the first ever make-and-take offered at Expo -**BLUEBIRD BOXES!** The outdoor activity was limited to the first 20 families that arrived at the booth site. Needless to say, every time slot was full at least 30 minutes before the activity! Each family was provided pre-cut lumber, screws, nails and cordless screwdrivers. **Over 360 bluebird boxes were constructed and taken home by the proud families that put them together.** Visitors and participants were provided a hand-out produced by the Sam Noble Foundation.

Keith Thomas deserves a huge pat on the back for thinking up this idea and seeing it through even to applying for grants and contacting lumber companies for contributions. However as you can imagine once the construction of the bluebird house starts, many volunteers are needed to help offer encouragement and an extra hand.

If you would be interested in volunteering at the Bluebird House Make-and-Take at the 2011 Wildlife Expo, please contact Mel Hickman to request a volunteer application:

Phone number: 405-424-0099 or email: mhickman@zoo.odwc.state.ok.us

We can guarantee that you will enjoy the experience and the hospitality offered by ODWC to our volunteers!

Wildlife Expo 2011 is **September 23 – 25th**.

For more information check out www.wildlifedepartment.com and click on "Expo" in the lower right corner.