

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 2009 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. Thank you for helping bring back the Eastern Bluebird.

RESULTS

The number of nestbox trail reports received for the 2009 breeding season (35) reflected a decrease from the 2008 (39). Accordingly, the number of nestboxes monitored decreased (488) as compared to 2008 (628). Eighteen (18) counties are represented for the 2009 breeding season, a slight decrease over the 19 counties in 2008. Table 1 provides a ten year comparison (1999-2009) 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, House Sparrow** and the **Tufted Titmouse**. Eight (8) 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 EGG was laid and therefore NOT ONE CHICK fledged out of the 11 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 for the species (Table 3). Monitors reported at least **1,364 Eastern Bluebirds** fledged from **404 clutches**. Figure 1 is a map of Oklahoma showing bluebird data by county for the 2009

OKLAHOMA NESTBOX PROJECT

Summary for the 2009 Season



Photo taken by C.Stayer. These were taken during Hackberry Flat Day in southwest OK. Friends of Hackberry Flat and FFA students from Frederick High School helped visitors construct Bluebird nest boxes. May 9, 2009

Lands and Wildlife Diversity Program

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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 2009 is 3.4 fledged per clutch. This demonstrates a slight decrease from 2008 (3.5 fledged per clutch) but 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: **58,522**

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Counties Reporting	21	24	25	22	21	21	28	21	15	19	18
Reports Submitted	46	47	47	40	44	51	71	48	31	39	35
Species*	11	11	11	7	9	10	12	10	12	13	9
# Nestboxes Monitored	963	871	803	714	780	767	973	744	545	628	566
Nesting Attempts	1075	879	703	650	664	110	734	754	386	467	483
Clutches	1053	811	649	588	641	612	736	715	367	434	419
# Eggs	4622	3592	2847	2611	2863	2676	3309	3253	1653	1885	1892
Eggs/Clutch	4.4	4.4	4.4	4.4	4.5	4.4	4.5	4.5	4.5	4.3	4.5
# Chicks	3704	3002	2019	1998	2250	2165	2708	2519	1203	1609	1409
Chick/Clutch	3.5	3.7	3.1	3.4	3.5	3.5	3.7	3.5	3.3	3.7	3.4
Chicks/Eggs	80%	83%	71%	76%	78%	81%	82%	77%	73%	85%	74%
# Fledged	3383	2789	1907	1879	2128	2092	2551	2317	1133	1530	1406
Fledged/Clutch	3.2	3.4	3	3.2	3.3	3.4	3.5	3.2	3.1	3.5	3.4
Fledged/Eggs	73%	77%	67%	72%	74%	78%	77%	71%	68%	81%	74%
Fledged/Hatched	91%	93%	94%	94%	94%	97%	94%	92%	94%	95%	99%

* Includes all species reported using the monitored nestboxes.



TABLE 2. Nesting Attempts by Year.

Species	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Eastern Bluebird	1075	879	686	690	664	654	734	634	386	467	483
Carolina Chickadee	36	47	49	39	40	59	92	60	38	53	30
House Sparrow	118	78	90	70	105	89	59	38	76	13	18
Bewick's Wren	8	13	6	11	16	17	20	4	11	8	5
Carolina Wren	6	12	6	5	11	9	7	6	1	15	9
House Wren	3	3	2	1	0	0	7	2	1	3	0
Tufted Titmouse	31	71	20	18	40	27	32	22	22	29	15
White-breasted Nuthatch	0	1	1	0	0	0	0	0	0	1	0
Great-crested Flycatcher	7	4	6	5	4	4	2	5	3	5	4
Tree Swallow	0	1	0	0	0	0	4	4	4	6	7
Eastern Phoebe	0	0	0	0	5	2	0	2	2	2	2
House Finch	1	0	1	0	0	0	0	0	0	0	0
Eastern Wood-Pewee	1	1	1	3	0	3	0	0	0	0	0
European Starling	0	0	1	4	4	1	2	0	0	8	0
Ash-throated Flycatcher	0	0	0	0	0	1	1	0	2	0	0
Prothonotary Warbler	0	0	0	0	0	0	0	0	1	2	0



TABLE 3. Nesting Success by Species in 2009
PC = per clutch

Species	Clutches Monitored	Eggs Laid		Eggs Hatched		Young Fledged	
		Total	PC	Total	PC	Total	PC
Eastern Bluebird	419	1892	4.5	1409	3.4	1406	3.4
Carolina Chickadee	28	173	6.2	148	5.3	132	4.7
Tufted Titmouse	14	86	6.1	73	5.2	70	5.0
House Sparrow	11	16	1.4	0	0	0	0
Carolina Wren	8	27	3.4	23	2.9	23	2.9
Bewick's Wren	4	25	6.2	18	4.5	18	4.5
Great-crested Flycatcher	4	13	3.25	12	3.0	12	3.0
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:

- Pretty good year. Sent 4 hatchlings to OK Trails exhibit at OKC Zoo. (Cleveland)
- 1 Clutch of Eastern Bluebird of 6 eggs were white. 1 Flying squirrel nest was found in a box. (Cherokee)
- Had 1 Flying squirrel nest. (Muskogee)
- We believe the female Carolina chickadee was killed before she could incubate her clutch. We wondered whether eight eggs in one box might suggest laying by two separate females. (Oklahoma)
- Many nests were well on their way to hatching or fledging and then the next time the nest was checked the Bluebirds were gone. No evidence of predators destroying the nest. Thanks to Dennis and Carol Stayer checking the boxes on a weekly basis. (Comanche)
- I believe that consecutive days of extreme triple digit heat in late June and early July negatively affected the egg hatch. Several clutches of eggs were abandoned at that time. (Payne)
- Too hot for last nesting. (Payne)
- When the March 27 blizzard blew in, our bluebirds were well on their way to having a very successful 1st nesting for the season. We had 13 nests started or completed with 39 eggs laid and 3 babies. The swirling snow filled the boxes and then turned to ice, therefore causing the loss of all eggs & babies as well as 3 female adult birds. During our 23 years of Bluebird trail monitoring, we've never before experienced the loss of one complete nesting. Although this year's total didn't compare with our record year of 2008, our bluebirds recovered nicely with a fairly successful season. (Beckham)

- We had two bluebird families building nests. On March 27 we had 22" of snowfall and we never saw the bluebirds again. I cleaned the boxes out and later the wren moved in. After the snow melted we found 1 bluebird and several other types of birds dead. (Woodward)
- Third clutch latest we've ever had! Now I know why they stop at the 2nd each year. 3rd clutch cooked with 100°+ weather for days! Female hardly sat on the nest due to heat, but parents very watchful of the box. After the eggs sitting for almost 2 months, we threw out the nest with eggs being eaten by ants. No babies, just yolk. We're so very happy with our 10 babies that fledged this year though! Last year none survived due to unknown cause. Two of our male babies visit our fountain frequently. Go babies go! (Cleveland)
- Got off to a slow start with 24 days of spring rain, but with the line reduced from 100 to 80 boxes it was a good year. Many fewer Tufted Titmouses (17 to 36 in 2008). The Great-crested Flycatcher was a bonus! The real mystery (and a positive one) was the change in the house sparrow situation. From trapping a high of 51 to 63 in 2005-2007 the total dropped to 16 in 2008 and only 10 in 2009. There were instances where a male would take a box and not be able to attract a female. I have no explanation for this. (Wagoner)
- I had no nests this year. Birds totally non-existent. I've always had 2-4 clutches since 1985. I need advice. Would be interested in others report. (Comanche)
- Inspected houses at least once each week. Tore out sparrow nests. Four nests were aborted with 3 or 4 eggs in nest. (Wagoner)
- We added 25 boxes to the Trail. Didn't have a lot of monitors – we wanted the warblers. Don't know how successful we were. Maybe next year we can do more monitoring. (Tulsa)
- This is the first time since 1991 that there were no nesting attempts by any species in the two boxes. I have no explanation. I will look for a different location for the boxes. Not even much sparrow activity. (McCurtain)

2010 UPDATE

Enclosed please find a survey form that can be used to submit 2010 results.

Happy Bluebirding in 2010!

HEY BLUEBIRDERS! DID YOU KNOW THAT...

In September 2009, the Lazy E Arena was transformed into the state's largest indoor and outdoor recreation event - Oklahoma Wildlife Expo. In 2009, over the three day event more than 42,000 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. A brief but very informative presentation was given by Mike Porter from the Sam Noble Foundation (of which many visitors listened even though they could not make a bluebird house!) and then the fun began!!!! **Over 260 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 2010 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 2010 is **September 24 – 26th**.

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

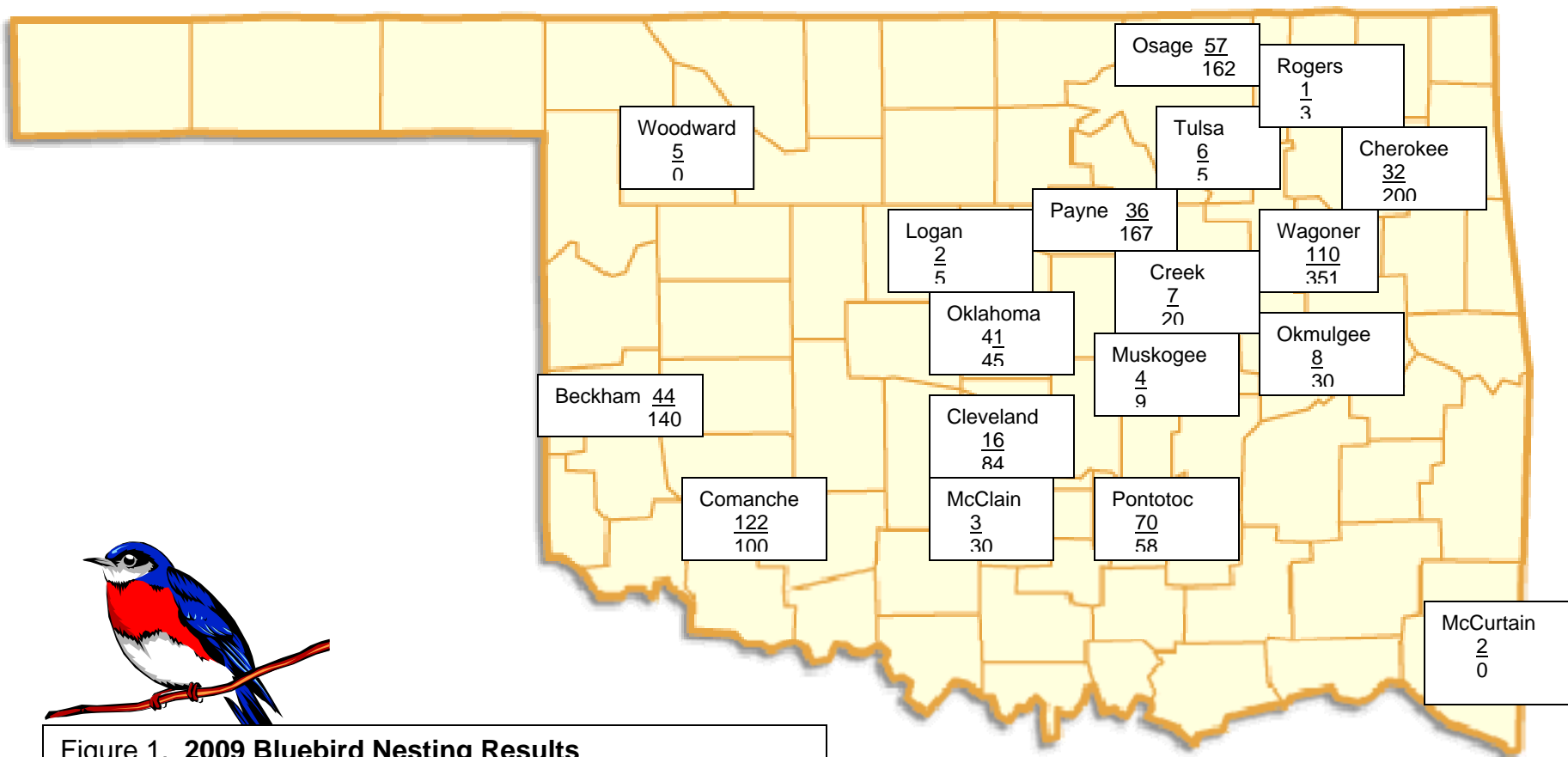


Figure 1. 2009 Bluebird Nesting Results

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