## 2016 AND 2017 BLUEBIRD NESTBOX SURVEY RESULTS

Since the numbers of nestbox survey reports are so limited, two years of data are combined for this report. As always, the Oklahoma Wildlife Diversity Program is thankful to the participants of this citizen science effort that take the time to not only help the Eastern Bluebird but to provide information to the Program. Fourteen (14) nestbox survey reports were received for the 2016 breeding season and ten (10) reports were received for the 2017 breeding season. The number of nestboxes monitored was 168 in 2016 and 138 in 2017, representing nine and six counties, respectively. Table (1) provides a ten year comparison (2007-2017) of survey results. Please note that the comparison focuses primarily on Eastern Bluebird breeding activities.

The following species attempted nesting in nestboxes in 2016 and 2017: **Eastern Bluebird (373)**, **Carolina Chickadee (9)**, **Bewick's Wren (7)**, **Carolina Wren (4)**, **Tufted Titmouse (2)**, **and House Sparrow (16)**. In both years, the House Sparrow was again an unwelcome species on the list as noted by the 16 nesting attempts reported. However, not one chick fledged out of the 16 nesting attempts! 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 Eastern Bluebird. Monitors reported at least a combined **1,240 Eastern Bluebirds fledged** from **353 clutches** from both years. Figure (1) is a map of Oklahoma showing bluebird data by county for the 2016 & 2017 breeding seasons. Included are the number of monitored nestboxes and the number of fledgled bluebirds reported by county.

The data, based on submitted reports, reflects the Eastern Bluebird breeding success rate of **3.6** fledged per clutch for 2016, and **3.4** fledged per clutch for 2017 which is in line with the 10-year average (2005-2015) of fledged/clutch for the Oklahoma Bluebird Nestbox Survey (3.64). This is good news!

The total number of fledged bluebirds reported to the Oklahoma Bluebird Nestbox survey since 1985: 64,193



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

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Counties Reporting	15	19	18	12	9	9	11	12	10	9	6
Reports Submitted	31	39	35	25	13	12	15	19	13	14	10
Species Using nestboxes	12	13	9	10	7	6	8	8	7	6	5
# Nestboxes Monitored	545	628	566	471	284	268	286	408	165	168	138
Nesting Attempts	386	467	483	318	223	191	189	260	171	228	145
Clutches	367	434	419	286	213	176	176	248	159	194	159
# Eggs	1653	1885	1892	1321	929	771	730	1111	762	889	741
Eggs/Clutch	4.5	4.3	4.5	4.6	4.4	4.4	4.1	4.5	4.8	4.6	4.6
# Chicks	1203	1609	1409	1017	688	597	561	903	649	760	621
Chick/Clutch	3.3	3.7	3.4	3.6	3.2	3.4	3.2	3.6	4.1	3.9	3.9
Chicks/Eggs	73%	85%	74%	77%	74%	77%	77%	81%	85%	85%	83%
# Fledged	1133	1530	1406	963	658	560	469	867	614	700	540
Fledged/Clutch	3.1	3.5	3.4	3.4	3.1	3.2	2.6	3.5	3.9	3.6	3.4
Fledged/Eggs	68%	81%	74%	73%	71%	72%	64%	78%	81%	79%	73%
Fledged/Hatched	94%	95%	99%	95%	96%	94%	74%	96%	94%	92%	87%

## COMMENTS

Following are the comments provided by the nestbox participants. Thank you so much for taking the time to provide some thoughts, ideas, and concerns. Each comment is identified with the county and year submitted:

- Every year the house sparrow problem seems to be getting worse. Just tearing out their nest doesn't solve the problem. (Okmulgee, 2016)
- Out of 5 houses, only one house was used. Sparrows kept building in one house although I tear every nest out of the house. In July, 3 birds, feathered but died. Very disappointing year. (Comanche, 2016)
- I only watched 2 fledge from the first clutch. Came back later to an empty nest. Saw all 4 fledge from the second clutch. Only one of 2 nest boxes were used. The pair had white eggs. (Oklahoma, 2016)
- -I am just learning what the house sparrow nest looks like and have started removing them from the boxes as soon as possible. (Okmulgee, 2016)
- -Had a great year, we had 4 nests starting their 3<sup>rd</sup> nesting but were abandoned due to high heat. (Beckham, 2016)
- -Seemed to be a lot of snake activity this year. (Osage, 2016)
- -We had a late nesting this year. The 1<sup>st</sup> one was late May & this was the only one. Saw only one adult. Don't know what happened to the other one. (Woodward, 2016)

- Nests completed in April, May, June, July. The last bird in the nest in August was taken by a snake that got in the nest. Love my bluebirds. Five have returned. (Oklahoma/Canadian,2016)
- -Good Year! Record numbers of bluebird pairs and fledglings for our 30<sup>th</sup> year. All bluebird boxes were used except one. (Beckham, 2016)
- -In one box four eggs were laid. The eggs disappeared before hatching; the nest, however, was undisturbed. The nest was removed and the bluebird pair rebuilt and laid four more eggs. Mother bird sat on the nest 22 days and then abandoned the nest. (Oklahoma, 2016)
- -First year to have more than two nesting boxes. Joyous every time I observed a new nest, beautiful blue eggs, baby birds and/or attentive parents. Plan to expand my trail from 6 to 10 boxes next year. (Washington, 2016)
- -A cold steady rain May 1<sup>st</sup>, killed 13 babies, but we bounced back with nesting's through July and set a record with 108 fledged! (Beckham, 2017)
- -We lost 5 complete clutches this year. Some due to abandonment and some because of a spell of damp, cool weather early in the season. (Beckham, 2017)
- -Lost 5 nests of hatched bluebirds of varying ages. We had several very cold spells in the early spring. Did not have any more problems the rest of the season. Had the usual problems with sparrows and snakes. (Osage, 2017).
- -The sparrows were fierce competitors this year even though I killed 83. I love this hobby and get excited with every new bluebird nest, egg and hatchling. Some of my neighbors on our rural road are becoming interested too. (Washington, 2017)
- -The first nest was early April. The birds hatched & had feathers that were turning blue. I check on them one day & the babies were all dead. No ants. Nothing had been eating on them. No adults were around. I cleaned out the box and the 2<sup>nd</sup> nesting was in the same box. (Woodward, 2017)

## **2018 UPDATE**

As you know, the Wildlife Diversity Program has been requesting information from those who monitor bluebird nestboxes since 1985. Through this citizen science effort, the Wildlife Diversity Program uses the information to better understand the use of nestboxes by cavity nesters and to provide a "peek" into the breeding activities of these birds. The survey also provides a platform for participants to share experiences; some inspiring, some heartbreaking.

We would very much like for you to use the updated form, attached to this report or to submit your reports online at:

https://wildlifedepartment.com/wildlife/wildlife-diversity-program/Oklahoma-Nest-Box-Trails-Project

You can attach the completed form to an email to <a href="Melynda.hickman@odwc.ok.gov">Melynda.hickman@odwc.ok.gov</a> or you can submit your data online at the same link listed above.

Please use this form to record the results of your bluebird nestbox monitoring and discard any older forms you may have.

Annual reports are posted on the OK Dept. of Wildlife Conservation's website under "Citizen Science" as well as a summary is provided through the monthly e-newsletter, *The Wild Side*. If you have not subscribed to this free newsletter you may do so at:

https://wildlifedepartment.com/wildlife/wildlife-diversity/wildside-old

One really great resource online for information on bluebird nestbox monitoring is <a href="www.sialis.org">www.sialis.org</a>. It is all about bluebirds and there is even a pictorial representation of the different ages of the chicks in the nest. I think you will enjoy the website.

THANK YOU ONE AND ALL!

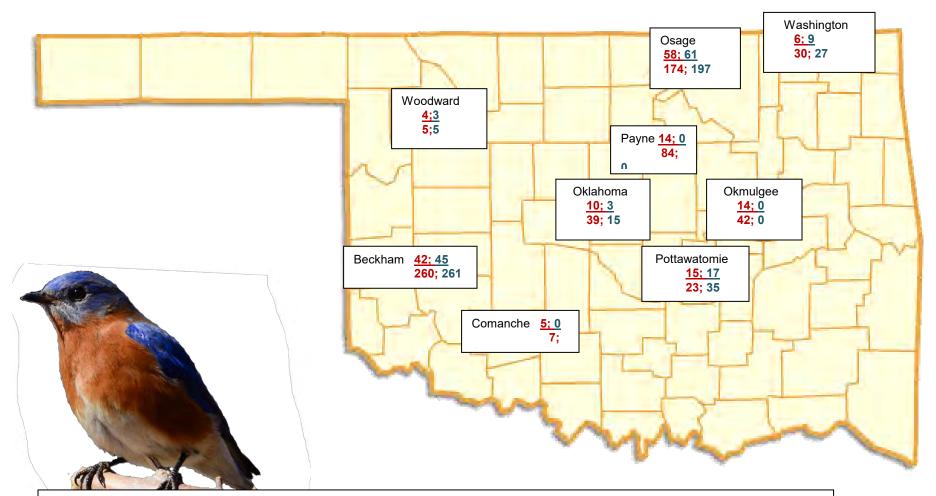


Figure 1. 2016 & 2017 Bluebird Nesting Results by County

The first top number is the number of nestboxes monitored in 2016 & second number is for 2017;

First bottom number is the number of bluebirds fledged in 2016 & second number is for 2017