

OKLAHOMA NESTBOX PROJECT

Summary for the 2011 Season



U.S. Fish and Wildlife Service

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 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 especially during the extreme dry and hot summer experienced in 2011. Thank you for helping bring back the Eastern Bluebird.

RESULTS

The number of nestbox trail reports received for the 2011 breeding season (13) reflected a decrease from the 2010 (25). Accordingly, the number of nestboxes monitored decreased (284), approximately 40% as compared to 2010 (471). Nine (9) counties are represented for the 2011 breeding season, a decrease over the 12 counties in 2010. Table 1 provides a ten year comparison (2001-2011) 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 for the first time in the top four, the **Great-crested Flycatcher**. Seven (7) identified bird species were reported nesting in nestboxes. Nesting attempts of these cavity-nesting bird species by year is provided in Table 2. In 2011, the House Sparrow was again an unwelcome species on the list. However, NOT ONE CHICK fledged out of the 8 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 **658 Eastern Bluebirds** fledged from **213 clutches**. Figure 1 is a map of Oklahoma showing bluebird data by county for the 2011 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 2011 is 3.1 fledged per clutch, a decrease from the previous 2 years (3.4). This is not the lowest number when compared to other years but there can be no doubt that the extreme heat and drought conditions contributed to a decrease in success rate. (See Table 1.)



Darold Hunter

The **total number of fledgling bluebirds reported** to the Oklahoma Nestbox Trails Project since 1985:
60,143

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Counties Reporting	25	22	21	21	28	21	15	19	18	12	9
Reports Submitted	47	40	44	51	71	48	31	39	35	25	13
Species*	11	7	9	10	12	10	12	13	9	10	7
# Nestboxes Monitored	803	714	780	767	973	744	545	628	566	471	284
Nesting Attempts	703	650	664	110	734	754	386	467	483	318	223
Clutches	649	588	641	612	736	715	367	434	419	286	213
# Eggs	2847	2611	2863	2676	3309	3253	1653	1885	1892	1321	929
Eggs/Clutch	4.4	4.4	4.5	4.4	4.5	4.5	4.5	4.3	4.5	4.6	4.4
# Chicks	2019	1998	2250	2165	2708	2519	1203	1609	1409	1017	688
Chick/Clutch	3.1	3.4	3.5	3.5	3.7	3.5	3.3	3.7	3.4	3.6	3.2
Chicks/Eggs	71%	76%	78%	81%	82%	77%	73%	85%	74%	77%	74%
# Fledged	1907	1879	2128	2092	2551	2317	1133	1530	1406	963	658
Fledged/Clutch	3	3.2	3.3	3.4	3.5	3.2	3.1	3.5	3.4	3.4	3.1
Fledged/Eggs	67%	72%	74%	78%	77%	71%	68%	81%	74%	73%	71%
Fledged/Hatched	94%	94%	94%	97%	94%	92%	94%	95%	99%	95%	96%

* Includes all species reported using the monitored nestboxes.



TABLE 2. Nesting Attempts by Year.

Species	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Eastern Bluebird	686	690	664	654	734	634	386	467	483	318	223
Carolina Chickadee	49	39	40	59	92	60	38	53	30	18	44
House Sparrow	90	70	105	89	59	38	76	13	18	7	8
Bewick's Wren	6	11	16	17	20	4	11	8	5	7	1
Carolina Wren	6	5	11	9	7	6	1	15	9	6	0
House Wren	2	1	0	0	7	2	1	3	0	2	0
Tufted Titmouse	20	18	40	27	32	22	22	29	15	16	3
White-breasted Nuthatch	1	0	0	0	0	0	0	1	0	0	0
Great-crested Flycatcher	6	5	4	4	2	5	3	5	4	1	4
Tree Swallow	0	0	0	0	4	4	4	6	7	9	2
Eastern Phoebe	0	0	5	2	0	2	2	2	2	1	0
House Finch	1	0	0	0	0	0	0	0	0	0	0
Eastern Wood-Pewee	1	3	0	3	0	0	0	0	0	0	0
European Starling	1	4	4	1	2	0	0	8	0	1	0
Ash-throated Flycatcher	0	0	0	1	1	0	2	0	0	0	0
Prothonotary Warbler	0	0	0	0	0	0	1	2	0	0	0



TABLE 3. Nesting Success by Species in 2011
PC = per clutch

Species	Clutches Monitored	Eggs Laid		Eggs Hatched		Young Fledged	
		Total	PC	Total	PC	Total	PC
Eastern Bluebird	213	929	4.4	688	3.2	658	3.1
Carolina Chickadee	38	173	4.5	140	3.6	131	3.4
Tufted Titmouse	2	9	4.5	5	2.5	5	2.5
Tree Swallow	2	9	4.5	9	4.5	9	4.5
House Sparrow	8	25	3.1	4	0.5	0	0
Bewick's Wren	1	5	5.0	5	5.0	5	5.0
Great-crested Flycatcher	4	14	3.5	14	3.5	14	3.5

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:

- May 13 nesting attempt successful – 4 eggs – 4 fledged; July 3 nesting attempt not successful – too hot or eggs not fertile – 3 eggs – 0 fledged. (McCurtain)
- The first nest in May was a complete success. The second one in July wasn't. The eggs were laid and I saw the adults for a week after and then they were gone. Either the adults were killed or it got too hot. The days were in the 100's every day. (Woodward)

– Sparrows were trying to use the nesting box. Each time they started a nest we removed them. Finally we took the door to the nesting box off for a couple of days. Then we put it back on and the bluebirds returned and started to build a nest. This time they chased away the sparrows. There was at least one clutch. We did not open the box to see how many eggs but we were lucky enough to see two fledge. They left about the end of July. (Tulsa)

– This marks the 25th year for our bluebird trail, and we've never before witnessed a year like this one. Our bluebirds got started fairly early laying their first eggs in early and middle March. That nesting went great and the second nesting was ok. But as the third nesting eggs were laid the extreme heat and drought were locked in. Only a small percentage of eggs hatched and on our trail that put an end to our nesting season for 2011. (Beckham)

– Eastern Phoebe nest on vent pip to shack. Had 2 clutches with 9 eggs. All fledged. (Osage)

– Season started out great unfortunately all eggs laid after July 1 were abandoned because of the oppressive high temperatures. (Beckham)

– Rough year – very hot and dry. Lost a lot of young birds. I had a lot of eggs that did not hatch. Lost fewer eggs to predators though. (Osage)



Photo taken by Ann Freeman. Elk City

Enclosed please find a survey form that can be used to submit 2012 results.

This report will be posted on the OK Dept. of Wildlife Conservation's website under "Citizen Science". If you misplace your survey form, the form is available on the same site to download and save. Go to: www.wildlifedepartment.com.

HEY BLUEBIRDERS! DID YOU KNOW THAT...

In September 2011, the Lazy E Arena was transformed into the state's largest indoor and outdoor recreation event Oklahoma Wildlife Expo. In 2011, over the three day event more than 59,000 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 2012 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 2012 is **September 29 & 30th** (Friday, the 28th is a school day only and the bluebird house make-n-take is not offered on that day).

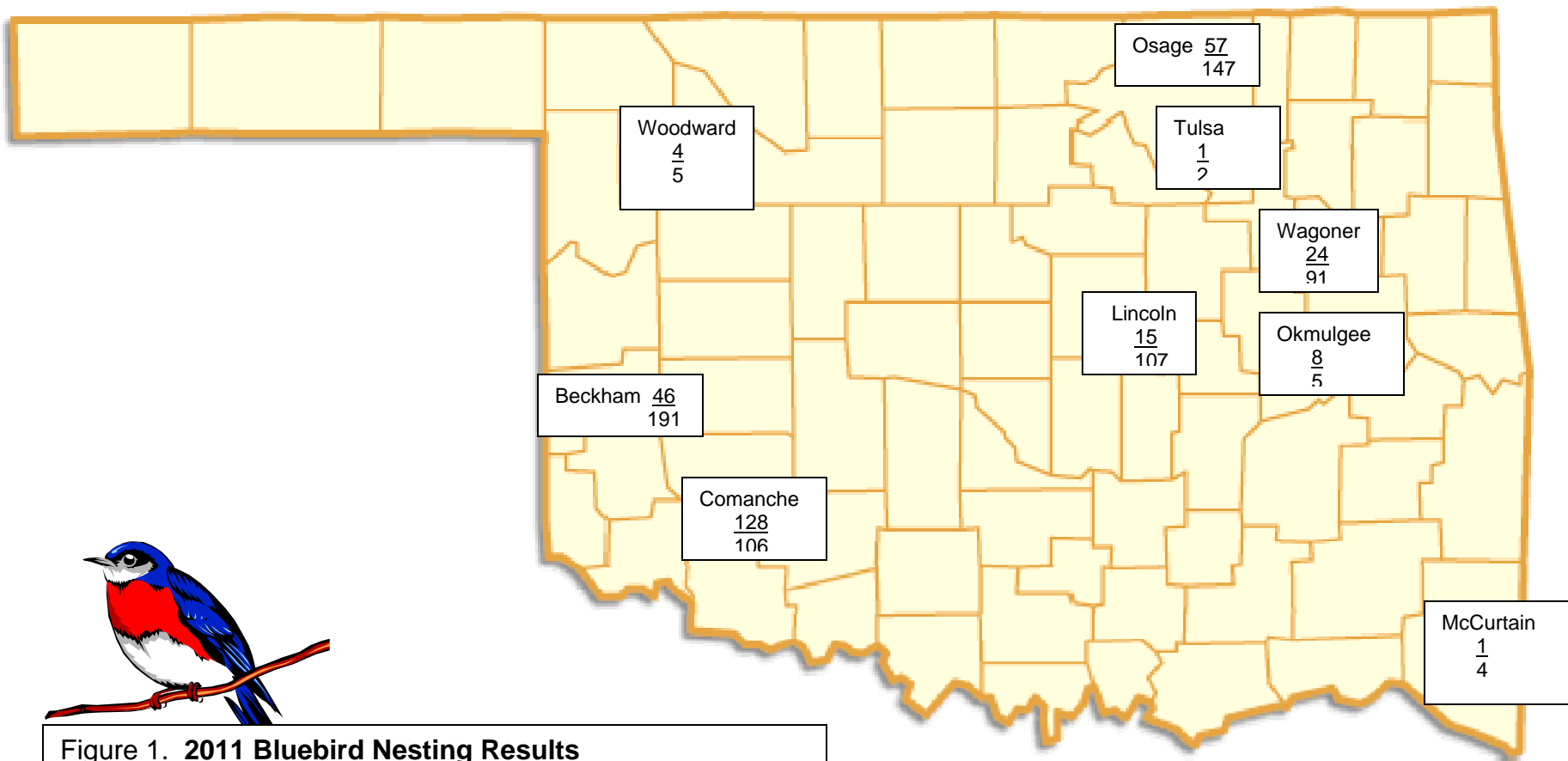


Figure 1. 2011 Bluebird Nesting Results

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