### OKLAHOMA NESTBOX PROJECT - Summary for the 2004 Season

### 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 Wildlife Diversity Program would also like to express our sincere gratitude to the **Oklahoma Bluebird Society** (OBS) for promoting bluebird conservation in Oklahoma. Thirty percent (15) of the bluebird nestbox reports we received for the 2004 breeding season listed they were affiliated with OBS. If you wish to learn more about your 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. The database of the Oklahoma Nestbox Trail Project provides a "window" into the conservation of cavity-nestersparticularly bluebirds- in Oklahoma. Membership includes receiving their excellent newsletter, *The Hole Story*, which provides good information about monitoring bluebird nesting activities and habitat enhancement. Heartwarming stories and poems provided by members will offer inspiration! A membership form is included in your packet.

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

#### **Distribution map**

The number of nestbox trail reports received for the 2004 breeding season (51) reflected an increase from the 2003 (44). Interestingly, the number of nestboxes monitored decreased (767) as compared to 2003 (780). Twenty-one (21) counties are represented for the 2004 breeding season which is the same as 2003. Table 1 provides a list of nestbox trail variables from 1994 to 2004.

The top four species in frequency of nesting attempts and occurrence on trails were the **Eastern Bluebird**, **House Sparrow**, **Carolina Chickadee**, and the **Tufted Titmouse**. Over **99%** of nestbox usage was by Eastern Bluebirds and this species was reported on **99%** of the trails.

Eleven (1) identified bird species were reported nesting in nestboxes including the first reported nesting of an Ash-throated Flycatcher (Comanche County) that fledged 4 young flycatchers. Nesting attempts by year is provided in Table 2. In 2004, the House Sparrow was again an unwelcome species on the list. However, absolutely no chicks fledged out of 135 eggs reported! Also reported for the third year in a row was a nesting attempt by a European Starling (Comanche County) which laid 1 egg but did not hatch. 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 **2,092 Eastern Bluebirds** fledged from **614 clutches**. Figure 1 is a map of Oklahoma showing bluebird data by county for the 2004 breeding season. Included are the number of monitored nestboxes and the number of fledgling bluebirds reported by county.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total Trail Reports	83	53	54	40	52	46	47	47	40	44	51
Total Nestboxes	1401	1173	1108	1081	1142	963	871	797	750	780	767
Average Trail Size	17	17	18	27	22	20	18	15	15	17	15
Number of Counties	33	29	31	24	31	21	24	25	22	21	21

TABLE 1. NESTBOX TRAIL VARIABLES FROM 1994 TO 2004

TABLE 2.NESTING ATTEMPTS BY YEAR

Species	1996	1997	1998	1999	2000	2001	2002	2003	2004
Eastern Bluebird	1016	1072	1390	1075	879	686	690	664	654
Carolina Chickadee	48	59	53	36	47	49	39	40	59
House Sparrow	134	98	143	118	78	90	70	105	89
Bewicks Wren	20	33	113	8	13	6	11	16	17
						6	5	11	9
Carolina Wren	13	14	22	6	12	2	1	0	0
House Wren	5	0	6	3	3	20	18	40	27
Tufted Titmouse	17	41	45	31	71	1		0	0
White-breasted Nuthatch	0	0	1	0	1		0		
Red-bellied	1	0	0	0	0	0	0	0	0
Woodpecker						6		4	4
Great-crested Flycatcher	2	3	5	7	4		5		
Tree Swallow	1	0	0	0	1	0	0	0	0
						0	0	5	2

Species	1996	1997	1998	1999	2000	2001	2002	2003	2004
Phoebe	1	2	0	0	0				
House Finch	0	0	0	1	0	1	0	0	0
Eastern Wood Peewee	1	1	0	1	1	1	3	0	3
European Starling	0	0	0	0	0	1	4	4	1

#### TABLE 3. NESTING SUCCESS BY SPECIES IN 2004

Species	Clutches	Eggs Laid	Eg	gs Hatche	Young Fledged		
	Monitored	Total PC	Т	otal	PC	Total	PC
Eastern Bluebird	641	2676	4.3	2165	3.5	2092	3.4
Carolina Chickadee	55	343	6.2	300	5.4	282	5.1
Tufted Titmouse	26	117	4.5	102	3.9	96	3.7
House Sparrow	41	135	3.3	37	0.9	0	0
Carolina Wren	9	35	3.8	26	2.8	26	2.8
Bewick's Wren	15	90	6.0	77	5.1	77	5.1
Great Crested Flycatcher	3	15	5.0	6	2.0	6	2.0
		DC - pc	n alutah				

PC = per clutch

# COMMENTS

Following are the comments provided by the trail reporters. My apologies if your comment is not reflected below. If I could not interpret handwriting, I did not record your comment. Thank you so much for taking the time to provide some thoughts, ideas, and concerns:

- The worst year I've had. Lots of sterile eggs. 1 clutch of 4 white eggs. (Pontotoc)
- The last nest of 3 were laid and adults started sitting on them and then the adults disappeared and never came back. This was the first time we had cowbirds lay eggs in a nest. We threw two eggs out. (Woodward)
- Sparrows were a big problem this year. One nest in a gourd laid one egg but

Sparrows broke it up. (Sequoyah)

- First time since 1997 have not fledged over 100 birds. (Canadian) Editor's note: However they did report 96 fledged bluebirds!
- Did not have a single sparrow invasion. (Oklahoma)
- All 3 nesting attempted and successfully completed were in the same box but I believe the third attempt was by different set of parents because it seemed the turn around time was too short between second and third attempt. Only 1 of 3 boxes was used sparrows kept #2 occupied and no attempts were made in #1 box??? (McCurtain)

- House sparrow problem getting worse! (Wagoner)
- Tough year. Too much construction going on, house sparrow predation, and box stolen. (Cleveland)
- Just a really good year on our trail for bluebirds with very few problems. Out of 34 nesting attempts only one was unsuccessful. The fledgling count had been at 88 the past two years and then jumped to 133 for this nesting season, making this our "best" year ever. (Beckham)
- Trapped or shot 17 sparrows and starlings. (Comanche)
- We were surprised and disappointed that we didn't get any tufted titmouse nesting in our nest boxes this year as we usually have them every summer. We are happy though to continue to have successful nestings and fledglings by the Eastern Bluebird. (Pottawatomie)
- I found one female bluebird dead in the box, her nest was made but no eggs had been laid. One of my boxes the bluebirds gave up on I fought sparrows for weeks- I let them nest and removed the eggs. I found ants in the nest when they (sparrows) gave up laying eggs. (Sequoyah)
- It has been an interesting year. Fort Sill had our first Ash-throated Flycatcher nest in one of the PVC boxes. ...Nesting over all was down compared to years passed, especially Bewick's wren and Carolina wren. (Comanche)
- Had one house that had three nesting attempts with 1 of the 3 had 6 of the 6 eggs hatch, but all 6 died. The second attempt none hatched possibly because the third attempt was built on top of the nest? I've never seen that before. When I cleaned out the house after three of the 5 fledged, the eggs from the second attempt were partially incubated under the third attempt. (Logan)
- We were very excited about our first bluebird nest this year, then disappointed when only one hatched. Then, the fledgling died. We were hopeful on the second nest, but only one of those eggs hatched. It did fledge which helped our moral. We tripled our wren numbers this year though. (Payne)
- Every thing considered, a very good year! (Woodward)
- I enjoy my bluebird experience. I had a pair build in a mealworm feeder ten feet from my windows. With being able to see everything going on in the box, I didn't get much done except watch the birds! (Cleveland)
- I had one pair of bluebirds nest in my martin box for the first time. They fledged 4 young. Flying squirrels were the worst predator this year. They killed 4 bluebirds, 1 titmouse, and 1 house sparrow. One pair of bluebirds had 7 eggs, and all 7 young hatched! (Muskogee)

This following comment was incredibly interesting and relates to an article from the **California Bluebird Recovery Program**, Vol. 10 No. 3, Summer 2004 that I had intended on sharing with our trail monitors. First the comment:

"When titmouse babies fledged, one remained in the house – plastic grass type nesting material had grown around the baby's right leg. We cut the plastic but the right leg had not developed a foot – put the baby back in the house anyway. Checked the house later and the baby was gone. Several weeks later, a <u>one-legged</u> titmouse showed up on our platform feeder and has since become a regular/ daily visitor." (Pawnee)