

## A Citizen Science Eastern Bluebird Project at Anne Springs Close Greenway

Compiled and written by Charlotte Morley

There are forty-five bluebird nestboxes strategically placed throughout the Anne Springs Close Greenway (ASCG) at three locations: the Nature Center, the Field Trial Barn, and the Dairy Barn. In the 2016 breeding season, 34 of the 41 nestboxes had nests built in them by mating bluebird pairs.

You may wonder why is there a need to place nestboxes? While many species are able to hide their nests in dense foliage or grassy meadow areas, many others require holes for nesting. Some birds, such as woodpeckers, can excavate their own nesting cavities in dead or decaying trees. Others depend on the abandoned nesting holes or natural cavities formed from fallen branches for places to build nests. In this region, there has been increase in development and removal of damaged and dead trees. This has left cavity-nesting birds with fewer natural places to raise their young. The ASCG is an ideal habitat to place nestboxes.

There were 247 eggs laid in the 2016 breeding season, the highest number since the data collection began on the ASCG, in 1999. Of the 247 eggs, there were 144 chicks that developed flight feathers to leave the nest, otherwise known as fledglings. There were 37 eggs that did not hatch and the remaining 66 were removed from the nests by unknown predators.

Eight volunteers, most all graduates of the South Carolina Catawba Master Naturalists program, monitored the 41 nest boxes in 2016. The volunteers were directed by Tom Anderson and Dick Metzler using the **Cornell Lab of Ornithology: Code of Conduct** guidelines.

Each nestbox is monitored, with minimal disturbance to the birds, on a bi-weekly basis over a span of 22 weeks (March 15-August 21). The volunteers record observations and send their documentation for data entry into **NestWatch** website via **Cornell Lab of Ornithology**.

After the nestlings fledged the nest, the volunteers clean out the nestbox. The “Nesting Attempt” is then summarized and closed out in the **NestWatch** data base. In the most popular nestboxes, the next breeding couple will begin building a new nest before the volunteer returns to check the nestbox.

The Eastern Bluebird breeding seems to be most active in nestboxes placed near the orchards where a symbiotic relationship exists. Bluebirds collect insect larva from the fruit trees to feed their young. More data, over time, is needed to analyze the benefits to both species.

In addition, other cavity-nesting species build nests in the nestboxes. Typically, the Carolina Chickadee, Carolina Wren, Tufted Titmouse, Eastern Phoebe, and the Brown-headed Nuthatch have utilized the nestboxes at the ASCG. In 2016 the Carolina Chickadee & Carolina Wren were successful, however, the Eastern Phoebes made several attempts on the porch of the Nature Center but was not successful.

Readers of this report that may be interested in learning more about the data collection process and/or setting up nestboxes on your property should visit [www.nestwatch.org](http://www.nestwatch.org)

## Summary Eastern Bluebird Monitoring 1999-2016

Year	No. of boxes	Bluebird eggs laid	Bluebird eggs hatched	Bluebird Fledged	Eggs of other species	# other species	Total	Total fledged	success rate
1999	22	50	*	14			50	14	28.0%
2000	27	87	*	64			87	64	73.6%
2001	24	131	*	68			131	68	51.9%
2002	24	156	*	57			156	57	36.5%
2003	23	142	*	65			142	65	45.8%
2004	24	135	*	74			135	74	54.8%
2005	35	157	*	66			157	66	42.0%
2006	30	182	*	85			182	85	46.7%
2007	32	236	*	93			236	93	39.4%
2008	33 <sup>^</sup>	199	110	79	18	9	217	88	40.6%
2009	33 <sup>^</sup>	182	80	56	15	13	197	69	35.0%
2010	29 <sup>^</sup>	198	118	92	18	13	216	105	48.6%
2011	28	164	116	93	36	15	200	108	54.0%
2012	29	243	144	130	32	17	275	147	53.5%
2013	31	180	117	85	13	0	193	85	44.0%
2014	27	188	134	100	25	0	213	100	46.9%
2015	31	194	100	78	42	20	236	98	41.5%
2016	34 <sup>~</sup>	220	147	128	27	16	247	144	58.3%
Total data		3044	1066	1427	226	103	3270	1530	46.8%

\* Data not tabulated

<sup>^</sup> 8 boxes were inactive or unused throughout the season

<sup>~</sup> 7 boxes were inactive or unused throughout the season