

A Citizen Science Breeding Bird Project at Anne Springs Close Greenway

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There were forty-one nesting sites monitored during 2017 throughout the Anne Springs Close Greenway (ASCG) at three locations: The Nature Center, The Field Trial Barn, and The Dairy Barn. During the breeding season, 34 of the 41 sites had mating birds that built nests. All of the sites are boxes for cavity nesting species. (An Eastern phoebe site that has been active at the Nature Center was monitored regularly in 2017 but no nests were found.)

While we monitor any bird nest sites we observe, most of those we monitor are cavity nesters. These include Eastern bluebirds, Brown-headed nuthatches, Tufted titmouse, Carolina chickadees and Carolina wrens. Providing boxes for nesting replaces natural nest holes or natural cavities. The ASCG has ideal habitat to place nestboxes.

There were 311 eggs laid in the 2017 breeding season, the highest number since data collection began on the ASCG, in 1999. All the eggs were from cavity nesting birds, 289 of them Eastern Bluebird eggs. Of the 311 eggs, 158 hatched and 93 matured and fledged. The number of eggs hatched is in line with past years but the number of birds that fledged is sharply down from recent years, primarily due to increased predation. A program to predator-proof the nestboxes is planned before next nesting season.

Ten volunteers monitored the 41 nest boxes in 2017 on a bi-weekly basis, compiling a total of 764 individual visits and records. The volunteers' records are entered into the **NestWatch** website maintained by *Cornell Lab of Ornithology*.

After the nestlings fledge from 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, breeding birds may occupy the box for one or even two more nest attempts.

All the birds that fledged successfully this year were Eastern Bluebirds. Other species that made nests were Carolina Chickadee and Carolina Wren. Eastern Phoebe, Tufted Titmouse and Brown - Headed nuthatches, which have previously nested on the Greenway, were not observed this year.

Of the birds we monitor, only the Brown-headed nuthatch is declining in numbers. We continue to try to provide boxes in suitable habitat to encourage their nesting. It is clear that Eastern Bluebirds are not endangered. They are just pretty! Over the years that records have been kept, we have fledged over 1520. Breeding seems to be most active in nestboxes placed near the orchards where a symbiotic relationship exists between the birds and the trees. Bluebirds collect insect larva from the fruit trees to feed their young which, in turn, reduces the number of fruit tree pests. Areas that have been converted from orchards to strawberry fields,

or where new developments have led to removal of orchards, have shown drop-offs in bluebird breeding. More data, over time, is needed to analyze the benefits to both birds and fruit trees.

Readers of this report that may be interested in learning more about the data collection process and/or setting up nestboxes on their property should visit www.nestwatch.org

Summary Eastern Bluebird Monitoring 1999-2017

Year	No. of boxes	Bluebird eggs laid	Bluebird eggs hatched	Bluebirds Fledged	Eggs of other species	# other species fledged	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 [^]	199	110	79	18	9	217	88	40.6%
2009	33 [^]	182	80	56	15	13	197	69	35.0%
2010	29 [^]	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 [~]	220	147	128	27	16	247	144	58.3%
2017	41 [~]	289	158	93	22	0	311	93	29.9%
Total data		3333	1224	1520	248	103	3581	1623	45.3%

* Data not tabulated

[^] 8 boxes were inactive or unused throughout the season

[~] 7 boxes were inactive or unused throughout the season