## Oxley Equestrian Center and Fall Creek Natural Area 2017 NestWatch Report

Submitted by Sarah Dzielski (Cornell Class of 2017) & Facundo Fernandez-Duque (Cornell Class of 2018)

During the 2017 nesting season, two Cornell students (Sarah Dzielski and Facundo Fernandez-Duque) monitored 55 nesting attempts for 13 species of birds at the Oxley Equestrian Center and around the Fall Creek Natural Area near Liddell Field Station. This work contributed data to the Cornell Lab of Ornithology's NestWatch program, a continental-scale citizen science project designed to quantify the reproductive success of birds (www.nestwatch.org). Funded by an Engaged Cornell Undergraduate Engaged Research Grant, we regularly checked 64 nest boxes and searched for nests of species that construct their own nesting structures. In addition, we conducted a supplemental feeding experiment to test the efficacy of providing insect-based foods to birds during the nesting season. This research was developed in collaboration with members of the NestWatch audience from New York, California, and Texas to gather data of interest to the community. Data analysis for a manuscript is underway.

We greatly appreciate your support our project, and to keep you updated on our progress, we developed the following summaries to communicate how each location contributed to our nest monitoring efforts. Thank you for providing access to these study sites supporting research about birds breeding in the Ithaca area.

## Fall Creek Natural Area (near Liddell Field Station)

The tall grassy fields surrounding the forest of Fall Creek Natural Area provided excellent habitat for a number of bird species this season. Because the fields were not cut until late in the season, Red-winged Blackbirds, Song Sparrows, Bobolinks, Savannah Sparrows, and other field-dwelling species were able to rear young. While we were not able to find any Bobolink or Savannah Sparrow nests, we did spot many fledged young of these species flushing from the fields in late July. Blackbird species like Bobolink and Red-winged Blackbird are in decline due to agricultural land use change, thus preserving their breeding habitat (grassy fields) until after the breeding season is crucial for helping these species recover.

Forest edge habitat was utilized by a number of thrush species (Veery, Wood Thrush, American Robin), woodpeckers (Downy Woodpecker, Hairy Woodpecker, Northern Flicker, and Pileated Woodpecker), warblers (Yellow, Black-and-white, and Chestnut-sided), orioles (Baltimore and Orchard), Cedar Waxwings, and other breeding birds. We found a number of nests hidden in the thick shrubs and trees along the edge of the forest.

Eastern Bluebirds, Black-capped Chickadees and Tree Swallows took advantage of the nest boxes installed for them. We incorporated the bluebirds and chickadees into our supplemental feeding experiment, so select pairs enjoyed a helping of mealworms each day once their eggs hatched. We enjoyed watching our focal birds fly out of the woods to defend

their nest box and feast on the mealworms. This site hosted at least 7 bluebird pairs, and a total of 28 chicks fledged!

Fall Creek Natural Area Summary			
Nest Boxes Used: 28 of 42			
Species	Number of attempts	Nest Type	
American Robin	5	Open Cup	
Baltimore Oriole	1	Open Cup	
Black-capped Chickadee	5	Nest Box	
Cedar Waxwing	2	Open Cup	
Downy Woodpecker	1	Natural Cavity	
Eastern Bluebird	12	Nest Box	
	0		
House Wren	(dummy nests only)	Nest Box	
Red-winged Blackbird	3	Open Cup	
Song Sparrow	1	Open Cup	
Tree Swallow	10	Nest Box	
Wood Thrush	1	Open Cup	
Yellow Warbler	1	Open Cup	
Total	42		



Figure 1. A Red-winged Blackbird nest hidden deep in the tall grass near Liddell Field Station.



Figure 2. A clutch of Black-capped Chickadees gets weighed. We weighed chickadee and bluebird chicks to measure growth rates for our supplemental feeding experiment.



Figure 3. Nest boxes installed around Fall Creek Natural Area and adjacent lands.

## Oxley Equestrian Center

Oxley Equestrian Center's barn structures and open fields near forest edges provided breeding habitat for a number of species associated with human-altered habitats. Tree Swallows nested in the boxes around the horse pastures, and many Barn Swallows built their clay nests in the barns but were too high for us to monitor. Both species could often be spotted flying over the horse pastures, catching insects to feed their young. House Sparrows, Eastern Bluebirds, European Starlings and House Wrens also utilized the nest boxes. The House Wrens did well at Oxley in 2017, successfully raising two groups of fledged young. A Northern Mockingbird pair built a number of nests in the ornamental shrubs around Oxley and kept abandoning them, keeping us searching for new nests all season. Eventually the pair settled on a location and successfully raised chicks in a bush across the street.

Oxley Equestrian Center Summary			
Nest Boxes Used: 9 of 22			
Species	Number of attempts	Nest Type	
Eastern Bluebird	1	Nest Box	
House Sparrow	3	Nest Box	
House Wren	3	Nest Box	
Tree Swallow	2	Nest Box	
Northern Mockingbird	1	Open Cup	
European Starling	2	Nest Box	
Cedar Waxwing	1	Open Cup	
Total	13		



Figure 4. Eastern Bluebird eggs inside of a nest box. Bluebird eggs are a beautiful pale blue color.

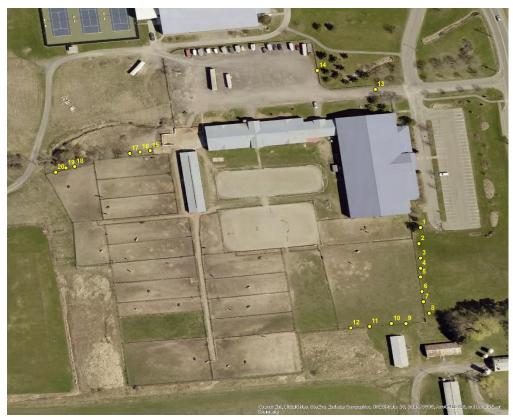


Figure 5. Nest boxes located at Oxley Equestrian Center.