

Lincoln Land Community College Bird Banding Station (LLCC BBS)
Lincoln Land Community College, Springfield, IL
(Coordinates: 394-0893)

Report and Results, Spring 2015

Lincoln Land Association of Bird Banders
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Federal Permit # 08355

The Lincoln Land Community College bird banding station (LLCC BBS), which was initiated in September, 2012, began its sixth overall season and third spring season of operations on Monday, 23 March 2015. The banding site was the same as the five previous seasons, primarily the northern edge of the LLCC property (just north of the ball fields and east of the campus lake) and southwestern edge of City Water, Light and Power property. The purposes established for the station are to use bird banding as a tool to: a) document, quantify and monitor bird populations that permanently live in or visit the site during the spring and fall migratory seasons, and b) provide educational opportunities for students, staff and others interested in learning more about birds and their environments. Objectives include: 1) documenting, quantifying and monitoring the seasonal bird populations; 2) comparing seasonal results with similar projects or studies at other Illinois or national sites; 3) publishing project results; and 4) providing “hands-on” experiences to students, staff and others who visit the station.

As in past seasons, mist nets were used to capture birds from dawn until about 11:00 a.m. on days without rain, strong winds, or below freezing temperatures. This spring, from 10 to 27 mist nets were used on 49 mornings (weekdays and some Saturdays) from 23 March through 25 May, for a total of 4781 net hours of operation. [One net hour is the use of one standard, 12-meter x 2 meter net for one hour during daylight hours.] The nets were placed in the same habitats and, in most cases, the same locations as in previous seasons. There were four types of habitat: a) an older, regenerated, deciduous woods with a dense honeysuckle understory and a moderately-sloped ravine, including a narrow stream that flows from the campus lake (below the dam) to Lake Springfield (off campus) (12 nets); b) the forest edge and its adjacent grassy lane (2½ nets); c) a small, managed prairie (4½ nets); and d) a small area in the vicinity of a group of bird feeders close to the lake (8 nets). To capture birds, nets were stretched (in specially-prepared net-lanes) between 10' aluminum poles (½" ENT conduit) that were placed vertically in the ground. The nets were then “unfurled” (usually before dawn) and “furled” (and “tied”) at the end of the daily banding session. (Furling and tying prevented the accidental capture of birds when not in operation). The Bander’s Code of Ethics – as developed and promoted by the North American Bird Banding Council (2001) – is the standard for banding operations. Site-specific station and banding protocols are also a formal part of the banding operations.

The 2015 spring season was rather cool and damp and migrant birds were slow to arrive and quick to depart; in fact, several expected species were neither caught nor seen all spring. Morning temperatures in late March ranged from the upper 20’s to mid-40’s (except twice to the low 60’s); April, from 29 degrees (on the 4th) and 30’s (with 36 as late as the 23rd) to upper 60’s (and 70’s on three dates); and May, 39 degrees (1 May) to upper 70’s. Banding was definitely hindered by fairly strong to extremely strong winds (17 days) and periodic rains/thunderstorms (5 days were rained out, and 7 others shortened because of rain) which seriously reduced the potential for capturing birds.

The final tally for this spring’s operations was 1064 birds of 75 species banded on 49 days with an average of 22 newly banded birds per day and 0.22 newly banded birds per net hour (see **Table 1** for comparisons to 2013 & 2104). Another 193 birds were captured as **returns** (birds that had been banded 90 or more days earlier, several of which had been banded in the fall of 2012—the first season of operation) and 416 as **repeats** (recaptured within 90 days of the banding date; several were captured from two to six times). During the spring season it’s expected that there will be one or more days when 100 or more birds can be banded. In 2013 there were none, in 2014 there were two, and this year, again, there were none -- in fact, the highest one-day total this year was only 71 (on 4 May). The lowest single-day totals for the season (1 and 3 birds) were on 1 May & 7 April, respectively (when the winds were extremely strong or rain shortened the day).

TABLE 1

Spring Comparisons	2015	2014	2013*
Last Day of banding	25 May	23 May	23 May
Number of banding days	49	47	40*
Total species banded	75	82	80
Total birds banded	1064	1391	1083
Highest one day total banded	71	136	64
Average # of Birds banded per day	22	30	27
Number of days with 100 or more birds	0	2	0
Number of days with 10 or fewer birds	10	7	4
Number of Returns	193	213	59
Number of Repeats	416	464	276
Number of Net Hours	4781	4182	3110
Number of newly banded birds per net hour	0.22	0.33	0.35

*In 2013, banding did not begin until 1 April because of the 17" snowstorm on the last Monday of March (which would have been the starting date).

Seven new species were banded at the station this spring: a White-eyed Vireo, a Tree Swallow (which, by season's end, had built a nest in one of the bluebird boxes), a Northern Rough-winged Swallow, a pair of Eastern Bluebirds (which also took up residency in one of the nest boxes), a Worm-eating Warbler, a Henslow's Sparrow, and an Orchard Oriole. Other noteworthy captures were a first year male Blue Grosbeak and the Savannah Sparrows. In addition to the new species for the station, new high counts for a single season were established for: Great Crested Flycatcher (2), Gray-cheeked Thrush (22), European Starling (2), Wilson's Warbler (4), Savannah Sparrow (4), Fox Sparrow (8), Red-winged Blackbird (51) and Common Grackle (59). New species highs for a spring season included: Northern Flicker (5), Eastern Phoebe (8), Brown Creeper (2), House Wren (16), Winter Wren (2), Marsh Wren (1), Golden-crowned Kinglet (2), and Magnolia Warbler (6).

The 10 most commonly banded species this spring are shown in **Table 2** and are compared with a) those of the last two springs and (b) what, in a typical year, would often be the 10 most common species (in somewhat descending order). The Dark-eyed Junco was the only species in which 100 or more were banded.

TABLE 2**The 10 most commonly banded species**

	2015	2014	2013
Dark-eyed Junco	162	177	76
Swamp Sparrow	89	98	46
American Goldfinch	69	106	83
Common Grackle	59	n/a	n/a
<u>Red-winged Blackbird</u>	<u>51</u>	<u>n/a</u>	<u>n/a</u>
Swainson's Thrush	47	61	n/a
White-throated Sparrow	41	101	69
Myrtle Warbler	39	n/a	n/a
House Finch	38	57	n/a
American Robin	35	n/a	n/a

Species typically in the top 10**(all spring years combined)**

White-throated Sparrow
American Robin
Gray Catbird
Indigo Bunting
Swamp Sparrow
American Goldfinch
Hermit Thrush
Common Grackle
Nashville Warbler
Tennessee Warbler

n/a: these species were not in the top 10 list that year.

The 2015 season may have been a typical or, perhaps, a subpar season; time will tell. **Table 3**, when compared to the captures of selected species during the first two spring seasons, suggests it to be a subpar spring season. Regarding total species, there were ten captured in both previous springs that were not captured this year and another 14 in just one spring. Had just half of those 24 been captured in 2015, along with the pleasant addition of the seven new ones early in the season, the total species count would have been 87. Regarding individual totals, **Table 3** also shows the scarcity of some of the commonly banded species compared to the past two springs. Some major highlights (or "lowlights") were the vireos, Ruby- and Golden-crowned Kinglets, Gray Catbird, nearly ALL warblers (except Northern Waterthrush and Common Yellowthroat), most sparrows, Indigo Buntings and American Goldfinches.

TABLE 3
Spring Season Captures for Selected Species

	<u>2015</u>	<u>2014</u>	<u>2013</u>		<u>2015</u>	<u>2014</u>	<u>2013</u>
Ruby-throated Hummingbird	0	2	4	Black-and-white Warbler	0	5	2
Red-headed Woodpecker	0	2	1	American Redstart	4	12	1
Warbling Vireo	1	4	4	Ovenbird	8	17	5
Ruby-crowned Kinglet	10	8	22	Northern Waterthrush	24	40	24
<u>Blue-gray Gnatcatcher</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>Louisiana Waterthrush</u>	<u>0</u>	<u>1</u>	<u>1</u>
Swainson's Thrush	47	31	68	Kentucky Warbler	0	1	3
Hermit Thrush	11	16	5	Mourning Warbler	0	1	1
American Robin	35	43	27	Common Yellowthroat	24	26	30
Gray Catbird	34	46	53	Wilson's Warbler	4	1	0
<u>Brown Thrasher</u>	<u>12</u>	<u>11</u>	<u>13</u>	<u>Canada Warbler</u>	<u>0</u>	<u>2</u>	<u>0</u>
Blue-winged Warbler	0	3	0	Chipping Sparrow	33	23	66
Golden-winged Warbler	0	2	0	Clay-colored Sparrow	0	2	1
Tennessee Warbler	4	21	5	Field Sparrow	7	18	16
Orange-crowned Warbler	1	5	0	Song Sparrow	28	56	39
<u>Nashville Warbler</u>	<u>3</u>	<u>23</u>	<u>7</u>	<u>Lincoln's Sparrow</u>	<u>7</u>	<u>18</u>	<u>7</u>
Yellow Warbler	2	1	6	Swamp Sparrow	89	98	46
Chestnut-sided Warbler	0	2	0	White-throated Sparrow	41	101	66
Magnolia Warbler	6	5	5	White-crowned Sparrow	23	91	32
Yellow-rumped Warbler	39	48	23	Rose-breasted Grosbeak	0	5	4
<u>Black-throated Green Warbler</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>Indigo Bunting</u>	<u>2</u>	<u>11</u>	<u>9</u>
Palm Warbler	2	15	8	Baltimore Oriole	0	0	5
Blackpoll Warbler	0	3	1	American Goldfinch	69	106	83
				House Sparrow	6	25	49

The total list of species captured this spring and the number of each banded is provided in the **Table 4** at the end of this report. The seven previously unbanded species are identified in **bold face** and bring the station total up to 111 for the six banding seasons. The 75 species banded is the lowest of the three spring seasons, but the third best of all seasons. The average of 0.22 birds per net hour this spring is subpar compared to 0.32 and 0.35 of the previous two springs and the 0.36 six-season overall average. Since this was only the sixth banding season and only the third spring season, it should have been easy to achieve a large number of records. Those records are identified in **Table 4** as follows: “***” new high for all seasons (15 species including the seven new species); * new high for a spring season (9 species); “T” ties previous high for all seasons (5 species); and, “t” ties previous high for just spring seasons (11 species).

In addition to the mist net captures, the blackbird “decoy” trap (established last year) was independently operated again this year. This walk-in trap measures 8’ x 16’ x 5.5’ and is located in a remote corner of the LLCC campus. The trap was in operation on 28 days and captured 81 blackbirds (72 grackles, 7 cowbirds and 2 redwings). As last year, a few birds were captured and released multiple times. Another aspect of the banding station operations was the placement of ten bluebird boxes; more will be added later. Two of the boxes were promptly used by birds, a pair of bluebirds (which fledged five young) and a pair of Tree Swallows (which had just started nesting at the end of the banding season). **One of the benefits of our banding operations is to learn that some of our banded birds have been captured elsewhere. That was the case for Swamp Sparrow 2511-49325; it was caught and released at the Sand Bluff Banding Station northwest of Rockford, IL, on 3 May (this year); it had been banded here on 14 October 2013.**

As in past seasons, the primary issue affecting banding operations was the large number of (tame) deer. The hope remains that they learn to know where the nets are when they are furled (and readily visible) and avoid them when unfurled (not visible). However, when the deer are caught off-guard (which they sometimes are), they disperse quickly--and a net in their departure path doesn't stop them. A few more nets were lost this spring and others damaged as a result of deer running through them. Other factors affecting the banding operations were the strong winds and rain.

A deer was also responsible for one of the three casualties this spring (as it attempted to eat the bird). A Sharp-shinned Hawk was responsible for a second casualty and had it not been for a net, another bird would have met its demise as a Cooper's Hawk was hot on its tail when they both got caught in the net. There were no clues as to why the third bird was a casualty. Even with these casualties, the station continued to maintain its extremely fine record for bird safety. And, during the course of the banding operations as in the past, visitors to the station brought in window casualties for us to dispose of.

TABLE 4
Total Spring 2015 Results

Bold Face = New Station Species

** new seasonal high total (32)

* new spring season high total (11)

T ties high total all seasons (5)

t ties spring season high total (5)

Sharp-shinned Hawk	1 *	Nashville Warbler	3
Cooper's Hawk	1 t	Yellow Warbler	2
Mourning Dove	4	Magnolia Warbler	6 *
Red-bellied Woodpecker	3	Yellow-rumped Warbler	39
<u>Downy Woodpecker</u>	<u>2</u>	<u>Palm Warbler</u>	<u>2</u>
Hairy Woodpecker	1 t	American Redstart	4
Northern Flicker	5 *T	Worm-eating Warbler	1 **
Yellow-bellied Flycatcher	1 t	Ovenbird	8
Traill's Flycatcher	1	Northern Waterthrush	24
<u>Eastern Phoebe</u>	<u>8 *</u>	<u>Common Yellowthroat</u>	<u>24</u>
Great Crested Flycatcher	2 **	Wilson's Warbler	4 **
White-eyed Vireo	1 **	Eastern Towhee	3 Tt
Warbling Vireo	1	Chipping Sparrow	33
Red-eyed Vireo	1	Field Sparrow	7
<u>Blue Jay</u>	<u>4</u>	<u>Savannah Sparrow</u>	<u>4 **</u>
Tree Swallow	1 **	Henslow's Sparrow	1 **
No. Rough-winged Swallow	1 **	Fox Sparrow	8 **
Black-capped Chickadee	10	Song Sparrow	28
Tufted Titmouse	3 t	Lincoln's Sparrow	7
<u>White-breasted Nuthatch</u>	<u>2 t</u>	<u>Swamp Sparrow</u>	<u>89</u>
Brown Creeper	2 *	White-throated Sparrow	41
Carolina Wren	1 t	White-crowned Sparrow	23
House Wren	16 *	Dark-eyed Junco	162
Winter Wren	2 *	Northern Cardinal	32
<u>Marsh Wren</u>	<u>1 *</u>	<u>Blue Grosbeak</u>	<u>1 Tt</u>
Golden-crowned Kinglet	2 *	Indigo Bunting	2
Ruby-crowned Kinglet	10	Red-winged Blackbird	51 **
Eastern Bluebird	1 **	Common Grackle	59 **
Veery	4 Tt	Brown-headed Cowbird	13
<u>Gray-cheeked Thrush</u>	<u>22 **</u>	Orchard Oriole	1 **
Swainson's Thrush	47	Purple Finch	1 t
Hermit Thrush	11	House Finch	39
Wood Thrush	4 Tt	Pine Siskin	2
American Robin	35	American Goldfinch	69
<u>Gray Catbird</u>	<u>34</u>	<u>House Sparrow</u>	<u>6</u>
Brown Thrasher	12	Total Birds Banded	1064
European Starling	2 **	Total Species	75
Cedar Waxwing	1 t		
Tennessee Warbler	4		
<u>Orange-crowned Warbler</u>	<u>1</u>		

Planning ahead! Construction on the station's banding "facility" progressed extremely well this spring. We're hoping it will be ready by the fall season. Many thanks to the students (and staff) of the LLCC Work Force Careers Center for their diligence. When the "facility" becomes reality, we will need assistance in furnishing it. Stay tuned.

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The LLCC BBS is scheduled to resume this fall from about 24 August to mid-November. See you then.