

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

**Report and Results, Fall 2015**

**Lincoln Land Association of Bird Banders**  
**Vernon Kleen, Bander/Coordinator**  
**Federal Permit # 08355**

The Lincoln Land Community College bird banding station (LLCC BBS), which was initiated in September, 2012, began operations of its seventh migratory season and fourth fall season on Monday, 24 August 2015. The site was the same as the six previous seasons, primarily the northern edge of the LLCC property (just north of the baseball and soccer fields and east of the campus lake) and the 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 to those of past years and to 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 near sunrise to about 11:00 a.m. on days without rain, strong winds, or below freezing temperatures. This fall, from 15 to 30 mist nets were used on 69 mornings (nearly all weekdays and most Saturdays) from 24 August through 14 November, plus 19-20 November, covering 5669 net hours of operation. [One net hour is the use of one standard, 12-meter x 2-meter mist net for one hour during daylight hours.] The habitats in which nets were placed consisted of the same four components (and, in most cases, the same locations) as in previous seasons; i.e., a) an older, regenerated, deciduous woods with a thick honeysuckle understory and a slightly-sloped ravine with a narrow, shallow stream that flows from the campus lake (below the dam) to Lake Springfield (off campus) – 11 nets; b) a woodland edge next to a crop field (**three new net sites were added to this component this fall**) or mowed grassy lane – 7 nets; c) a small, managed prairie – 4 nets; and d) an area in the vicinity of a group of bird feeders close to the lake – 8 nets. To capture birds, net “lanes” were established and the nets were stretched between two 10’ aluminum poles (½” ENT conduit) placed vertically in the ground. The nets were then “unfurled” (usually before sunrise) and “furled” at the end of the daily banding session (to prevent the accidental capture of any birds when not in operation). The Bander’s Code of Ethics – as developed and promoted by the North American Bird Banding Council (2001) – was adopted as the standard for banding operations. Station and banding protocols were also utilized as a formal part of the banding operations—these protocols included proper training of persons to extract birds from the nets, the careful handling, processing and releasing of the birds, and approved photography.

Table 1 presents the 2015 Fall statistics and compares them with those of the two previous fall seasons.

<b><u>TABLE 1</u></b>	Fall	Fall	<b>Fall</b>
<b><u>Fall Comparisons</u></b>	2013	2014	<b>2015</b>
First banding Date	08/26	08/25	<b>08/24</b>
Last banding Date	11/15	11/14	<b>11/20</b>
Number of banding days	64	64	<b>69</b>
Number of birds banded	1902	2670	<b>2047</b>
Number of species banded	70	79	<b>80</b>
Average number of Birds per day	29.7	41.7	<b>29.7</b>
Highest one-day total banded	194	117	<b>120</b>
Number of days with 100+ birds banded	5	4	<b>2</b>
Number of Net Hours	5596	5103	<b>5669</b>
Number of banded birds per Net Hour	0.34	0.52	<b>0.37</b>
Returns of Banded Birds*	35	81	<b>57</b>
<b><u>Repeats of Banded Birds**</u></b>	<b>470</b>	<b>513</b>	<b>572</b>

\*Returns: Birds banded at the site 90 or more days earlier (beginning in the fall of 2012).

\*\*Repeats: birds captured within 90 days of original banding or previous capture.

During the 2015 fall season there were only two days in which 100 or more birds were banded -- the highest was 120 (7 November). The record one-day total still stands at 194 (18 October 2013). In contrast, there were ten days in which five or fewer birds were banded compared to six and two in 2013 and 2014, respectively. The 80 species banded is a new fall-season high (one more than the 79 of last year) and would have been even higher had we captured a single blackbird of any species; a few other species (such as Red-breasted Nuthatch, European Starling, 3-4 more warbler species and Purple Finch) could have added to that total as well. The final tally of birds captured this fall (2047) was 100+ more than 2013, but 500+ fewer than last year, even given the 5 more banding days and 500+ more net hours. The key differences this year -- as depicted in Table 2 -- were a) the American Goldfinch -- where, in round numbers, nearly 600 were banded in both 2013 & 2014 but only 243 banded (about 40% as many) this fall; and b) the Chipping Sparrow with only 27 banded this fall compared to 84 & 170 the past two falls. When comparing only last year's totals, there were a 100-or-more Tennessee Warblers, House Finches and House Sparrows banded in 2014 than in 2015. In contrast, however, record numbers for several species were established in 2015 (especially the sparrows and junco) -- detailed in the APPENDIX. The complete list of species captured this fall and the number of each banded is also provided in the APPENDIX. The two new species for the station are identified in **bold face** and bring the accumulative station total to 113. Except for the number of birds banded in 2014, the 2047 birds banded (with 5669 net hours) in 69 banding days are all higher than both previous years. The average of 29.7 birds per day is the same as 2013, but well below the 41.7 of last year; however, the 2015 figures include days that were "shortened" (both the number of nets in and hours of operation) because of excessive wind (especially south and west winds), rain and/or leaves -- wind-blown and leaf-filled nets made it difficult to capture and hold birds as the nets became conspicuously visible. The increase in the number of net hours is due in part to the placement of new nets (three) along a wooded edge that had previously not been readily accessible. Although the nets within the woodlands were responsible for capturing several species not caught in other habitats, only five of the eleven nets there could be considered consistently productive. Three of the four prairie nets, all eight of the feeder-area nets and five of the seven edge nets were excellent for capturing birds.

Table 2 identifies a) the 10 most commonly banded species this fall and compares them with the totals of the two previous fall seasons, and b) the species that are typically in the top 10 (in approximate descending order) at most other eastern and midwestern fall banding stations. Five of the "typical" top 10 were not represented at all in the LLCC BBS results this year (last year that number was seven). As previously referenced, the American Goldfinch has ranked as the most commonly banded species in years past; however, this year, because of "low" numbers, it was surpassed by the Dark-eyed (Slate-colored) Junco--102 of which were banded in just two days.

**TABLE 2**

**The 10 most commonly banded species**

	<u>2013</u>	<u>2014</u>	<u>2015</u>
Dark-eyed Junco	104	169	<b>284</b>
American Goldfinch	579	629	<b>243</b>
Song Sparrow	86	48*	<b>120</b>
House Finch	52	216	<b>102</b>
<u>White-throated Sparrow</u>	98	92	<b>96</b>
American Robin	37*	57*	<b>84</b>
Yellow-rumped Warbler	88	107	<b>84</b>
Northern Cardinal	40*	33*	<b>77</b>
House Sparrow	91	178	<b>67</b>
<u>Swamp Sparrow</u>	83	35*	<b>55</b>

\*Not in the Top 10 these years

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

White-throated Sparrow
American Goldfinch
Yellow-rumped Warbler
Gray Catbird
<u>Hermit Thrush</u>
Ruby-crowned Kinglet
American Robin
Northern Cardinal
Magnolia Warbler
<u>Swainson's Thrush</u>
Ovenbird
Nashville Warbler
Golden-crowned Kinglet

In contrast to the most common birds, 17 species were represented by a single individual this fall (compared to 12 & 14 for 2013 & 2014, respectively), and another 5 by just two birds. The new species banded at the station this fall were the Blue-headed Vireo and Cape May Warbler; and six other's including the Warbling Vireo, White-eyed Vireo and Eastern Bluebird were firsts for a fall season. Other interesting captures included a Sharp-shinned Hawk, two Cooper's Hawks, a Yellow-bellied Sapsucker, a Marsh Wren, a Black-throated Blue Warbler, four Bay-breasted Warblers, a Blackpoll Warbler and nine Pine Siskins. Some of the interesting "non-captures" were Red-breasted Nuthatch (none), Cedar Waxwing (only 1), warblers in general (less than 300 total and only 215 if Yellow-rumped are excluded), all blackbird species (not a single bird) and Purple Finch (none). In terms of species groups, we caught 62 woodpeckers of 5 species,

30 flycatchers of 6 species (15 Eastern Phoebes), 10 vireos of 5 species (6 Red-eyed), 40 wrens of 4 species (25 House Wrens), 185 thrushes of 7 species (84 robins & 54 Swainson's), 299 warblers of 21 species (84 Yellow-rumped), and 697 sparrows of 10 species (284 juncos, 120 Song & 96 White-throated). With the station now in its seventh overall season, the number of new "high" seasonal totals wasn't expected to be as numerous as in seasons past. Regardless, new "single-season" highs were set for 24 species this fall (including the 2 first-time species) and ties were recorded for another 14. There were six new "fall season" highs and four ties. All these records are identified in the APPENDIX. As always, an occasional casualty can be expected; fortunately, the number of casualties continued to be extremely low (as it has been for all banding seasons). Of the six known casualties, 3 were killed directly by deer attempting to eat them (personal observation) and a Cooper's Hawk was responsible for another. The station was also the benefactor of a number of specimens from LLCC staff and visitors (primarily window casualties) for identification and donation to the State Museum.

The five issues affecting banding operations (and, in some cases, the potential number of nets used each day) were wind, rain, leaves, people and deer. Very little could be done about the wind and rain except to furl nets that had been opened. As for leaves, when leaves are in the nets, the number of birds captured was reduced in two ways: 1) the birds could see and therefore avoided leaf-filled nets, and 2) considerable time was required to extract the leaves and during that time, when people were at the nets, birds avoided the capture area. In addition, all leaves (and their remnants) had to be totally removed from the nets prior to furling, otherwise, the nets could not have been readily unfurled the next morning. As for people, there were three types: full classrooms, periodic wanderers, and those with dogs. The classroom groups and periodic wanderers didn't usually affect banding operations unless they lingered for extended periods or staged as a group in close proximity to active nets – especially those close to the lake. Then there were two categories of people with dogs: 1) those whose dogs were either on leashes or trained not to stray and 2) those who permitted their dogs to run freely. The latter did cause problems including one net that was completely destroyed from an unleashed, roaming dog. Then there were the deer (and more deer). The only hope remains that they learn where the nets are when they are furlled (and readily visible) and avoid them when unfurled (not visible). On five occasions I witnessed deer completely destroy two nets and run through three others leaving very gaping holes. Several other nets were similarly affected (both destroyed and damaged) by deer. 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. The deer in the area of the banding station are so tame, they don't even flee when you try to chase them away.

Construction of the banding facility, which began early last November, has now been completed. It began with students (and staff) of the LLCC Work Force Careers Center but, for a variety of reasons, was completed late this fall by campus staff. Therefore, next spring, the facility will be fully functional (we were able to test it out for several days this fall).

Acknowledgments: Finally, many thanks to everyone who volunteered time at and visited the LLCC banding station. Special thanks to a) Lincoln Land Community College for permitting the project to continue (in particular Dr. Charlotte Warren, Dr. Eileen Tepatti, Bill Bade, Dave Bretscher and Steve Handy); b) Anthony Rothering (LLCC Biology Faculty) for near-daily assistance in all aspects of the project from beginning to end; c) many regular assistants (especially Jim Mordacq, Tyler Beckerman, Joe Gardner, Stevie Emmons, Lizzie Roehrs, Anna Kozlov, Kelsey Thornton, Susan Shaw, Libby Errickson and Mike Kennedy); d) students and staff of the LLCC Work Force Careers Center and other LLCC staff for completing the construction of the "banding facility"; e) all who donated wish-list items for the new facility and station (including the anonymous donor of the electric Polaris work vehicle); f) Paul Biggers and Anthony Rothering for reviewing and providing pertinent comments on the draft of this report, and g) everyone else who helped and/or visited the station (including 88+ LLCC classroom students, at least 4 LLCC classes, 4 UIS grad students and 1 scout troop) any time during the season.

The LLCC BBS is scheduled to resume next spring from about 21 March through 27 May. See you then.

P.O. Box 13442  
Springfield, IL 62791

## APPENDIX: 2015 Fall Banding Summary

**Bold Face = New Station Species (2)**

\*\* new seasonal high total (24 species)

\* new fall season high total (6 species)

T ties high total all seasons (14 species)

t ties fall season high total (4 species)

Sharp-shinned Hawk	1
Cooper's Hawk	2 T
Mourning Dove	17 **
Ruby-throated Hummingbird	1
<u>Red-bellied Woodpecker</u>	<u>12 **</u>
Yellow-bellied Sapsucker	1 T
Downy Woodpecker	33 **
Hairy Woodpecker	4 **
Northern Flicker	12 **
<u>Eastern Wood-Pewee</u>	<u>4 **</u>
Yellow-bellied Flycatcher	2 T
Traill's Flycatcher	6 T
Least Flycatcher	2
Eastern Phoebe	15
<u>Great Crested Flycatcher</u>	<u>1 t</u>
White-eyed Vireo	1 *T
<b>Blue-headed Vireo</b>	<b>1 **</b>
Warbling Vireo	1 *
Philadelphia Vireo	1 T
<u>Red-eyed Vireo</u>	<u>6 T</u>
Blue Jay	22 **
Black-capped Chickadee	26 **
Tufted Titmouse	33 **
White-breasted Nuthatch	9 **
<u>Brown Creeper</u>	<u>23</u>
Carolina Wren	7 T
House Wren	25
Winter Wren	7 T
Marsh Wren	1 T
<u>Golden-crowned Kinglet</u>	<u>23 **</u>
Ruby-crowned Kinglet	34
Eastern Bluebird	1 *
Veery	6 **
Gray-cheeked Thrush	15
<u>Swainson's Thrush</u>	<u>54</u>
Hermit Thrush	23
Wood Thrush	2
American Robin	84 **
Gray Catbird	19
<u>Brown Thrasher</u>	<u>6 t</u>
Cedar Waxwing	1
Blue-winged Warbler	1
Golden-winged Warbler	1
Tennessee Warbler	32
<u>Orange-crowned Warbler</u>	<u>11 T</u>
Nashville Warbler	19
Magnolia Warbler	31
<b>Cape May Warbler</b>	<b>1 **</b>
Black-throated Blue Warbler	1 Tt
<u>Yellow-rumped Warbler</u>	<u>84</u>

Black-throated Green Warbler	15 **
Palm Warbler	17 T
<i>Yellow Palm Warbler (2)</i>	
Bay-breasted Warbler	4 *T
<u>Blackpoll Warbler</u>	<u>1 *</u>
Black-and-white Warbler	9
American Redstart	15
Ovenbird	18
Northern Waterthrush	11
<u>Mourning Warbler</u>	<u>2</u>
Common Yellowthroat	17
Wilson's Warbler	5 **
Canada Warbler	4
Eastern Towhee	4 **
<u>American Tree Sparrow</u>	<u>5 t</u>
Chipping Sparrow	27
Field Sparrow	27 **
Fox Sparrow	13 **
Song Sparrow	120 **
<u>Lincoln's Sparrow</u>	<u>23 **</u>
Swamp Sparrow	55
White-throated Sparrow	96
White-crowned Sparrow	47 *
Dark-eyed Junco	284 **
<u>Northern Cardinal</u>	<u>77 **</u>
Rose-breasted Grosbeak	1
Indigo Bunting	4
House Finch	102
Pine Siskin	9
<u>American Goldfinch</u>	<u>243</u>
House Sparrow	67

---

Total Birds Banded	2047
Total Species Banded	80

