

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

[Report and Results, Fall 2020](#)

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

The Lincoln Land Community College Bird Banding Station (LLCC BBS), initiated in September, 2012, began its sixteenth migratory season and ninth fall season of operations on Wednesday, 19 August 2020 and ended on 16 November 2020. Because of the Covid-19 pandemic, there was no 2020 spring season for the station. The 2020 site was the same as all past seasons: the northern edge of LLCC property and the southwestern edge of City Water, Light and Power (CWLP) property as described in previous reports. The purposes established for the station remained unchanged; i.e., 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 included: 1) documenting, quantifying and monitoring the seasonal bird populations; 2) comparing seasonal results with those of past years and to similar projects or studies at other Illinois and midwestern sites; 3) publishing project results; and 4) providing “hands-on” experiences to students, staff and others who visit the station.

As in past seasons, nylon mist nets were used to capture birds from near sunrise to about 11:00 a.m. on days without rain, strong winds, snow or very cold temperatures. A hummingbird feeder was also placed in the area to allow more of this species to be attracted, trapped and banded in addition to the regular station operations. The number of nets used each day throughout the season (most weekday and Saturday mornings) varied from 18 to 26. The season’s total net hours was 5696. [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 five components (and, in most cases, the same locations) as in previous seasons; i.e., a) an older, regenerated, deciduous woods with a thick bush honeysuckle understory with a slightly-sloped ravine and a narrow, shallow stream that flowed from the campus lake (below the dam) to Lake Springfield (off campus) – 9 nets; b) a narrow woodland edge between a busy thoroughfare and a fallow field – 3 nets; c) a mowed grassy lane next to the woods – 3½ nets; d) a small, managed prairie – 3½ nets; and e) an area in the vicinity of a group of bird feeders close to the lake (and dam) – 7 nets. To capture birds, net “lanes” were prepared 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) – continued to be the standard for banding operations. Additional station and banding protocols were also utilized as a formal part of the banding operations—these protocols included appropriate training of persons to extract birds from the nets, careful handling, processing and releasing of the birds, recording data and approved photography.

TABLE 1

Fall Comparisons	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020
First banding Date	08/26	08/25	08/24	08/22	08/21	08/20	08/19	08/19
Last banding Date	11/15	11/14	11/20	11/18	11/11	11/17	11/19	11/16
Number of banding days	64	64	69	73	65	65	69	74
Number of species banded	70	79	80	78	79	79	74	88
Number of birds banded	1902	2670	2047	2318	2236	2076	1289	1947
Average number of Birds per day	29.7	41.7	29.7	31.8	34.4	31.9	18.7	26.3
Highest one-day total banded	194	117	120	241	147	174	90	104
Number of days with 100+ birds banded	5	4	2	4	4	3	0	1
Number of Net Hours	5596	5103	5669	5100	4582	5670	4549	5696
Number of banded birds per Net Hour	0.34	0.52	0.36	0.45	0.49	0.37	0.28	0.34
Returns of Banded Birds*	35	81	57	53	66	64	26	80
Repeats of Banded Birds**	470	513	572	507	425	387	243	317

*Returns: Birds banded at the site 90 or more days previously (earliest bandings were in fall of 2012).

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

TABLE 1 compares the annual Fall statistics for 2020 (**bold data**) with those of the previous seven years. The 2020 banding season began on 19 August (tied for the earliest starting date), ended on 16 November (a middle ending date) and included 74 operation days – a record number (by one day). Unlike most years, when station operations were cancelled for several days because of rain, wind or snow, this year there were only three cancelled days (all because of rain and one of those was the scheduled close-down day, 14 November, hence the extended season to 16 November). In years past, rain caused above normal water level in the stream and prevented access to some nets; however, this year the stream was never too deep to cross over. The 88 species (compared to only 74 last year) was a NEW STATION RECORD for all seasons. The previous highs were 80 in the fall and 87 in the spring. Of those 88, 15 were represented by a single bird and the other two were single-day captures. Without those 17, the species total would have been 71. The 1947 birds banded this year were 50% better than last year’s extreme low but quite similar to the 2013, 2015 & 2018 seasons (1902 to 2076). The average number of birds banded per day from 2013 - 2019 was 35.4—nine more than the 2020 average of 26.3. The number of net hours, 5696, was a new record and (along with the net hours since 2014) included a 20% reduction for the “excessive” number of deer-caused holes in and other damage to the nets plus an occasional 10% further reduction on extremely windy days that lowered the potential for capturing and holding birds. And, the number of birds per net hour (0.34) was very similar to the 2013, 2015 & 2018 seasons (0.34 to 0.37).

There was only one day this fall in which 100 or more birds were banded, but eight with 50 or more. (The second highest day was 85.) The previous high of 241 birds banded in one day is still the station record. In contrast, there was only one day when five or fewer were banded (typically that average is five); however, there were 13 days in which the total did not reach double digits. Another important aspect of the banding program is the capture of birds that have been previously banded. This year, 80 were captured as **returns** (birds banded 90 or more days earlier (SEE **TABLE 2**); the oldest were a Blue Jay banded in the fall of 2014, a Hairy Woodpecker (fall of 2015) and Black-capped Chickadee (fall of 2015). Interestingly, 10 of the returning species were migrants (**green in the Table**) and 8 of the 11 returns had been banded at the station as returning winter residents from one to four years previously. Another 317 captures were “**repeats**” [birds caught within 90 days of original banding or a previous capture] -- several of these were caught multiple times (as many as eight) during the season.

TABLE 2

	Returns* from past seasons										Total Returns					
	2012	2013		2014		2015		2016		2017		2018		2019		
F = Fall; S = Spring	F	S	F	S	F	S	F	S	F	S	F	S	F	S	F	
Ruby-throated Hummingbird															1	1
Red-bellied Woodpecker								2					1			3
Yellow-bellied Sapsucker															1	1
Hairy Woodpecker						1				1						2
Downy Woodpecker									2						2	4
Blue Jay					1				1						3*	5
Black-capped Chickadee							1				1	6	1	4		13
Tufted Titmouse													1		7	8
White-breasted Nuthatch												1	1			2
Carolina Wren										1					1	2
House Wren								1								1
American Robin													1			1
Gray Catbird															1	1
Brown Thrasher														1		1
Common Yellowthroat															1	1
Chipping Sparrow													1			1
Song Sparrow															2	2
Slate-colored Junco													1			1
Northern Cardinal							1	2				5		2	1	11
House Finch															1	1
American Goldfinch					1					2	1	1			5	10
House Sparrow							1	2		1		1	2	1		8

*Returns: Birds banded 90 or more days previously (beginning in the fall of 2012). = 80

Green = returning migrants

@ For banding records, the banding lab requires the use of the following names for five species in this report: Yellow-shafted Flicker, Traill’s Flycatcher, Myrtle Warbler, Western Palm Warbler and Slate-colored Junco.

TABLE 3
The 10 most commonly banded species (among fall years) Species typically in top 10

	2013	2014	2015	2016	2017	2018	2019	2020	
Myrtle Warbler	88	107	84	120	66	142	22*	166	White-throated Sparrow
@Slate-colored Junco	104	169	284	269	296	199	91	159	American Goldfinch
American Robin	37*	57*	84	53*	77	79	90**	154**	Myrtle Warbler
White-throated Sparrow	98	92	96	158	48*	60*	104	142	Gray Catbird
House Finch	52	216	102	250	390	94	18*	108	Hermit Thrush
American Goldfinch	579	629	243	336	300	229	91	134	Ruby-crowned Kinglet
Song Sparrow	86	48*	120	60	51	65	78	62	American Robin
Northern Cardinal	40*	33*	77	50*	56	49*	22*	61	Northern Cardinal
House Sparrow	91	178	67	80	60	128	18*	60	Magnolia Warbler
Swainson's Thrush	33*	64	54*	23*	32*	53*	39	57	Swainson's Thrush

*Not in the Top 10 these years

** New Fall Season high

Ovenbird

Nashville Warbler

TABLE 3 identifies a) the 10 most commonly banded species this fall (**bold data**) and compares them with the totals of the seven 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. Six (more than usual) of the “typical” top 10 were represented in the LLCC BBS Top 10 this fall. The American Goldfinch and Slate-colored Junco are the only species to appear in the top ten all eight years; the Myrtle Warbler, Song Sparrow, House Finch and House Sparrow have missed just one year. The White-throated Sparrow dropped from first position to fourth even though it had its highest total since 2014. The American Robin made the Top 10 for its fifth time with a record-setting appearance. The Swainson's Thrush and Northern Cardinal made it for their third time.

In contrast to the most common birds, 15 species were represented by a single bird this fall (which is normal) and another twelve by just two birds. Counting the Red-shouldered Hawk (station species number 127) there were ten new seasonal high totals (see the Appendix), four additional “fall season” highs, four species tied for high seasonal totals and two more tied for fall-season highs.

The list of likely “non-captures” is too large to print here (and notably absent from the list in the Appendix); however, the Philadelphia Vireo, Canada Warbler and American Tree Sparrow were the three most conspicuous. All five station habitats were less-productive than anticipated. The prairie did not attract its traditional finches, warblers and sparrows; the feeders around the lake's edge, even though adequately supplied, were poorly visited; the woodlands and wooded edges had fewer birds, especially sparrows. Exceptions to this fall's below-usual numbers, however, were American Robins and White-throated Sparrows which were more common than usual. Field edges were remarkably void of birds. The “cold fronts”, which often trigger birds to head south in mass numbers, were few and far between. Of those that appeared on the radar as potentially good migration nights, none turned out as such at the LLCC BBS.

TABLE 4 provides, for six species groups (column 1), the sum total of all the birds banded in each group the past seven fall seasons (2013 to 2019) (column 2), the average number of birds banded for each group over that seven-year span (column 3), the total number of birds banded in 2020 (column 4), and the percentage of how well the 2020 group compared to the seven-year average. The numbers indicate that all but the “sparrow” group fared above average compared to the past seven years and that the woodpeckers, primarily resident birds, did extremely well. The warbler

	TABLE 4		2020	% of		
	Fall Seasons from 2013 to 2019				Total	Average
	Total Birds	Average				
Combined	Per Year					
Woodpeckers (5 species)	229	32.7	49	163.3%		
Chickadees/Nuthatches (3 species)	282	40.3	44	109.2%		
Kinglets (2 species)	318	45.4	46	101.3%		
Thrushes (5 species)	635	90.7	110	116.1%		
Warblers (27 species)	2540	362.8	420	115.8%		
Sparrows (13 species)	4027	575.3	485	84.3%		

numbers were somewhat inflated because of the 166 Myrtles (compared to only 22 last year). Despite these “good” figures, the low numbers of 2019 reduced the seven-year average several percentage points and the 2020 averages, especially for the migratory species (thrushes, warblers and sparrows), would be lower than the pre-2019 six-year averages. In addition to the above groups, this year there were: 30 flycatchers of 6 species (the same figures, including 17 Eastern Phoebes, as last year), 18 vireos of 3 species, and 69 wrens of 4 species (50 House Wrens).

The fall’s complete list of species captured, the number of each banded and the new and tied records appear in the **APPENDIX**. Some of the more interesting fall captures included the station’s first **Red-shouldered Hawk**, two Sharp-shinned Hawks (both on the same day), ten Ruby-throated Hummingbirds, three Yellow-bellied Sapsuckers (all on the same day), two Blue-headed Vireos, a Marsh Wren, 25 Cedar Waxwings, 19 Bay-breasted Warblers, five Northern Parulas, two Blackburnian Warblers, two Savannah Sparrows, a first fall Dickcissel and a first fall Baltimore Oriole. One species worth noting: the Myrtle Warbler, continued to appear in an interesting trend over the banding station’s eight-year existence – low numbers banded in the odd-numbered years (2013, 2015, 2017 and 2019) and high numbers banded in the even-numbered years (2014, 2016, 2018 and 2020). Two extra site activities this year (not included in the totals) included the use of a hummingbird feeder and trap which was successful in capturing 17 hummingbirds (including a return from last fall) and a five-night “owl project” that successfully captured ten owls (two Eastern Screech-Owls and eight Northern Saw-whet Owls – one of the latter had been banded near Duluth, MN a year earlier).

The five external factors affecting banding operations (which affected the number of nets used and the potential number of birds caught each day) were **wind, rain, leaves, people and deer**. Little could be done about the wind and rain except to furl nets that had already been opened, or, to not open them at all (cancelling operations prior to starting the day). As for leaves, when leaves are in the nets, the number of birds captured are reduced in two ways: 1) the birds can see, and therefore avoid, the leaf-filled nets, and 2) considerable time is required to extract the leaves out of the nets and during the time, extractors are present, birds avoid the capture area. This year was a near-typical year; a heavy leaf-fall normally occurs on about five days each fall; this year it happened on three. However, there were several moderate leaf-fall days. Of course, all leaves, parts of leaves, small sticks, insects (and anything else in the nets) must be totally removed from the nets prior to each day’s furling so that the nets can be readily unfurled the next morning. As for visiting people, there are four types: full classrooms, interested students (some earning extra classroom credits), periodic wanderers, joggers or fishermen, and those with dogs. This year there were no classroom groups and only a couple of individual students. There were a few periodic hikers/joggers/fishermen but they had little effect on netting operations. Then there are two categories of people with dogs: 1) those whose dogs are either on leashes or trained not to stray and 2) those who permit their dogs to run freely. Fortunately, none of the nets were known to have been damaged by dogs this fall. Finally, there are the deer (and more deer). Although this fall wasn’t the worst season of net damage and bird casualties caused by deer, it continues to extend the period of negative effects on resources and banding principles of care. The only hope remains that the deer learn where the nets are when furled (and readily visible) and avoid them when unfurled (not visible); unfortunately, a few nets were totally destroyed this fall and several others have gaping holes where deer “ran through” them. In one instance, a deer went through a net in one direction, ran parallel to it then came back through from the other direction. When deer are caught off-guard (which they sometimes are), or are in pursuit of other deer (such as a buck chasing does), they disperse quickly--and a net in their departure path does not stop them (although they often stumble and fall after hitting a net). Deer around the banding station are so tame, they don’t even flinch when you actively try to chase them away; in two instances during the last week of operations, three deer actually came up to see what was being tossed at them rather than flee from the area. On occasion a deer will use its nose to lift up the bottom trammel of a net and slither underneath before scampering away. Station success would be more productive and more birds would be captured if there were fewer deer in the area.

As always, an occasional bird casualty occurs; fortunately, the number caused by nets and the banding operations at the LLCC BBS is extremely low --in fact, this year there were none. Unfortunately, though, there were nine bird casualties caused by deer. As for casualties in general, the station continued to be the benefactor of window-caused deaths from LLCC staff for identification and donation to the State Museum.

The banding “headquarters” (building facility) continued to be a major benefit, not only as a safe and dry place to house the “bird-mobile” and all banding materials, but also 1) as the workplace on the colder and windy mornings towards the end of the season, 2) as a warm, wind-free rest area between net checks; 3) the banding and classroom site for the four-day “Advanced Banding Workshop”, and 4) the lighted gathering spot during the “owl” nights. However, the picnic table under the building’s canopy continued to be the primary banding workplace. We will always be grateful to the LLCC Work Force Careers Center for making this facility possible. Of course, volunteers are the station’s backbone.

During this fall's season at least 33 individuals volunteered one or more days at the station and 16 of them five or more days.

Acknowledgments: Finally, many thanks to everyone who volunteered time at and visited the LLCC BBS (and maintained the Covid-19 protocol through special distancing, masks and the limited number of volunteers permitted to visit the station each day through an advance registration process). Special thanks to a) Lincoln Land Community College for permitting the project to continue (in particular, Dr. Charlotte Warren, Dave Bretscher and Steve Handy); b) Anthony Rothering (LLCC Biology Faculty and new holder of a Master Bird Banding Permit) for timely assistance in all aspects of the project from beginning to end (and, especially, keeping the bird feeders full for the benefit of resident birds but as an attractant to migrants in the area); c) Lawrence Strubhart for preparing special net lanes in the prairie and taking care of downed trees and other grounds issues that needed special attention; d) Carla Potts for near-daily assistance in all station activities (and especially arriving before dawn on many days to unfurl nets); e) other volunteers for furling and unfurling nets, extracting birds and leaves and/or recording data, etc. (especially, Aaron Fishburn, Joe Gardner, Abigail Gerrish, Nicole Kinney, Betty Kleen, Gina Kovach, Jim Mordacq, Grace Norris, Nancy Redman, Sam Reif, Andrew Sharp, Susan Shaw and Holly Thompson); f) Danielle Kaschube for coordinating and leading the "Advanced Bander Workshop" (for LLABB attendees: myself, Anthony Rothering, Jim Mordacq, Nancy Redman, Holly Thompson, Chad Cremer, Asya Rahlin and Tara Beveroth); g) Paul and Ruth Biggers for the loan of the "Ruth-mobile" and transporting the station's "bird-mobile" to and from the shop for servicing; h) Susan Shaw, Carla Potts, Sam Reif and Grace Norris for cleaning the bird bags; i) Betty Kleen for the season-ending cleaning of the facility, j) Wayne Huckabee for constructing useful tools, k) Tony Rothering for adding new light fixtures above the banding tables, l) donors of treats and special-use items for the station, especially for the Northern Saw-whet Owl nights; and m) Paul Biggers, Anthony Rothering, Nancy Redman and Susan Shaw for reviewing and providing pertinent comments on the draft of this report, And, thanks, too, to everyone who provided financial support, especially to the Redmans for unique grants through Phillips 66; and several contributors and anonymous donors (since grants and donations are our primary means of support).

The LLCC BBS is scheduled to resume next spring beginning on Thursday, 18 March (just before spring) and continuing into the last week of May. See you then.

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Lincoln Land Community College Bird Banding Station (LLCC BBS)

Lincoln Land Association of Bird Banders, PO. Box 13442, Springfield, IL 62791

FACEBOOK: Lincoln Land Community College Bird Banding Station

APPENDIX: 2020 Fall Banding Summary

Bold Face = New Station Species (1)

**** new seasonal high total (10 species)**

*** new fall season high total (4 species)**

T ties high total all seasons (4 species)

t ties fall season high total (5 species)

Sharp-shinned Hawk	2T
Cooper's Hawk	1
Red-shouldered Hawk	1**
Mourning Dove	2
<u>Ruby-throated Hummingbird</u>	<u>10**</u>
Red-bellied Woodpecker	14T
Yellow-bellied Sapsucker	3**
Downy Woodpecker	23
Hairy Woodpecker	5*
<u>@ Yellow-shafted Flicker</u>	<u>5</u>
Eastern Wood-Pewee	6
Yellow-bellied Flycatcher	2
<u>@ Traill's Flycatcher</u>	<u>2</u>
Least Flycatcher	2
<u>Eastern Phoebe</u>	<u>17</u>
Great Crested Flycatcher	1
Blue-headed Vireo	2**
Warbling Vireo	1
Red-eyed Vireo	15**
<u>Blue Jay</u>	<u>20</u>
Black-capped Chickadee	19
Tufted Titmouse	17
Red-breasted Nuthatch	5
White-breasted Nuthatch	8
<u>Brown Creeper</u>	<u>11</u>
Carolina Wren	13
House Wren	50
Winter Wren	4
Marsh Wren	1
<u>Golden-crowned Kinglet</u>	<u>15</u>
Ruby-crowned Kinglet	32
Eastern Bluebird	3
Veery	3
Gray-cheeked Thrush	9
<u>Swainson's Thrush</u>	<u>57</u>
Hermit Thrush	40
Wood Thrush	1
American Robin	154**
Gray Catbird	25
<u>Brown Thrasher</u>	<u>3</u>
European Starling	1
Cedar Waxwing	25
Blue-winged Warbler	1 t
Golden-winged Warbler	1
<u>Tennessee Warbler</u>	<u>35</u>
Orange-crowned Warbler	26**
Nashville Warbler	17
Northern Parula	5T
Yellow Warbler	1
<u>Chestnut-sided Warbler</u>	<u>5</u>
Magnolia Warbler	36
Cape May Warbler	2**
<u>@ Myrtle Warbler</u>	<u>166</u>
Black-throated Green Warbler	8
<u>Blackburnian Warbler</u>	<u>2**</u>

<u>@ Western Palm Warbler</u>	<u>12</u>
Bay-breasted Warbler	19**
Black-and-white Warbler	4
American Redstart	22
<u>Ovenbird</u>	<u>19</u>
Northern Waterthrush	10
Mourning Warbler	1
Common Yellowthroat	27
Wilson's Warbler	1
<u>Scarlet Tanager</u>	<u>1*</u>
Eastern Towhee	1
Chipping Sparrow	53
Field Sparrow	20
Savannah Sparrow	2 t
<u>Fox Sparrow</u>	<u>6</u>
Song Sparrow	62
Lincoln's Sparrow	10
Swamp Sparrow	33
White-throated Sparrow	142
<u>White-crowned Sparrow</u>	<u>12</u>
<u>@ Slate-colored Junco</u>	<u>159</u>
Northern Cardinal	61
Rose-breasted Grosbeak	2
Indigo Bunting	3
<u>Dickcissel</u>	<u>1T*</u>
Common Grackle	9
Brown-headed Cowbird	2
Baltimore Oriole	1*
Purple Finch	2
<u>House Finch</u>	<u>108</u>
Pine Siskin	13
American Goldfinch	134
House Sparrow	60
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Total Birds Banded	1947
Total Species Banded	88

Number of Species with only one bird:	15
Number of Species with only two birds:	12
Number of Species caught on a single day:	17

@ For banding records, the banding lab requires the use of the following names for five species in this report: Yellow-shafted Flicker, Traill's Flycatcher, Myrtle Warbler, Western Palm Warbler and Slate-colored Junco.

