

Breeding Bird Monitoring Report for the Crossroads at Big Creek Preserve, Door County, Wisconsin: 2021

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Blue-winged Warbler is a recommended Focal Species at Crossroads (photo by G.S. Casper).



Executive Summary

Tracking the success of restoration at Crossroads at Big Creek includes assessing how the breeding bird community is responding to ongoing activities. The breeding bird community has strong ties to the landscape and its habitat quality, being resident for several months during which resources are needed to raise a family, and is considered to be an important biodiversity component and high priority for monitoring the success of ongoing habitat restoration. Continued monitoring of the breeding bird community is recommended.

This study collected baseline data for comparison to survey data from later years to inform the success of ongoing habitat restoration and management projects. Survey results and metrics are provided to meet these goals. Some suggestions for improving point count surveys, and for engaging citizenry through social apps, are made.

The baseline data identified 39 species of conservation concern visiting the property in 2021 (some were late migrants or transients), from which 27 initial Focal Species are selected. A Checklist was developed which also identifies 35 species with high vulnerability from the Partners In Flight Avian Conservation Assessment Database. Adaptive habitat management should re-evaluate habitat goals and management actions whenever new survey data are available, and consider pursuing specific habitat features that might further benefit Focal Species (i.e., houses for Tree Swallow, greater grassland extent for Clay-colored Sparrow, improved forest conditions for Wood Thrush). Habitat goals may also be adjusted if Focal Species are not responding positively to habitat changes, by either choosing new Focal Species as measures of success, or changing management plans to address species habitat needs.

Yellow-billed Cuckoo is uncommon at Crossroads.



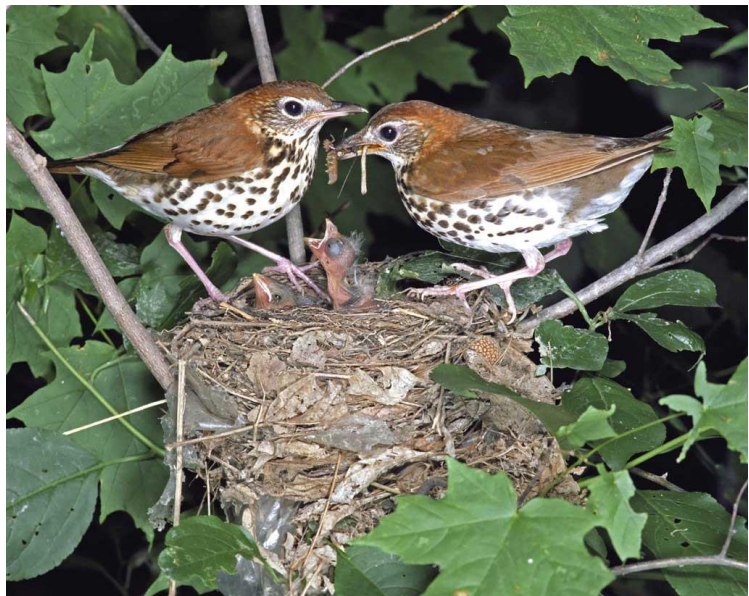
1. Introduction

Crossroads at Big Creek, Inc. (Crossroads) is a non-profit learning center and nature preserve within the city limits of Sturgeon Bay, Door County, Wisconsin, where the Big Creek Estuary connects with Lake Michigan (Figure 1). Established in 1992, the preserve encompasses approximately 200 acres with Big Creek and its estuary a central feature, and surrounding lands of former agriculture and orchards now representing woodlots, old field, and swamp forest in varying stages of restoration. Wetlands consist of emergent marsh shoreline in the estuary, a stream, swamp forest, wet meadows, and a few ponds. The Door County location is a peninsula along the northeastern coast of Lake Michigan, and an important migratory flyway for birds, bats and insects.

An ecological restoration plan is being implemented for Crossroads, with monitoring and reassessment checkpoints. Improved habitats will include sedge meadow and alder thicket, northern wet-mesic forest, mesic forest, and transitional meadow habitat. The restoration will be guided by Crossroads' significance as a migratory bird stopover site, and by improving habitat for spawning fish. Improved trails and programs to expand community science and empower participation in the restoration work will support and amplify the on-the-ground restoration. Crossroads has received encouragement in this project from many longstanding partners, including the Door County Soil and Water Conservation Department, the City of Sturgeon Bay, The Nature Conservancy, the Door County Land Trust, and a number of state and federal agencies.

This report addresses results of an initial year of baseline surveys of the breeding bird community by both acoustic and point count surveys, identifies metrics for tracking trends in the avian community to assist with measuring the success of habitat restoration, and provides some initial conservation status assessment information for species.

Wood Thrush is a recommended Focal Species at Crossroads.



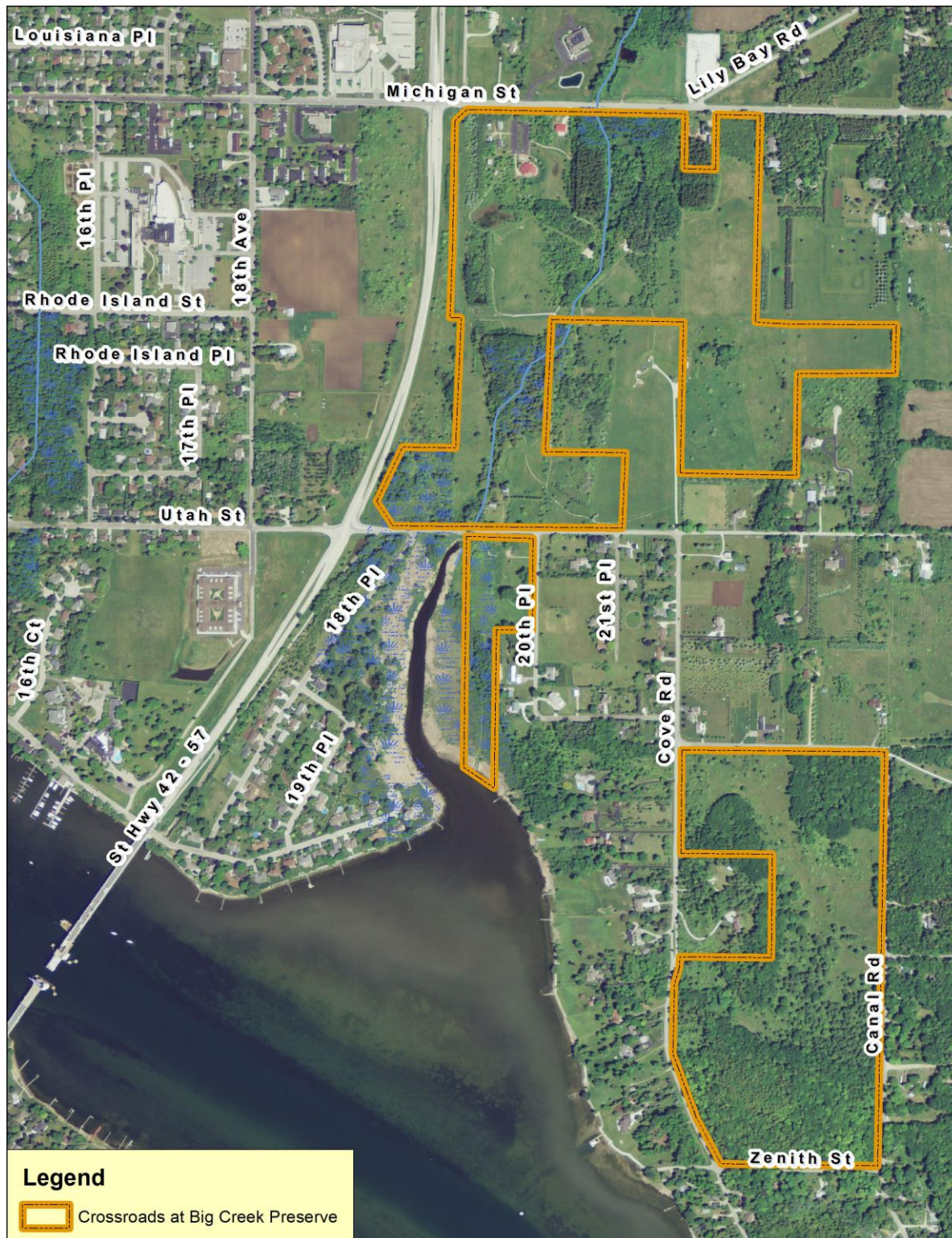


Figure 1. Crossroads at Big Creek boundaries, Door County, Wisconsin.

2. Methods

Sampling effort for both acoustic and point count methods was determined by examining species accumulation curves for multiple years and sites throughout Wisconsin, which determined that 15 acoustic surveys and 8 point count surveys were sufficient to detect over 75% of species actually present with 95% confidence (Casper unpublished data, Casper and Cutright 2021).

2.1 Acoustic Surveys

Five wetland habitat sites were selected for acoustic monitoring in order to maximize detections of frogs (Casper 2022b; Figure 2, Table 1). Four SM4 automated recording systems (ARS) with omnidirectional stereo microphones (Wildlife Acoustics, Inc., Concord, MA USA; Song Meter model SM4; Figure 3) were programmed to record 5-minute samples (WAV files) from 14:00 to 04:00 each day on the top of each hour, with six extra samples from 19:30 to 00:30 on the half-hour marks. Each unit was also programmed to record an additional five 10-minute duration samples each morning for bird song analyses (from 30 minutes before sunrise, and at 4 subsequent 1-hour later intervals). Recorders were programmed at a sampling rate of 24 kHz (twice the frequency range of most target species). Digital data were recorded on SD cards and copied to external hard drives upon completion. ARS were deployed 19 March and retrieved in mid-August (Table 1, Appendix A).

A fifth SM3 model unit (Wildlife Acoustics, Inc., Concord, MA USA; Song Meter model SM3; figures 2 and 3) was deployed near the nature center at an ephemeral wetland swale, in part as an educational display (Site E). It was programmed to record 5-minute samples (WAV files) from 15:00 to 04:00 each day on the top of each hour, with four extra samples from 19:30 to 22:30 on the half-hour marks. This ARS was deployed 13 April and retrieved on 20 August (Table 1, Appendix A).

ARS were strapped to a tree trunk or mounted on a post at ca. 5–6 ft high (Figure 3). Recorders were photo documented and general habitat descriptions noted (Table 1). Temperature loggers (HOBO models OA-002-08 Pendant Light/Temp, and OA-002-64 Pendant Light/Temp; Onset Computer Corporation, Bourne, Massachusetts, USA) were also deployed alongside each ARS to assist with frog data analyses, but these data were not utilized for avian surveys.

Acoustic Data Analysis

Birders expert in identification by sound analyzed 15 acoustic samples from each site. Samples were chosen every other morning in June, and rotated on a schedule using the first pre-dawn sample on June 1, the next later sample on June 3, the next later sample on June 5, and the next later sample on June 7; then the rotation restarted with the first pre-dawn sample on June 9, etc. This procedure provides equal representation of each of four time slots. On bad weather days the observer substituted the day after or the day before. For analysis, Observer 1 displays the sound spectrogram in software (Song Scope, Wildlife Acoustics, Inc., Maynard, MA), scrolling through the spectrogram and playing back and identifying any bird sounds to species,

and recording the time in the sample that each species is first identified. These results are then examined by Observer 2, who verifies at least one instance of a correct identification for each species in each sample. If the two observers do not concur, a third observer examines the data to break the tie, and spectrograms are compared to published examples (Macaulay Library 2019, Pieplow 2017). Final confirmed species determinations in each sample are then compared with point count results (if available). More detail on acoustic data analysis is provided in Casper (2022a).

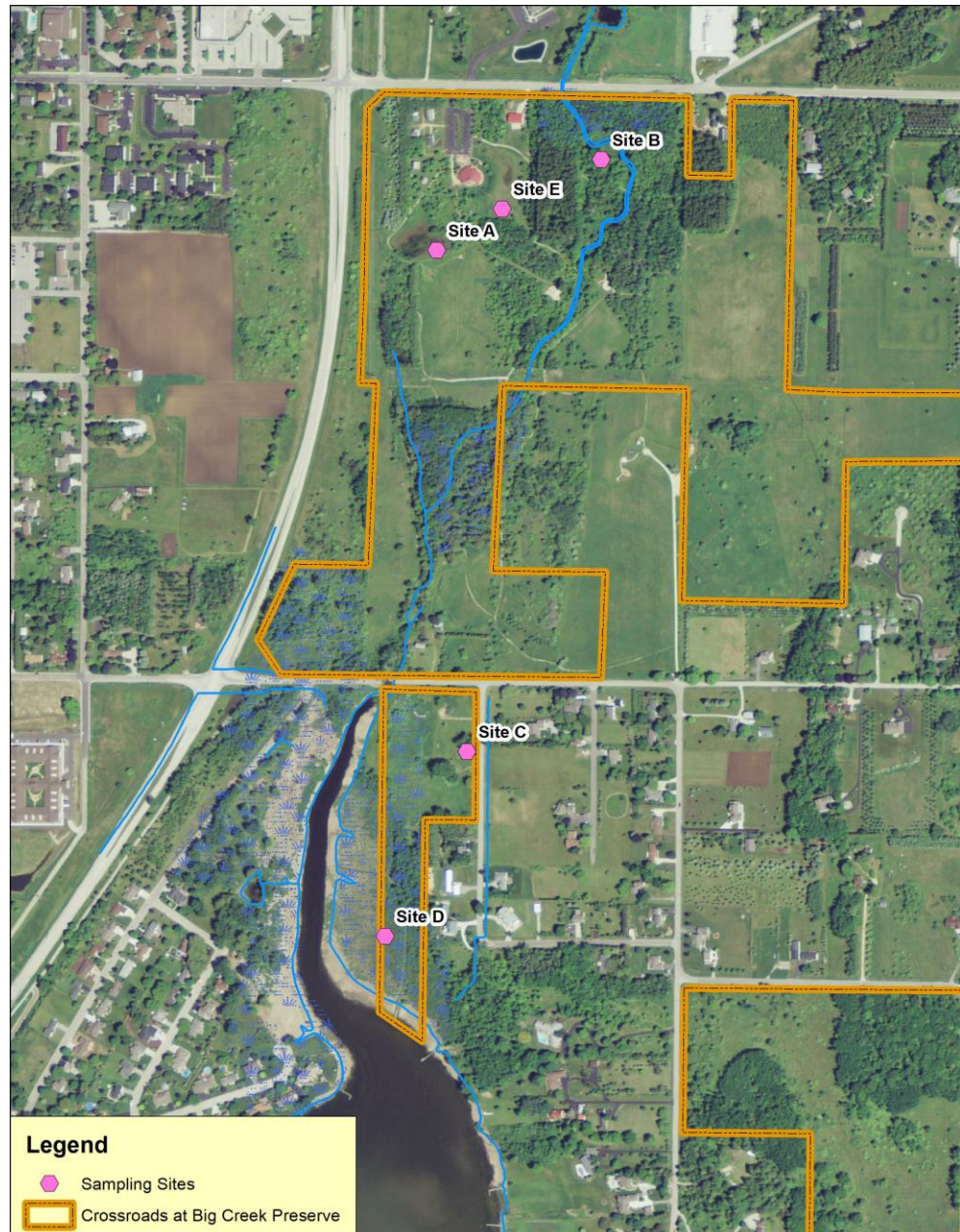


Figure 2. Acoustic survey sites, Crossroads 2021.

Table 1. Acoustic Survey Sites and Data Collected, Crossroads at Big Creek, 2021.

Site	Model_SN	LatDD	LongDD	Deploy Date	Data Start	Data End	Habitat
A	SM4_15507	44.832991	-87.345420	3/19	3/19	8/15	Tree/shrub line between old field and wetland swale.
B	SM4_15646	44.834108	-87.342602	3/19	6/2	8/13	Wet meadow open area along Big Creek near woodlot.
C	SM4_15686	44.826871	-87.344862	3/19	3/19	8/13	Semi-permanent pond along roadway mostly shaded by trees, shrub and grassland surround.
D	SM4_15974	44.824613	-87.346257	3/19	6/2	8/13	Along estuary shoreline, emergent wetland, small trees, and shrubs.
E	SM3_300054	44.833500	-87.344300	4/13	4/3	8/20	Open ephemeral wetland in grassland surround near woodlot.



Figure 3. Automated recording devices (ARS). Model SM4 on left, Model SM3 on right. Temperature loggers are visible attached underneath SM4 and on the backboard of the SM3.

2.2 Point Counts

Breeding bird surveys utilizing 10-minute point counts were also conducted independently in June 2021 (Grimm 2022). Four points were surveyed on four separate dates with two counts on June 3, 4, 8 and 9, conducted at least 30-minutes apart, and a final count on June 14, totaling nine counts at each point. For full methods see Grimm (2022).

2.3 Other Data

Grimm (2022) also recorded species encountered between points as miscellaneous observations; conducted three additional point counts on June 8, 9 and 14 at a fifth point (Southwest Point); and conducted single point counts on June 4 and 14 at two additional points (North Bridge and North Point, respectively).

An eBird Basic Data Set (2022) was harvested for Door County, from which a June-only data set was extracted for this project and examined for records within or very near the property boundaries.

3. Results

3.1 Acoustic Survey Results

ARS successfully collected 5 samples on each June morning as programmed and 15 samples were analyzed from each site (Appendix A). The following exceptions occurred, which did not affect data analyses for birds:

- On two units (15646 and 15974; sites B and D, respectively) Card A became corrupted, likely due to defective firmware. Data were recovered normally from Card B on each ARS, beginning on 2 June.
- There was a small gap in recording on ARS 300054 (Site E) from 23–30 May due to battery failure. Batteries were replaced and normal recording resumed on 31 May.
- Various truncated recordings were made on most ARS that were less than the programmed settings of 5- or 10-minute durations. This is normal and typically due to read-write errors when electronic interference occurs, such as static charge, or when SD Cards write faster than firmware can handle.

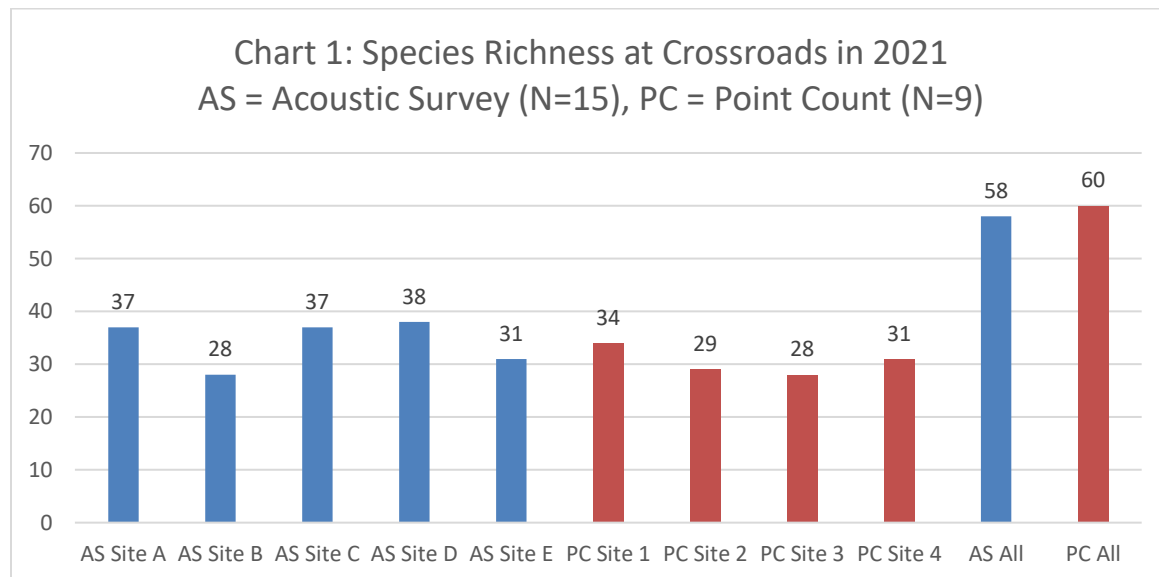
3.2 Metrics

Metrics are quantifiable measures that can be compared across years to track trends in species occupancy and/or abundance. Metrics can inform adaptive habitat management and track how species' respond to habitat changes. For breeding bird surveys (both acoustic and point count surveys) three metrics for the breeding bird community are developed – Species Richness, Count, and Duration.

3.2.1 Species Richness Metric

Species richness is the number of species recorded for each site during an assured breeding season, and for the preserve as a whole (all sites combined). June surveys encompass the assured breeding season for most Wisconsin species as represented in the Wisconsin Breeding Bird Atlas Breeding Bird Bar Chart (<https://ebird.org/atlaswi/home>), when resident birds are assumed to be on territory. This is intended to avoid counting vagrants, transients, and late migrants as resident breeders. However, some species begin breeding earlier in the year and by June are less detectable (i.e., Ruffed Grouse); hence are typically undercounted in June-only surveys. Morning point counts also under-count or miss entirely many nocturnal calling species (i.e., owls). These species should be considered in data interpretation, and if important to monitor then surveys should focus on methods specific to those species and their breeding seasons. Late migrants can also be recorded in early June, especially during late spring years. These typically are present only for a few days in early June then disappear, and are addressed in data interpretation (i.e., Duration metric).

Species richness is represented in checklists listing all species found on breeding bird surveys (Appendix B). For 2021 acoustic surveys species richness ranged from 28 to 38 species (5 sites), and for point counts ranged from 28 to 34 species (4 sites). Overall, slightly more species were detected on point count surveys (Chart 1).



Few species were found by only one survey method (Table 2). Many of these were late migrants that did not persist (see Duration metric), species that rarely vocalize or cannot be differentiated by sound alone (i.e., American White Pelican and Herring Gull, respectively), or species present only at particular sites (acoustic and point count surveys were at different

sites). Acoustic surveys also tended to better capture rarer species due to more surveys conducted, which more often records species with lower detection rates (15 acoustic vs. 9 point count surveys).

Table 2. Species Exceptions (Breeding Bird Surveys Crossroads 2021)

Acoustics-Not Point Count	Point Count-Not Acoustics	Misc-Only
Blue-gray Gnatcatcher	Alder Flycatcher	Red-tailed Hawk
Chipping Sparrow	American White Pelican	
Dickcissel	Caspian Tern	
European Starling	Chimney Swift	
Hairy Woodpecker	Eastern Meadowlark	
Scarlet Tanager	Herring Gull	
White-breasted Nuthatch	Nashville Warbler	
Wood Duck	Northern Waterthrush	
	Osprey	
	White-throated Sparrow	

3.2.2 Duration Metric

This metric tracks the number of days between first and last detections in June, assisting with evaluating the likelihood that species were transient (as indicated by presence on just a few days), or resident (as indicated by presence throughout June). It is analogous to the S7 Breeding Code (singing male present for 7+ days) in the Wisconsin Breeding Bird Atlas Handbook (<https://ebird.org/atlaswi/home>), which informs a “Probable” breeding determination. Duration is intended as a site-specific metric, as species presence at one site does not necessarily imply that a breeding pair has established at other sites as well. When acoustic and point count surveys are conducted at the same sites, results should be combined to identify first and last detections.

At Crossroads in 2021, the duration metric was calculated only for acoustic survey sites, which spanned the month of June (Appendix C). Duration could not be derived from point counts because only the first half of June was surveyed.

3.2.3 Count Metrics

The number of occupied samples (of 15) in June can be tracked across years as an indicator of acoustic activity. This is intended as a site-specific metric, providing a measure of the rate of acoustic activity by individuals within microphone range. It does not count the number of individuals. However higher acoustic activity is associated with species’ persistence and abundance on a site, therefore this metric is useful for comparing species trends across years. It

should not be used to compare species with other species as the propensity to vocalize varies among species (i.e., House Wren vocalizes much louder and more frequently than does Yellow-billed Cuckoo).

For point counts, a count of occupied samples can also be calculated as a measure of persistence. Additionally, if counts of individuals are recorded a maximum count can be used as a trend metric. These metrics were not calculated for 2021 point count results because only half of June was surveyed.

3.3 Detection Rates

Detection rates were calculated for both survey methods (Appendix C). These are useful for interpreting breeding status in checklists, and understanding which species are sampled with confidence at any given effort level. Detection rates vary annually influenced by weather and species' abundance. For species with sampling effort meeting 95% confidence, absence from survey results can be assumed to be real. For remaining species, absence may be inferred as a probability based on detection rates. Grimm (2022) included species accumulation curves in his report that reaffirm the assumptions made for the study design regarding 8 samples at each point, for Crossroads-specific data.

3.4 Checklists

Checklists were developed assigning a qualitative breeding status determination by interpreting Duration and Count metrics along with any evidence of breeding recorded on point counts (Appendix B). In future, breeding codes defined in the Wisconsin Breeding Bird Handbook (*op. cit.*) should be used on point counts and utilized to assign a breeding determination (Confirmed, Probable, Possible, Observed). For monitoring avian response to habitat quality, species accepted as putative breeders should meet breeding codes falling into the Confirmed or Probable categories (see also <https://ebird.org/atlaswi/explore>). Interpreting Duration and Count metrics is somewhat qualitative as the researcher must also take into account typical species-specific detection rates and life history and behaviours that affect detection on surveys. For example, species difficult to detect during the June breeding season (i.e., cuckoos, Brown Thrasher, Ruffed Grouse, Great Horned Owl) may be considered probable breeders with lower counts and shorter durations than species that are highly detectable (i.e., Red-winged Blackbird).

For the 2021 initial baseline surveys, three categories were used for assessing species status at Crossroads in 2021 (Appendix B):

- “Breeding” is assigned to species with high count and duration metrics indicating they were on territory for at least half of June. In some instances, this may include species frequently foraging at the monitored habitat but possibly nesting elsewhere. This

category is analogous to “Confirmed” or “Probable” in Wisconsin Breeding Bird Atlas terminology.

- “Possible” is assigned to species with lower metric values where species are clearly detected but a conclusion that breeding individuals are on territory in the monitored habitat is uncertain. This category is equivalent to “Possible” in Atlas terminology.
- “Transient” is used for species that are considered late migrants, transients moving between habitat areas, or occasional foragers at the site. This category is analogous to “Observed” in Atlas terminology.

Checklists (Table 3) combine point count and acoustic survey results, and provide several measures of conservation status. Bolded species have high conservation concern. Full survey results are provided in Appendices B–D.

- State of the Birds Report (2016) conservation measures. Combined Conservation Score (CCS^{\max}) and Population Trend (PT-c) values for each species are sourced from the State of the Birds Report (2016). The CCS^{\max} score can range from 4 for a widespread relatively secure species, to 20 for a species of the very highest concern. The PT-c score indicates vulnerability due to the direction and magnitude of recent changes in population size. PT-c reflects trends only within North America and is therefore a continental score. Species that have declined by 50% or more since the mid-1960s are considered most vulnerable, whereas species with increasing trends are least vulnerable. Species with $CCS^{\max} \geq 14$, or species with $CCS^{\max} = 13$ and PT-c = 5 (steeply declining trend), are considered to have the highest vulnerability to extinction based on elevated scores across multiple factors (bolded species in Table 3).
- Partners In Flight Avian Conservation Assessment Database (Panjabi et al. 2021) provides a breeding season Regional Combined Score (RCS-b), which is assessed based on regional breeding distributions, population size, population trends, threats to breeding, and relative densities. The Checklist provide the Regional Combined Score for the breeding season (RCS-b) in two regions because Crossroads sits on the boundary of these regions (Grimm 2022). Higher scores indicate increasing vulnerability and stewardship concern.

Table 3. Combined Breeding Bird Survey Checklists, Crossroads 2021.

Species	Acoustics (5 sites)	Point Counts (4 sites)	Grimm Other	eBird 2021	PT-CCS ^{max} c	RCS-b Region 12	RCS-b Region 23	Focal Species	
Alder Flycatcher		X	X		4	9	10	9	X
American Crow	X	X	X	X	2	6	11	11	
American Goldfinch	X	X	X	X	2	6	11	10	
American Kestrel				X	4	11	13	13	
American Redstart	X	X	X	X	4	11	13	9	X
American Robin	X	X	X	X	2	5	10	10	
American White Pelican		X		X	2	11	12	15	
Baltimore Oriole	X	X	X	X	4	10	13	14	X
Barn Swallow				X	4	8	13	12	X
Belted Kingfisher	X	X		X	4	10	16	14	X
Black-and-white Warbler	X	X	X	X	4	11	15	11	
Black-capped Chickadee	X	X	X	X	2	7	11	11	
Black-throated Green Warbler	X	X		X	2	9	12	8	
Blue Jay	X	X	X	X	4	8	11	13	X
Blue-gray Gnatcatcher	X				2	7	6	7	
Blue-winged Warbler	X	X			4	13	10	14	X
Brown-headed Cowbird	X	X	X	X	4	7	11	12	X
Brown Thrasher				X	4	11	14	15	X
Canada Goose	X	X	X	X	1	6	9	10	
Caspian Tern		X			1	10	13	13	
Cedar Waxwing	X	X	X	X	2	6	13	10	
Chimney Swift		X		X	5	12	14	15	
Chipping Sparrow	X		X	X	3	8	13	10	
Clay-colored Sparrow	X	X		X	4	10	11	12	X
Common Grackle	X	X		X	5	9	12	14	X
Common Yellowthroat	X	X	X	X	4	9	13	12	X
Dickcissel	X				3	11	9	13	
Downy Woodpecker	X	X	X	X	2	7	10	11	
Eastern Bluebird				X	1	7	10	14	
Eastern Kingbird	X	X	X	X	4	11	14	15	X
Eastern Meadowlark		X			5	11	14	14	
Eastern Towhee	X	X	X		4	11	14	14	
Eastern Wood-Pewee	X	X		X	4	10	13	13	X
European Starling	X			X			11	13	
Field Sparrow	X	X	X	X	5	12	14	16	X

Table 3. Combined Breeding Bird Survey Checklists, Crossroads 2021.

Species	Acoustics (5 sites)	Point Counts (4 sites)	Grimm Other	eBird 2021	PT-CCS ^{max} c	RCS-b Region 12	RCS-b Region 23	Focal Species	
Gray Catbird	X	X	X	X	2	8	12	12	
Great Blue Heron	X	X	X	X	1	7	14	13	
Great Crested Flycatcher	X	X	X	X	2	8	14	12	
Great Egret				X	1	7	8	8	
Green Heron	X	X			4	11	12	14	X
Hairy Woodpecker	X			X	1	6	11	11	
Herring Gull		X		X	5	11	14	12	
House Finch	X	X		X	2	6	7	9	
House Wren	X	X	X	X	2	5	9	10	
Indigo Bunting	X	X	X	X	4	9	8	12	X
Killdeer	X	X	X	X	5	11	13	14	X
Mallard	X	X	X	X	2	7	9	10	
Mourning Dove	X	X	X	X	4	7	6	10	X
Nashville Warbler		X	X		2	9	14	12	
Northern Cardinal	X	X	X	X	2	5	5	7	
Northern Flicker	X	X	X	X	4	9	14	15	
Northern Waterthrush		X			2	9	12	9	
Osprey		X			1	7	10	9	
Ovenbird	X	X	X		2	9	14	10	
Pileated Woodpecker	X	X			1	7	12	10	
Purple Finch				X	4	9	15	10	X
Red-bellied Woodpecker	X	X	X	X	1	7	9	10	
Red-breasted Nuthatch	X	X	X	X	1	6	10	8	
Red-eyed Vireo	X	X	X	X	2	6	11	8	
Red-tailed Hawk			X	X	1	6	9	10	
Red-winged Blackbird	X	X	X	X	4	8	10	14	X
Ring-billed Gull				X	1	6	11	9	
Rose-breasted Grosbeak	X	X	X		4	11	17	14	
Ruby-throated Hummingbird				X	1	8	10	10	
Sandhill Crane	X	X	X	X	1	9	11	12	
Scarlet Tanager	X			X	2	11	15	13	
Song Sparrow	X	X	X	X	4	8	12	13	X
Spotted Sandpiper	X	X		X	3	9	13	13	
Tree Swallow	X	X	X	X	4	10	15	11	X
Turkey Vulture				X	1	5	7	7	

Table 3. Combined Breeding Bird Survey Checklists, Crossroads 2021.

Species	Acoustics (5 sites)	Point Counts (4 sites)	Grimm Other	eBird 2021	PT-CCS ^{max} c	RCS-b Region 12	RCS-b Region 23	Focal Species	
Warbling Vireo	X	X	X		2	9	10	12	
White-breasted Nuthatch	X			X	1	6	10	11	
White-throated Sparrow		X			4	9	13	10	
Wood Duck	X			X	1	8	10	12	
Wood Thrush	X	X	X	X	5	14	15	12	X
Yellow Warbler	X	X		X	4	8	11	9	X
Yellow-billed Cuckoo	X	X	X		5	12	12	13	X
Yellow-rumped Warbler	X	X		X	2	6	9	8	X
N Species	58	59	41						

4. Discussion and Recommendations

Crossroads at Big Creek is implementing an Ecological Restoration Plan (Landscapes of Place 2021) to improve habitat diversity for wildlife. Tracking the success of restoration includes assessing how the breeding bird community responds. The breeding bird community has strong ties to the landscape and its habitat quality, being resident for several months during which resources are needed to raise a family. In contrast, migrants may only stop over for a single day. Hence the breeding bird community is considered to be an important biodiversity component and high priority for monitoring the success of ongoing habitat restoration.

Monitoring the breeding bird community with statistical confidence is difficult due to generally low detection rates and high mobility for most species. Lack of statistical confidence may result in species that are present being missed (false absence), and over-representation of highly detectable species. To reduce this error recommended survey effort was fairly high (15 acoustic and 8 point count surveys) and the study design was to sample throughout the month of June so that species persistence within breeding habitat could be evaluated and non-breeding individuals identified. It is not uncommon for late migrants in early June, or vagrant males that attempt to set up territory but then do not attract mates and subsequently leave, to be recorded on breeding bird surveys. An additional value with point counts is visual confirmation of breeding activity, such as carrying food, building nests, or fledgling young observed. Recording these breeding indicators, as defined by the Wisconsin Breeding Bird Atlas, was recommended for point counts to better evaluate breeding success.

The goal of this study was to collect baseline data on the breeding bird community that can be compared to later years to inform the success of ongoing habitat restoration and management projects. Survey results and metrics provided will meet these goals. Acoustic surveys provided

robust data but are limited to the area surrounding the digital recorders. Repeating surveys for comparison in future years will need to re-sample the same points. Additional points may be added as resources permit.

Future point count surveys will also need to repeat the same points for valid comparison to the baseline year. However, survey effort should be improved to provide more useful metrics. In particular, point counts should be distributed throughout the month of June, and Atlas breeding indicators should be used (Casper and Cutright 2021). The 2021 study design recommended these criteria and can be met by one visit per week in June (Appendix D).

Performing both point count and acoustic surveys at the same points adds value in bolstering checklists for these points, but this often reduces the number of points sampled. For important habitat areas performing both surveys is recommended to better sample the full avian community, which will include some species better detected visually, and some better detected acoustically (Table 2). Another advantage of acoustic surveys is that the digital data recorded can be independently verified, and contains many other animal sounds that can be analyzed. Human error is also significantly reduced in acoustic surveys as a double observer method is utilized for data analysis. In future, it is expected that software applications such as Merlin Bird ID (<https://merlin.allaboutbirds.org/>) may also accept parsing large data sets to search for sounds of many species, which may reveal additional species missed on the 15 samples currently analyzed manually.

The baseline data identified 39 species of conservation concern visiting the property in 2021 (some were late migrants or transients), from which 27 initial Focal Species are selected. Focal Species are currently probable or confirmed breeders that have either a declining Population Trend ≥ 4 or a Continental Conservation Score ≥ 10 (State of the Birds 2016). Increases in these species are an indicator of restoration success, as would be the appearance of any new species of conservation concern.

Recommended Initial Focal Species:

Alder Flycatcher, American Redstart, Belted Kingfisher, Baltimore Oriole, Barn Swallow, Belted Kingfisher, Blue-winged Warbler, Blue Jay, Brown Thrasher, Brown-headed Cowbird, Clay-colored Sparrow, Common Grackle, Common Yellowthroat, Eastern Kingbird, Eastern Wood-Pewee, Field Sparrow, Green Heron, Indigo Bunting, Killdeer, Mourning Dove, Purple Finch, Red-winged Blackbird, Song Sparrow, Tree Swallow, Wood Thrush, Yellow-billed Cuckoo, Yellow Warbler.

The Checklist also identifies species with high vulnerability in the two regions based on CCS-b scores. The following 35 most vulnerable species are therefore suggested for future evaluation of stewardship options at Crossroads: American Kestrel, American White Pelican, Baltimore Oriole, Belted Kingfisher, Black-and-white Warbler, Blue Jay, Blue-winged Warbler, Brown Thrasher, Caspian Tern, Chimney Swift, Common Grackle, Dickcissel, Eastern Bluebird, Eastern Kingbird, Eastern Meadowlark, Eastern Towhee, Eastern Wood-Pewee, Field Sparrow, Great Blue Heron, Great Crested Flycatcher, Green Heron, Herring Gull, Killdeer, Nashville Warbler, Northern Flicker, Ovenbird, Purple Finch, Red-winged Blackbird, Rose-breasted Grosbeak, Scarlet Tanager, Song Sparrow, Spotted Sandpiper, Tree Swallow, Wood Thrush, and Yellow-billed Cuckoo.

Adaptive habitat management should re-evaluate habitat goals and management actions whenever new survey data indicate that specific habitat features might further benefit Focal Species (i.e., houses for Tree Swallow, greater grassland extent for Clay-colored Sparrow, improved forest conditions for Wood Thrush). Habitat goals should also be adjusted if Focal Species are not responding positively to habitat changes, by either choosing new Focal Species as measures of success, or changing management plans to address the shortcomings for the species.

Crossroads may also consider utilizing data from eBird, and promoting eBird based surveys to its user base, to further improve assessments of the avian community. While eBird records typically do not follow any study design, they can contribute to the Duration metric and to annual checklists if evaluated properly.

Rose-breasted Grosbeak appeared to be rare to absent as a breeder at Crossroads in 2021, but is a prime candidate for recovery of a breeding population post-restoration.



6. Literature Cited

- Casper, Gary S. 2022a. Standard Operating Procedure for Acoustic Analysis of Breeding Bird Data. Great Lakes Ecological Services, LLC, P.O. Box 375, Slinger, WI 53086 USA. April 24, 2022. 6 pp.
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- State of the Birds Report. 2016. Accessed from: <https://www.stateofthebirds.org/2016/>.

7. Appendices

- Appendix A: Data Collection Results
- Appendix B: Checklists
- Appendix C: Acoustic Survey Metrics and Detection Rates
- Appendix D: Point Count SOP

Appendix A: Acoustic Data Collection Summary for the Crossroads at Big Creek Preserve - 2021

ARS = Automated Recording System

Program Screen Shots

2021 programming for SM4 units: Narrow bars are 5-minute samples, thicker bars are 10-minute samples, program continues until batteries fail or recorder is stopped. Programming was identical on all four recorders in 2021.

The screenshot displays the SM4 Configurator software interface, divided into several sections:

- Deployment Scenario:** Shows settings for a simulation starting on 2021/03/15 at 01:00:00. It includes slot and microphone configurations (Slot A: 64GB, Slot B: 64GB, Mic 0: Internal, Mic 1: Internal) and a battery level of 72 Wh. A note specifies that run time estimates assume power-efficient flash cards and high quality batteries at room temperature.
- Settings:** Includes fields for Prefix (XROADS15507), Timezone (UTC-05), Position (Lat: 44.82865 N, Lon: 87.34498 W), Channel (stereo), Gain (Left: 16.00 dB, Right: 16.00 dB), Preamp (Left: 26dB, Right: 26dB), High-pass filter (Left: 220Hz, Right: 220Hz), Sample Rate (24000 Hz), Max Length (01:00), Compression (none), Delay Start (2021/03/15), LED always, Battery Cutoff (0.0 V), and Sensitivity (Left: 0.0 dB, Right: 0.0 dB). A "Schedule Mode daily" dropdown is also present.
- Schedule:** Features a "Load built-in schedule" dropdown and three event configurations. Each event has START, DUTY (cycle, ON, OFF), and END time settings. Buttons for "Del" and "Add" are provided for each event.
- Recording Activity Calendar:** A grid showing recording activity from 2021-Mar-15 to 2021-Mar-24. The grid uses color-coding: blue for Night, yellow for Day, black bars for Recording, purple for Flash full, and red for Battery empty. Recording activity is shown as black bars of varying thickness (5-minute or 10-minute samples) across the time slots.

At the bottom, the software version and copyright information are displayed: "SM4 Configurator ©2020 Wildlife Acoustics, Inc. All rights reserved. Patents pending. www.wildlifeacoustics.com". A status bar at the very bottom shows: "2021-Mar-15 14:00:00 (00:05:00) 0.2Wh A:0.4G(10) B:0.0G(0) [rise 07:01 set 18:56]".

2021 programming for SM3 unit: Bars are 5-minute samples, program continues until batteries fail or recorder is stopped.

SM3 Configurator

File Help

Configuration settings

Prefix: XROADS-SM3

Timezone: UTC-05 :00

Position: Lat: 43.83 N Lon: 87.35 W

Solar mode: Sunrise/Sunset

Cutoff voltage: 0.0 V

Sensitivity: 0: 0.0 dB 1: 0.0 dB

Deployment scenario

SM3 Start dd/mm/yy hh:mm:ss 04/04/2021 00:00:00

A: 32GB B: 32GB C: Empty D: Empty

Mic 0: Internal Mic 1: Internal

Trig Ratio (%): 10% Battery (Wh): 72 Wh

Program

1	HPF	CH 0: 220 Hz	CH 1: 220 Hz	
2	GAIN	CH 0: Automatic	CH 1: Automatic	
3	FS	WAV Format	AUTO	Auto Rate
4	ZC	OFF	DIV 8	
5	TRGLVL	CH 0: Off	CH 1: Off	
6	REPEAT			
7	AT TIME	15	: 00	: 00
8	FS	WAV Format	CH 0+1	12000 Hz
9	REPEAT			
10	RECORD	00	: 05	: 00
11	PAUSE	00	: 55	: 00
12	UNTCOUNT	4 times		
13	REPEAT			
14	RECORD	00	: 05	: 00
15	PAUSE	00	: 25	: 00
16	UNTCOUNT	8 times		
17	REPEAT			
18	RECORD	00	: 05	: 00
19	PAUSE	00	: 55	: 00
20	UNTCOUNT	6 times		
21	UNTDATA	2021	May	14
22	REPEAT			
23	AT TIME	15	: 00	: 00

04-Apr-2021 (0) 00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00

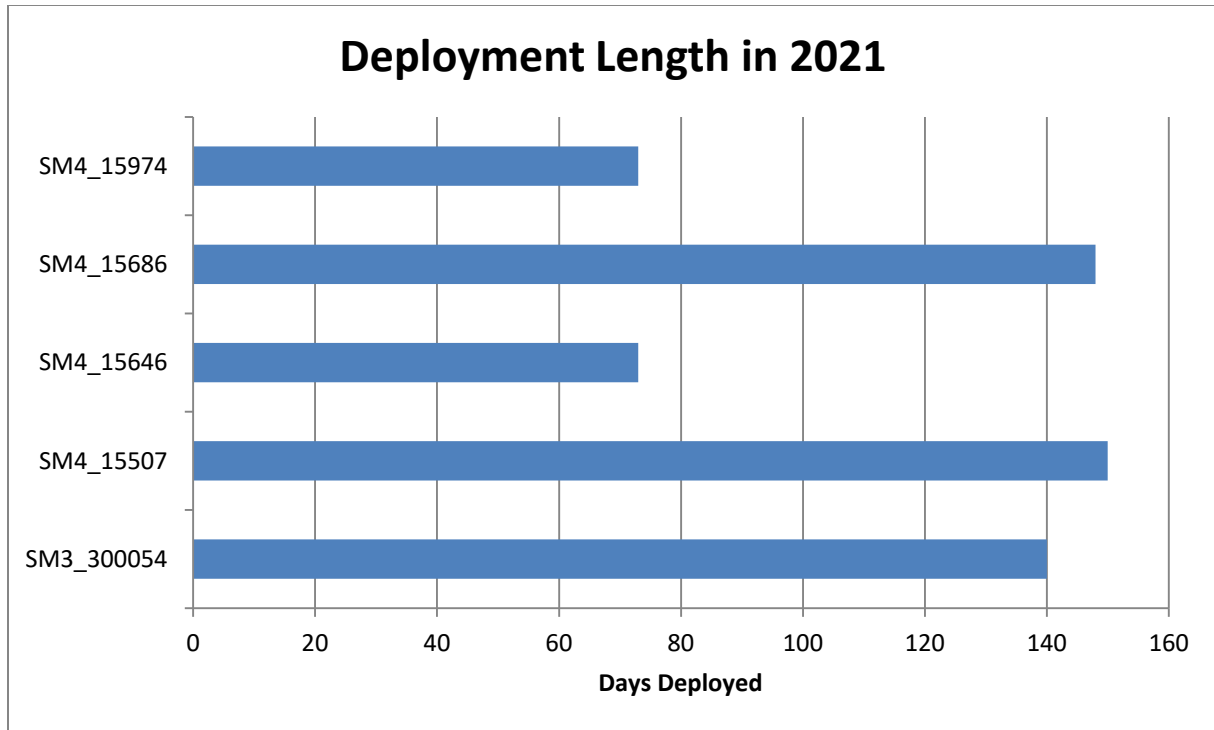
05-Apr-2021 (1) 00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00

06-Apr-2021 (2) 00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00

■ Night ■ Day ■ Recording ■ Flash full ■ Battery empty

SM3 Configurator ©2015 Wildlife Acoustics, Inc. All rights reserved. Patents pending. www.wildlifeacoustics.com

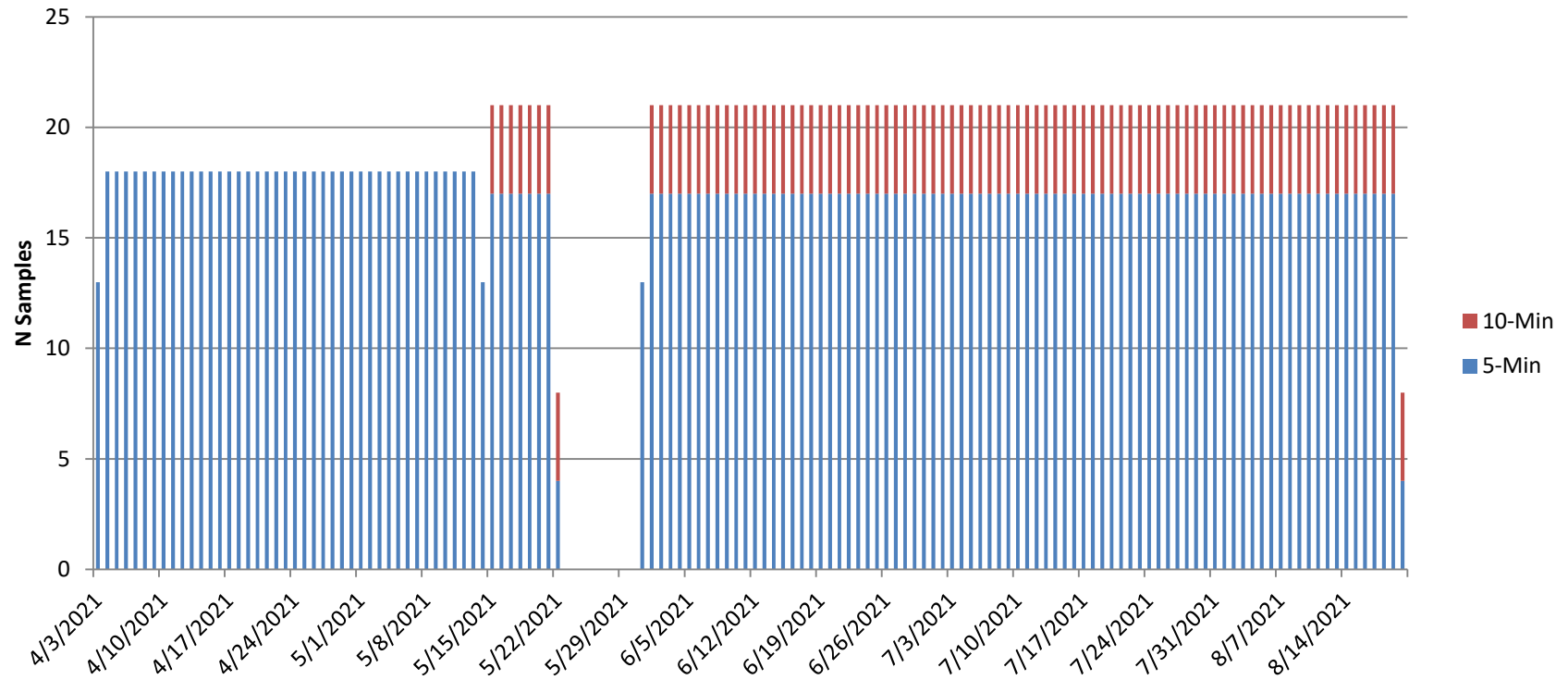
04-Apr-21 15:00:00 (00:05:00) 0.0Wh A:0G(2) B:0G(0) C:0G(0) D:0G(0) FS 0+1 WAV 12000



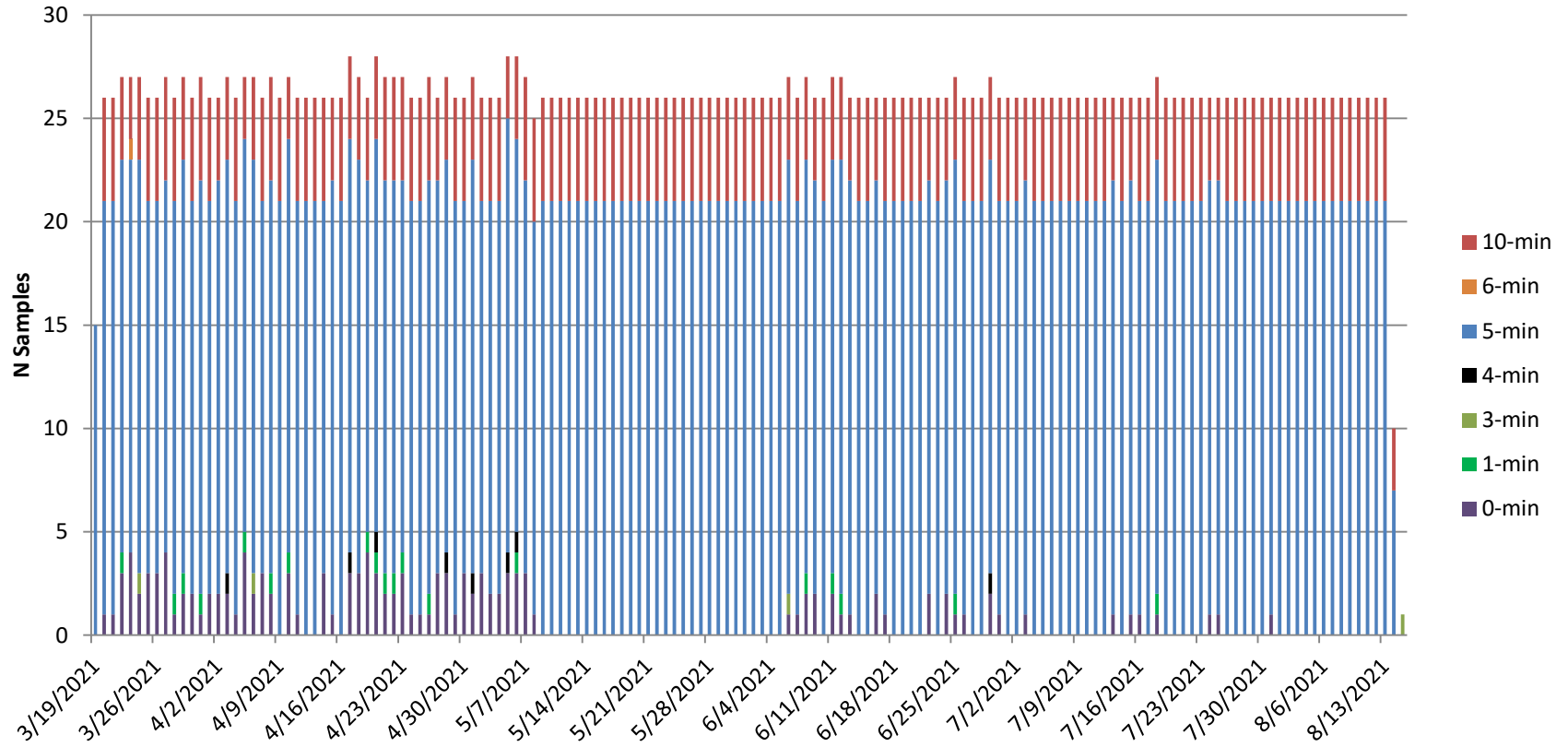
Data Collection Period, Crossroads at Big Creek, 2021.

Site	Start	End	Day Count
SM3_300054	4/3/2021	8/20/2021	140
SM4_15507	3/19/2021	8/15/2021	150
SM4_15646	6/2/2021	8/13/2021	73
SM4_15686	3/19/2021	8/13/2021	148
SM4_15974	6/2/2021	8/13/2021	73

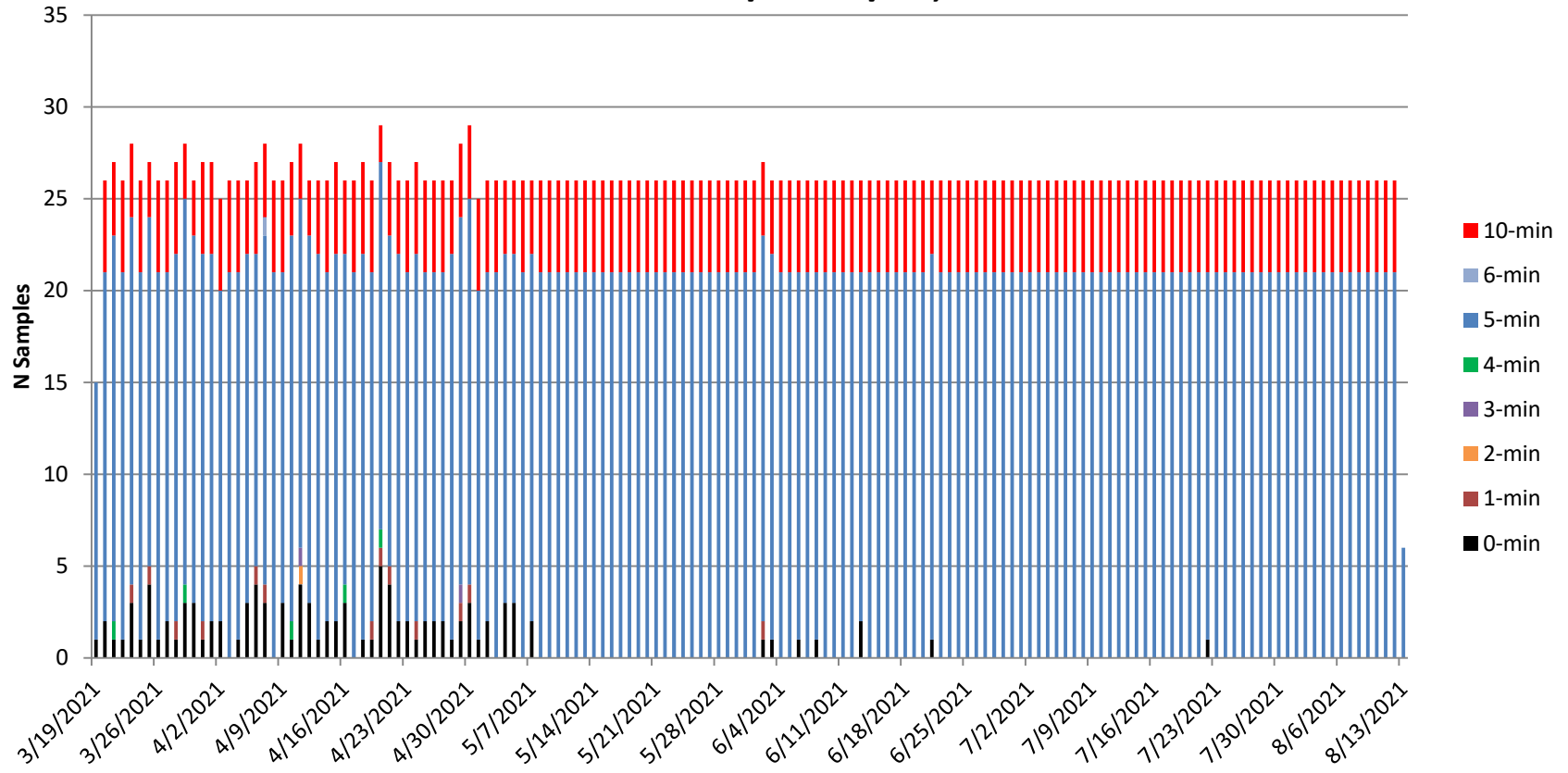
Data Collected SM3 300054: 4/3 - 8/20, 2021



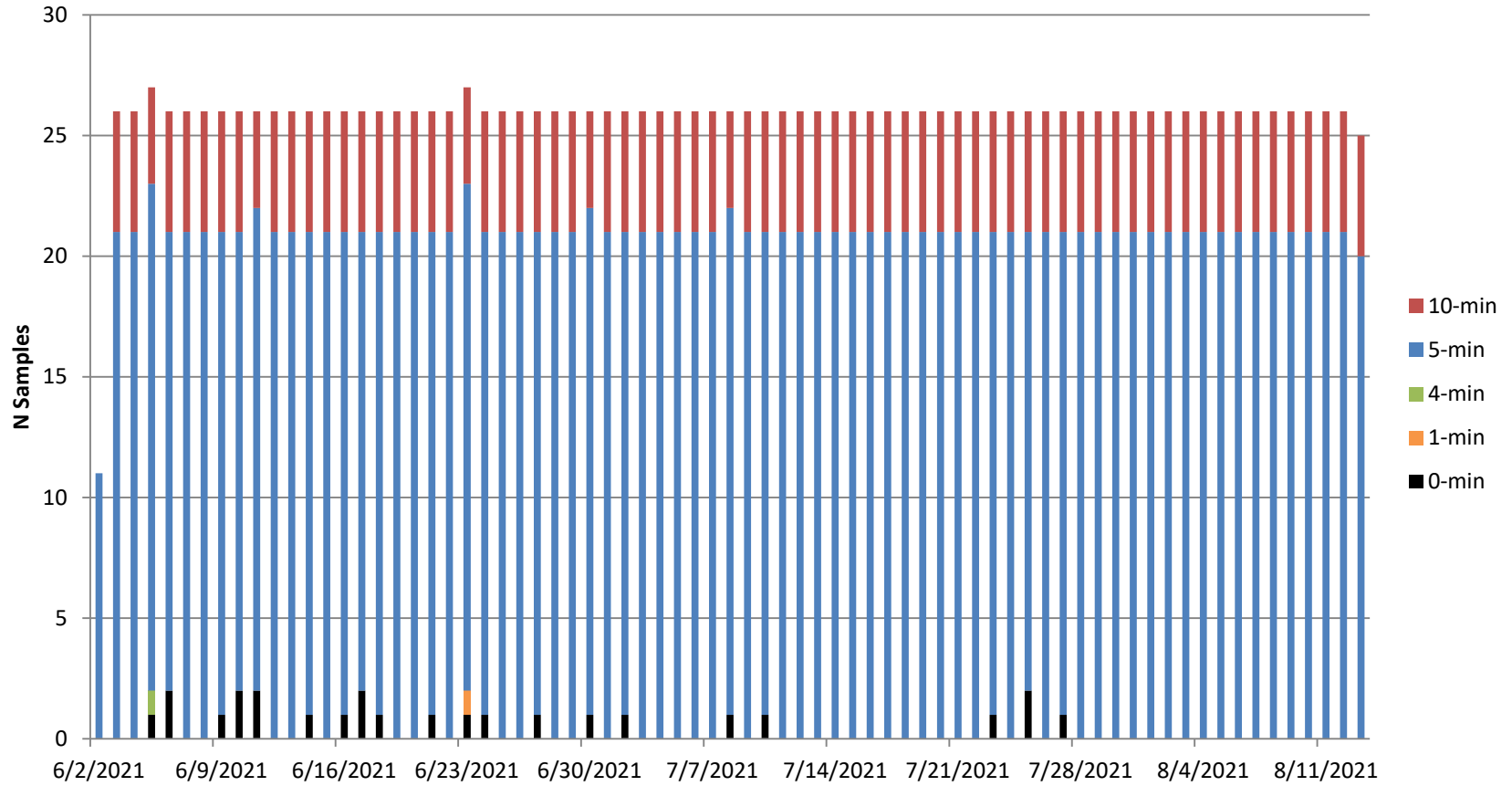
Data Collected SM4 15507: 3/19 - 8/15, 2021



Data Collected SM4 15686: 3/19 - 8/13, 2021



Data Collected SM4 15974: 6/2 - 8/13, 2021



Site	Sample	File Name	Species	Observer 1	First Min	First Sec	Notes (e.g. background noise)	Observer 2	Observer 2 results (Confirmed or not, notes)	Observer 3 notes (if needed)
A	1	XROADS15507_20210601_043600	American Crow	Jesse Peterson	1	21.0		Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	American Crow	Jesse Peterson	0	5.0				
A	4	XROADS15507_20210607_073400	American Crow	Jesse Peterson	3	18.0				
A	6	XROADS15507_20210611_053300	American Crow	Jesse Peterson	9	56.0				
A	9	XROADS15507_20210617_043300	American Crow	Jesse Peterson	6	20.0				
A	10	XROADS15507_20210619_053300	American Crow	Jesse Peterson	0	3.5		Gary Casper	confirmed	
A	2	XROADS15507_20210603_053500	American Goldfinch	Jesse Peterson	1	14.5		Nathaniel Reinartz	confirmed	
A	3	XROADS15507_20210605_063500	American Goldfinch	Jesse Peterson	7	20.5				
A	4	XROADS15507_20210607_073400	American Goldfinch	Jesse Peterson	0	42.5				
A	6	XROADS15507_20210611_053300	American Goldfinch	Jesse Peterson	0	0.0				
A	7	XROADS15507_20210613_063300	American Goldfinch	Jesse Peterson	1	19.5				
A	8	XROADS15507_20210615_073300	American Goldfinch	Jesse Peterson	0	45.5				
A	10	XROADS15507_20210619_053300	American Goldfinch	Jesse Peterson	6	39.0				
A	11	XROADS15507_20210621_063300	American Goldfinch	Jesse Peterson	0	21.0				
A	12	XROADS15507_20210623_073400	American Goldfinch	Jesse Peterson	1	22.0				
A	15	XROADS15507_20210630_063700	American Goldfinch	Jesse Peterson	0	11.0		Gary Casper	confirmed	
A	3	XROADS15507_20210605_063500	American Redstart	Jesse Peterson	1	7.0		Nathaniel Reinartz	confirmed	
A	4	XROADS15507_20210607_073400	American Redstart	Jesse Peterson	0	12.5				
A	6	XROADS15507_20210611_053300	American Redstart	Jesse Peterson	5	26.0	Better at 8:31.5			
A	15	XROADS15507_20210630_063700	American Redstart	Jesse Peterson	0	40.5				
A	4	XROADS15507_20210607_073400	American Robin	Jesse Peterson	2	56.0	Better at 3:34.0	Nathaniel Reinartz	confirmed	
A	5	XROADS15507_20210609_040000	American Robin	Jesse Peterson	1	19.0	20210609_043300 file would not work, 20210609_0533 looked very "noisy," so used 20210609_040000			
A	7	XROADS15507_20210613_063300	American Robin	Jesse Peterson	3	8.5				
A	13	XROADS15507_20210625_043400	American Robin	Jesse Peterson	1	21.0				
A	15	XROADS15507_20210630_063700	American Robin	Jesse Peterson	0	4.0				
A	1	XROADS15507_20210601_043600	Baltimore Oriole	Jesse Peterson	0	2.0		Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	Baltimore Oriole	Jesse Peterson	8	54.0				
A	3	XROADS15507_20210605_063500	Baltimore Oriole	Jesse Peterson	0	3.0				
A	4	XROADS15507_20210607_073400	Baltimore Oriole	Jesse Peterson	1	52.5				
A	6	XROADS15507_20210611_053300	Baltimore Oriole	Jesse Peterson	0	33.0				
A	7	XROADS15507_20210613_063300	Baltimore Oriole	Jesse Peterson	4	27.0				
A	2	XROADS15507_20210603_053500	Black-and-white Warbler	Jesse Peterson	0	5.0		Nathaniel Reinartz	confirmed	
A	1	XROADS15507_20210601_043600	Black-capped Chickadee	Jesse Peterson	3	19.5	Better at 3:48.5	Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	Black-capped Chickadee	Jesse Peterson	1	39.0				
A	6	XROADS15507_20210611_053300	Black-capped Chickadee	Jesse Peterson	0	14.0				
A	9	XROADS15507_20210617_043300	Black-capped Chickadee	Jesse Peterson	0	2.5				
A	10	XROADS15507_20210619_053300	Black-capped Chickadee	Jesse Peterson	1	52.5				
A	13	XROADS15507_20210625_043400	Black-capped Chickadee	Jesse Peterson	6	7.5		Gary Casper	confirmed	
A	2	XROADS15507_20210603_053500	Black-throated Green Warbler	Jesse Peterson	3	12.0		Nathaniel Reinartz	confirmed	
A	6	XROADS15507_20210611_053300	Blue Jay	Jesse Peterson	2	38.5	Better at 2:47.0	Nathaniel Reinartz	confirmed	
A	8	XROADS15507_20210615_073300	Blue Jay	Jesse Peterson	1	7.5	Better at 1:19.0			
A	9	XROADS15507_20210617_043300	Blue Jay	Jesse Peterson	2	58.5				
A	13	XROADS15507_20210625_043400	Blue Jay	Jesse Peterson	6	55.0				
A	2	XROADS15507_20210603_053500	Blue-winged Warbler	Jesse Peterson	3	1.5		Nathaniel Reinartz	confirmed	
A	7	XROADS15507_20210613_063300	Blue-winged Warbler	Jesse Peterson	1	28.5	Better at 6:18.0			
A	9	XROADS15507_20210617_043300	Blue-winged Warbler	Jesse Peterson	1	6.0				
A	10	XROADS15507_20210619_053300	Blue-winged Warbler	Jesse Peterson	5	45.5				
A	15	XROADS15507_20210630_063700	Blue-winged Warbler	Jesse Peterson	3	14.0				
A	3	XROADS15507_20210605_063500	Brown-headed Cowbird	Jesse Peterson	0	8.5		Nathaniel Reinartz	confirmed	
A	4	XROADS15507_20210607_073400	Brown-headed Cowbird	Jesse Peterson	2	48.0				
A	8	XROADS15507_20210615_073300	Brown-headed Cowbird	Jesse Peterson	2	52.5				
A	15	XROADS15507_20210630_063700	Brown-headed Cowbird	Jesse Peterson	6	27.0				
A	3	XROADS15507_20210605_063500	Cedar Waxwing	Jesse Peterson	4	49.0		Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	Chipping Sparrow	Jesse Peterson	4	5.0		Nathaniel Reinartz	confirmed	
A	8	XROADS15507_20210615_073300	Chipping Sparrow	Jesse Peterson	6	42.0	Not certain; Call too long?	Nathaniel Reinartz	confirmed	
A	1	XROADS15507_20210601_043600	Clay-colored Sparrow	Jesse Peterson	0	1.0		Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	Common Grackle	Jesse Peterson	0	17.5		Nathaniel Reinartz	confirmed	
A	1	XROADS15507_20210601_043600	Common Yellowthroat	Jesse Peterson	0	0.0	Best at 7:37.0	Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	Common Yellowthroat	Jesse Peterson	0	3.0				
A	4	XROADS15507_20210607_073400	Common Yellowthroat	Jesse Peterson	4	50.0				
A	7	XROADS15507_20210613_063300	Common Yellowthroat	Jesse Peterson	0	57.0				
A	8	XROADS15507_20210615_073300	Common Yellowthroat	Jesse Peterson	0	4.0				
A	9	XROADS15507_20210617_043300	Common Yellowthroat	Jesse Peterson	0	4.0				

A	12	XROADS15507_20210623_073400	Common Yellowthroat	Jesse Peterson	8	22.0			
A	13	XROADS15507_20210625_043400	Common Yellowthroat	Jesse Peterson	0	0.0			
A	15	XROADS15507_20210630_063700	Common Yellowthroat	Jesse Peterson	0	1.0		Gary Casper	confirmed
A	2	XROADS15507_20210603_053500	Eastern Kingbird	Jesse Peterson	0	8.5	Not certain; again at 0:10.5	Nathaniel Reinartz	confirmed
A	3	XROADS15507_20210605_063500	Eastern Towhee	Jesse Peterson	5	7.5		Nathaniel Reinartz	confirmed
A	4	XROADS15507_20210607_073400	Eastern Towhee	Jesse Peterson	9	54.0			
A	2	XROADS15507_20210603_053500	Field Sparrow	Jesse Peterson	9	17.5		Nathaniel Reinartz	confirmed
A	3	XROADS15507_20210605_063500	Field Sparrow	Jesse Peterson	5	2.0			
A	4	XROADS15507_20210607_073400	Field Sparrow	Jesse Peterson	0	38.5			
A	5	XROADS15507_20210609_040000	Field Sparrow	Jesse Peterson	3	32.0			
A	6	XROADS15507_20210611_053300	Field Sparrow	Jesse Peterson	3	36.5			
A	7	XROADS15507_20210613_063300	Field Sparrow	Jesse Peterson	1	14.0			
A	8	XROADS15507_20210615_073300	Field Sparrow	Jesse Peterson	0	54.0			
A	9	XROADS15507_20210617_043300	Field Sparrow	Jesse Peterson	1	23.5			
A	13	XROADS15507_20210625_043400	Field Sparrow	Jesse Peterson	0	1.5		Gary Casper	confirmed
A	1	XROADS15507_20210601_043600	Gray Catbird	Jesse Peterson	0	35.0		Nathaniel Reinartz	confirmed
A	12	XROADS15507_20210623_073400	Gray Catbird	Jesse Peterson	0	2.0			
A	13	XROADS15507_20210625_043400	Gray Catbird	Jesse Peterson	9	51.0			
A	15	XROADS15507_20210630_063700	Gray Catbird	Jesse Peterson	0	5.0			
A	1	XROADS15507_20210601_043600	Great Crested Flycatcher	Jesse Peterson	9	24.5	Uncertain; Also at 9:28.0	Nathaniel Reinartz	confirmed
A	4	XROADS15507_20210607_073400	Great Crested Flycatcher	Jesse Peterson	7	47.5			
A	6	XROADS15507_20210611_053300	Great Crested Flycatcher	Jesse Peterson	8	20.0			
A	15	XROADS15507_20210630_063700	Great Crested Flycatcher	Jesse Peterson	4	36.5		Gary Casper	confirmed
A	1	XROADS15507_20210601_043600	House Wren	Jesse Peterson	0	23.0		Nathaniel Reinartz	confirmed
A	2	XROADS15507_20210603_053500	House Wren	Jesse Peterson	3	13.0			
A	3	XROADS15507_20210605_063500	House Wren	Jesse Peterson	0	5.0			
A	4	XROADS15507_20210607_073400	House Wren	Jesse Peterson	0	4.0			
A	6	XROADS15507_20210611_053300	House Wren	Jesse Peterson	3	7.5			
A	7	XROADS15507_20210613_063300	House Wren	Jesse Peterson	0	6.0		Gary Casper	confirmed
A	4	XROADS15507_20210607_073400	Indigo Bunting	Jesse Peterson	1	59.0		Nathaniel Reinartz	confirmed
A	6	XROADS15507_20210611_053300	Indigo Bunting	Jesse Peterson	6	53.0			
A	7	XROADS15507_20210613_063300	Indigo Bunting	Jesse Peterson	0	7.5			
A	8	XROADS15507_20210615_073300	Indigo Bunting	Jesse Peterson	0	0.0			
A	10	XROADS15507_20210619_053300	Indigo Bunting	Jesse Peterson	4	23.0			
A	12	XROADS15507_20210623_073400	Indigo Bunting	Jesse Peterson	6	47.0			
A	13	XROADS15507_20210625_043400	Indigo Bunting	Jesse Peterson	4	25.0			
A	5	XROADS15507_20210609_040000	Killdeer	Jesse Peterson	2	14.0		Nathaniel Reinartz	confirmed
A	15	XROADS15507_20210630_063700	Killdeer	Jesse Peterson	7	40.5			
A	4	XROADS15507_20210607_073400	Mallard	Jesse Peterson	3	11.0		Nathaniel Reinartz	confirmed
A	10	XROADS15507_20210619_053300	Mourning Dove	Jesse Peterson	0	4.5		Nathaniel Reinartz	confirmed
A	1	XROADS15507_20210601_043600	Northern Cardinal	Jesse Peterson	0	3.5		Nathaniel Reinartz	confirmed
A	2	XROADS15507_20210603_053500	Northern Cardinal	Jesse Peterson	6	5.0	Chip note; Song at 8:08.0		
A	3	XROADS15507_20210605_063500	Northern Cardinal	Jesse Peterson	3	21.0			
A	4	XROADS15507_20210607_073400	Northern Cardinal	Jesse Peterson	0	1.0	Chip note; Song at 1:02.0		
A	6	XROADS15507_20210611_053300	Northern Cardinal	Jesse Peterson	0	0.0			
A	7	XROADS15507_20210613_063300	Northern Cardinal	Jesse Peterson	9	7.0			
A	8	XROADS15507_20210615_073300	Northern Cardinal	Jesse Peterson	6	52.0			
A	9	XROADS15507_20210617_043300	Northern Cardinal	Jesse Peterson	0	10.0			
A	10	XROADS15507_20210619_053300	Northern Cardinal	Jesse Peterson	0	0.5			
A	12	XROADS15507_20210623_073400	Northern Cardinal	Jesse Peterson	5	32.5			
A	13	XROADS15507_20210625_043400	Northern Cardinal	Jesse Peterson	0	0.0			
A	14	XROADS15507_20210627_053500	Northern Cardinal	Jesse Peterson	8	32.0	Chip		
A	15	XROADS15507_20210630_063700	Northern Cardinal	Jesse Peterson	0	48.5			
A	15	XROADS15507_20210630_063700	Northern Flicker	Jesse Peterson	4	46.5	Common Flicker	Nathaniel Reinartz	confirmed--should be Northern Flicker
A	8	XROADS15507_20210615_073300	Ovenbird	Jesse Peterson	4	24.0	Better at 4:58.0	Nathaniel Reinartz	confirmed
A	2	XROADS15507_20210603_053500	Red-eyed Vireo	Jesse Peterson	0	8.0		Nathaniel Reinartz	confirmed
A	3	XROADS15507_20210605_063500	Red-eyed Vireo	Jesse Peterson	3	23.0			
A	4	XROADS15507_20210607_073400	Red-eyed Vireo	Jesse Peterson	0	0.0			
A	6	XROADS15507_20210611_053300	Red-eyed Vireo	Jesse Peterson	0	50.0			
A	7	XROADS15507_20210613_063300	Red-eyed Vireo	Jesse Peterson	0	4.0			
A	8	XROADS15507_20210615_073300	Red-eyed Vireo	Jesse Peterson	0	48.0	Better at 3:54.0		
A	9	XROADS15507_20210617_043300	Red-eyed Vireo	Jesse Peterson	0	0.0			
A	10	XROADS15507_20210619_053300	Red-eyed Vireo	Jesse Peterson	0	1.0			
A	11	XROADS15507_20210621_063300	Red-eyed Vireo	Jesse Peterson	2	50.0			
A	13	XROADS15507_20210625_043400	Red-eyed Vireo	Jesse Peterson	8	15.5			
A	14	XROADS15507_20210627_053500	Red-eyed Vireo	Jesse Peterson	0	6.0			

A	15	XROADS15507_20210630_063700	Red-eyed Vireo	Jesse Peterson	4	29.0	Better at 8:20.0		
A	3	XROADS15507_20210605_063500	Red-winged Blackbird	Jesse Peterson	7	16.0		Nathaniel Reinartz	confirmed
A	7	XROADS15507_20210613_063300	Red-winged Blackbird	Jesse Peterson	2	16.5			
A	8	XROADS15507_20210615_073300	Red-winged Blackbird	Jesse Peterson	2	26.0			
A	10	XROADS15507_20210619_053300	Red-winged Blackbird	Jesse Peterson	2	54.0			
A	11	XROADS15507_20210621_063300	Red-winged Blackbird	Jesse Peterson	9	10.0			
A	12	XROADS15507_20210623_073400	Red-winged Blackbird	Jesse Peterson	0	59.0			
A	13	XROADS15507_20210625_043400	Red-winged Blackbird	Jesse Peterson	3	57.0			
A	1	XROADS15507_20210601_043600	Rose-breasted Grosbeak	Jesse Peterson	0	15.0		Nathaniel Reinartz	confirmed
A	7	XROADS15507_20210613_063300	Scarlet Tanager	Jesse Peterson	0	50.0		Nathaniel Reinartz	confirmed
A	6	XROADS15507_20210611_053300	Song Sparrow	Jesse Peterson	2	21.0		Nathaniel Reinartz	confirmed
A	10	XROADS15507_20210619_053300	Song Sparrow	Jesse Peterson	6	48.0	Distant		
A	15	XROADS15507_20210630_063700	Song Sparrow	Jesse Peterson	2	5.0	Better at 7:21.0		
A	1	XROADS15507_20210601_043600	Tree Swallow	Jesse Peterson	8	17.0		Nathaniel Reinartz	confirmed
A	2	XROADS15507_20210603_053500	Tree Swallow	Jesse Peterson	5	2.0			
A	1	XROADS15507_20210601_043600	Warbling Vireo	Jesse Peterson	0	57.0		Nathaniel Reinartz	confirmed
A	3	XROADS15507_20210605_063500	Yellow Warbler	Jesse Peterson	3	19.0		Nathaniel Reinartz	confirmed
A	7	XROADS15507_20210613_063300	Yellow Warbler	Jesse Peterson	2	14.0			
B	1	XROADS15646_20210602_053600	American Crow	Jesse Peterson	0	0.0		Nathaniel Reinartz	confirmed
B	2	XROADS15646_20210603_053500	American Crow	Jesse Peterson	1	49.0			
B	5	XROADS15646_20210609_043300	American Crow	Jesse Peterson	2	38.0			
B	6	XROADS15646_20210611_053300	American Crow	Jesse Peterson	0	13.0			
B	8	XROADS15646_20210615_073300	American Crow	Jesse Peterson	0	15.0			
B	9	XROADS15646_20210617_043300	American Crow	Jesse Peterson	6	32.0			
B	10	XROADS15646_20210619_053300	American Crow	Jesse Peterson	0	23.0			
B	14	XROADS15646_20210627_053500	American Crow	Jesse Peterson	6	47.0			
B	4	XROADS15646_20210607_073400	American Goldfinch	Jesse Peterson	1	58.0		Nathaniel Reinartz	confirmed
B	15	XROADS15646_20210629_063600	American Goldfinch	Jesse Peterson	0	43.5			
B	5	XROADS15646_20210609_043300	American Robin	Jesse Peterson	0	44.0		Nathaniel Reinartz	confirmed
B	7	XROADS15646_20210613_063300	American Robin	Jesse Peterson	0	22.0		Nathaniel Reinartz	confirmed
B	9	XROADS15646_20210617_043300	American Robin	Jesse Peterson	0	18.0			
B	10	XROADS15646_20210619_053300	American Robin	Jesse Peterson	0	0.0			
B	11	XROADS15646_20210622_063400	American Robin	Jesse Peterson	0	0.0	6/21 was all rain noise. Used 6/22 instead		
B	13	XROADS15646_20210626_043500	American Robin	Jesse Peterson	0	0.0	6/25 file would not work. Used 6/26 instead		
B	15	XROADS15646_20210629_063600	American Robin	Jesse Peterson	6	30.0			
B	1	XROADS15646_20210602_053600	Baltimore Oriole	Jesse Peterson	0	48.0		Nathaniel Reinartz	confirmed
B	4	XROADS15646_20210607_073400	Baltimore Oriole	Jesse Peterson	0	12.0			
B	7	XROADS15646_20210613_063300	Baltimore Oriole	Jesse Peterson	7	48.5			
B	1	XROADS15646_20210602_053600	Black-capped Chickadee	Jesse Peterson	1	55.0		Nathaniel Reinartz	confirmed
B	4	XROADS15646_20210607_073400	Black-capped Chickadee	Jesse Peterson	1	55.0			
B	8	XROADS15646_20210615_073300	Black-capped Chickadee	Jesse Peterson	1	7.0			
B	9	XROADS15646_20210617_043300	Black-capped Chickadee	Jesse Peterson	0	30.0			
B	10	XROADS15646_20210619_053300	Black-capped Chickadee	Jesse Peterson	0	42.5			
B	11	XROADS15646_20210622_063400	Black-capped Chickadee	Jesse Peterson	2	4.0			
B	12	XROADS15646_20210624_073400	Black-capped Chickadee	Jesse Peterson	3	45.5			
B	13	XROADS15646_20210626_043500	Black-capped Chickadee	Jesse Peterson	6	24.0			
B	15	XROADS15646_20210629_063600	Black-capped Chickadee	Jesse Peterson	0	2.0			
B	1	XROADS15646_20210602_053600	Blue Jay	Jesse Peterson	2	2.0	Rain between 4:30 and 8:00	Nathaniel Reinartz	confirmed
B	2	XROADS15646_20210603_053500	Blue Jay	Jesse Peterson	3	41.0			
B	4	XROADS15646_20210607_073400	Blue Jay	Jesse Peterson	3	3.0			
B	7	XROADS15646_20210613_063300	Blue Jay	Jesse Peterson	2	40.5			
B	12	XROADS15646_20210624_073400	Blue Jay	Jesse Peterson	8	2.5			
B	7	XROADS15646_20210613_063300	Blue-gray Gnatcatcher	Jesse Peterson	0	36.5		Nathaniel Reinartz	confirmed
B	10	XROADS15646_20210619_053300	Blue-gray Gnatcatcher	Jesse Peterson	0	9.5	Better at 2:39.0		
B	11	XROADS15646_20210622_063400	Blue-gray Gnatcatcher	Jesse Peterson	3	27.0			
B	4	XROADS15646_20210607_073400	Cedar Waxwing	Jesse Peterson	5	41.0		Nathaniel Reinartz	confirmed
B	11	XROADS15646_20210622_063400	Chipping Sparrow	Jesse Peterson	0	14.0		Nathaniel Reinartz	confirmed
B	15	XROADS15646_20210629_063600	Chipping Sparrow	Jesse Peterson	9	31.0			
B	10	XROADS15646_20210619_053300	Common Grackle	Jesse Peterson	8	51.0		Nathaniel Reinartz	confirmed
B	11	XROADS15646_20210622_063400	Common Grackle	Jesse Peterson	0	42.0			
B	15	XROADS15646_20210629_063600	Common Grackle	Jesse Peterson	7	35.0			
B	1	XROADS15646_20210602_053600	Common Yellowthroat	Jesse Peterson	0	16.0		Nathaniel Reinartz	confirmed
B	2	XROADS15646_20210603_053500	Common Yellowthroat	Jesse Peterson	0	6.0			
B	3	XROADS15646_20210605_063500	Common Yellowthroat	Jesse Peterson	0	3.0			
B	4	XROADS15646_20210607_073400	Common Yellowthroat	Jesse Peterson	0	2.0			
B	5	XROADS15646_20210609_043300	Common Yellowthroat	Jesse Peterson	0	3.0			
B	6	XROADS15646_20210611_053300	Common Yellowthroat	Jesse Peterson	0	0.5			

B	7	XROADS15646_20210613_063300	Common Yellowthroat	Jesse Peterson	0	8.5	Better at 0:52.0			
B	9	XROADS15646_20210617_043300	Common Yellowthroat	Jesse Peterson	0	1.0				
B	10	XROADS15646_20210619_053300	Common Yellowthroat	Jesse Peterson	0	54.0				
B	13	XROADS15646_20210626_043500	Common Yellowthroat	Jesse Peterson	2	2.0				
B	2	XROADS15646_20210603_053500	Eastern Kingbird	Jesse Peterson	6	50.0	Not certain	Nathaniel Reinartz	confirmed	
B	3	XROADS15646_20210605_063500	Eastern Kingbird	Jesse Peterson	0	2.5				
B	2	XROADS15646_20210603_053500	Eastern Wood-Pewee	Jesse Peterson	3	6.5		Nathaniel Reinartz	confirmed	
B	4	XROADS15646_20210607_073400	Eastern Wood-Pewee	Jesse Peterson	0	17.0				
B	5	XROADS15646_20210609_043300	Eastern Wood-Pewee	Jesse Peterson	0	5.0				
B	6	XROADS15646_20210611_053300	Eastern Wood-Pewee	Jesse Peterson	0	5.5				
B	7	XROADS15646_20210613_063300	Eastern Wood-Pewee	Jesse Peterson	0	2.5				
B	10	XROADS15646_20210619_053300	Eastern Wood-Pewee	Jesse Peterson	1	6.0				
B	2	XROADS15646_20210603_053500	Great Crested Flycatcher	Jesse Peterson	0	4.5	Better at 1:17.0	Nathaniel Reinartz	confirmed	
B	4	XROADS15646_20210607_073400	Great Crested Flycatcher	Jesse Peterson	1	36.5				
B	7	XROADS15646_20210613_063300	Great Crested Flycatcher	Jesse Peterson	2	47.5				
B	9	XROADS15646_20210617_043300	Great Crested Flycatcher	Jesse Peterson	2	54.0				
B	6	XROADS15646_20210611_053300	Green Heron	Jesse Peterson	8	2.5	Squawk	Nathaniel Reinartz	confirmed	
B	1	XROADS15646_20210602_053600	House Wren	Jesse Peterson	0	18.0		Nathaniel Reinartz	confirmed	
B	2	XROADS15646_20210603_053500	House Wren	Jesse Peterson	0	24.0				
B	3	XROADS15646_20210605_063500	House Wren	Jesse Peterson	0	6.0				
B	4	XROADS15646_20210607_073400	House Wren	Jesse Peterson	0	0.5				
B	5	XROADS15646_20210609_043300	House Wren	Jesse Peterson	0	40.0				
B	6	XROADS15646_20210611_053300	House Wren	Jesse Peterson	2	8.0				
B	7	XROADS15646_20210613_063300	House Wren	Jesse Peterson	0	20.5				
B	8	XROADS15646_20210615_073300	House Wren	Jesse Peterson	0	11.0				
B	9	XROADS15646_20210617_043300	House Wren	Jesse Peterson	4	47.0				
B	10	XROADS15646_20210619_053300	House Wren	Jesse Peterson	5	46.5				
B	11	XROADS15646_20210622_063400	House Wren	Jesse Peterson	0	25.5				
B	4	XROADS15646_20210607_073400	Indigo Bunting	Jesse Peterson	2	10.5	Abbreviated song; better at 4:46.0	Nathaniel Reinartz	confirmed	
B	6	XROADS15646_20210611_053300	Indigo Bunting	Jesse Peterson	0	6.0				
B	7	XROADS15646_20210613_063300	Indigo Bunting	Jesse Peterson	0	0.0				
B	8	XROADS15646_20210615_073300	Indigo Bunting	Jesse Peterson	0	0.5				
B	10	XROADS15646_20210619_053300	Indigo Bunting	Jesse Peterson	2	1.5	Spit			
B	11	XROADS15646_20210622_063400	Indigo Bunting	Jesse Peterson	0	6.0				
B	15	XROADS15646_20210629_063600	Indigo Bunting	Jesse Peterson	0	2.5				
B	7	XROADS15646_20210613_063300	Killdeer	Jesse Peterson	3	2.5		Nathaniel Reinartz	confirmed	
B	7	XROADS15646_20210613_063300	Mourning Dove	Jesse Peterson	1	34.0		Nathaniel Reinartz	confirmed	
B	9	XROADS15646_20210617_043300	Mourning Dove	Jesse Peterson	0	59.0				
B	10	XROADS15646_20210619_053300	Mourning Dove	Jesse Peterson	0	36.5				
B	14	XROADS15646_20210627_053500	Mourning Dove	Jesse Peterson	3	38.0				
B	1	XROADS15646_20210602_053600	Northern Cardinal	Jesse Peterson	0	3.0		Nathaniel Reinartz	confirmed	
B	2	XROADS15646_20210603_053500	Northern Cardinal	Jesse Peterson	0	0.0				
B	3	XROADS15646_20210605_063500	Northern Cardinal	Jesse Peterson	4	18.0				
B	4	XROADS15646_20210607_073400	Northern Cardinal	Jesse Peterson	0	2.0	Chip; song at 1:53.0			
B	5	XROADS15646_20210609_043300	Northern Cardinal	Jesse Peterson	3	22.0	Chip; song at 6:58.0			
B	6	XROADS15646_20210611_053300	Northern Cardinal	Jesse Peterson	0	9.0				
B	7	XROADS15646_20210613_063300	Northern Cardinal	Jesse Peterson	0	34.0				
B	9	XROADS15646_20210617_043300	Northern Cardinal	Jesse Peterson	0	4.0				
B	10	XROADS15646_20210619_053300	Northern Cardinal	Jesse Peterson	0	34.5				
B	11	XROADS15646_20210622_063400	Northern Cardinal	Jesse Peterson	1	40.0				
B	12	XROADS15646_20210624_073400	Northern Cardinal	Jesse Peterson	0	0.0	6/23 was all rain noise. Used 6/24 instead			
B	13	XROADS15646_20210626_043500	Northern Cardinal	Jesse Peterson	0	4.5				
B	14	XROADS15646_20210627_053500	Northern Cardinal	Jesse Peterson	3	37.0				
B	8	XROADS15646_20210615_073300	Northern Flicker	Jesse Peterson	4	46.5		Nathaniel Reinartz	confirmed--should be Northern Flicker	
B	1	XROADS15646_20210602_053600	Ovenbird	Jesse Peterson	8	14.5		Nathaniel Reinartz	confirmed	
B	2	XROADS15646_20210603_053500	Ovenbird	Jesse Peterson	1	12.0				
B	4	XROADS15646_20210607_073400	Ovenbird	Jesse Peterson	0	38.5				
B	6	XROADS15646_20210611_053300	Ovenbird	Jesse Peterson	4	41.5	Distant; better at 8:59.0			
B	11	XROADS15646_20210622_063400	Ovenbird	Jesse Peterson	0	3.0				
B	14	XROADS15646_20210627_053500	Ovenbird	Jesse Peterson	6	42.0				
B	6	XROADS15646_20210611_053300	Red-bellied Woodpecker	Jesse Peterson	0	48.5	Again at 2:11.0	Nathaniel Reinartz	confirmed	
B	8	XROADS15646_20210615_073300	Red-bellied Woodpecker	Jesse Peterson	8	31.0				
B	10	XROADS15646_20210619_053300	Red-bellied Woodpecker	Jesse Peterson	0	2.0				
B	1	XROADS15646_20210602_053600	Red-eyed Vireo	Jesse Peterson	0	31.0		Nathaniel Reinartz	confirmed	
B	2	XROADS15646_20210603_053500	Red-eyed Vireo	Jesse Peterson	0	1.0				
B	3	XROADS15646_20210605_063500	Red-eyed Vireo	Jesse Peterson	0	44.5				

B	4	XROADS15646_20210607_073400	Red-eyed Vireo	Jesse Peterson	0	14.5				
B	6	XROADS15646_20210611_053300	Red-eyed Vireo	Jesse Peterson	0	3.0				
B	7	XROADS15646_20210613_063300	Red-eyed Vireo	Jesse Peterson	0	4.0				
B	8	XROADS15646_20210615_073300	Red-eyed Vireo	Jesse Peterson	5	43.5				
B	9	XROADS15646_20210617_043300	Red-eyed Vireo	Jesse Peterson	9	29.0				
B	10	XROADS15646_20210619_053300	Red-eyed Vireo	Jesse Peterson	0	3.5				
B	11	XROADS15646_20210622_063400	Red-eyed Vireo	Jesse Peterson	0	30.5				
B	15	XROADS15646_20210629_063600	Red-eyed Vireo	Jesse Peterson	9	8.0				
B	1	XROADS15646_20210602_053600	Red-winged Blackbird	Jesse Peterson	0	12.0	Better at 3:30.0	Nathaniel Reinartz	confirmed	
B	2	XROADS15646_20210603_053500	Red-winged Blackbird	Jesse Peterson	0	50.0				
B	3	XROADS15646_20210605_063500	Red-winged Blackbird	Jesse Peterson	1	3.0				
B	4	XROADS15646_20210607_073400	Red-winged Blackbird	Jesse Peterson	0	37.5				
B	5	XROADS15646_20210609_043300	Red-winged Blackbird	Jesse Peterson	1	44.0				
B	7	XROADS15646_20210613_063300	Red-winged Blackbird	Jesse Peterson	1	20.0				
B	8	XROADS15646_20210615_073300	Red-winged Blackbird	Jesse Peterson	0	9.0				
B	10	XROADS15646_20210619_053300	Red-winged Blackbird	Jesse Peterson	3	19.0				
B	15	XROADS15646_20210629_063600	Red-winged Blackbird	Jesse Peterson	8	56.0				
B	12	XROADS15646_20210624_073400	Rose-breasted Grosbeak	Jesse Peterson	0	15.0		Nathaniel Reinartz	confirmed	
B	1	XROADS15646_20210602_053600	Song Sparrow	Jesse Peterson	0	0.5		Nathaniel Reinartz	confirmed	
B	2	XROADS15646_20210603_053500	Song Sparrow	Jesse Peterson	0	20.0	Better at 0:38.0			
B	3	XROADS15646_20210605_063500	Song Sparrow	Jesse Peterson	0	5.0	Better at 0:30.0			
B	4	XROADS15646_20210607_073400	Song Sparrow	Jesse Peterson	0	8.0				
B	5	XROADS15646_20210609_043300	Song Sparrow	Jesse Peterson	0	4.0				
B	6	XROADS15646_20210611_053300	Song Sparrow	Jesse Peterson	1	17.5				
B	7	XROADS15646_20210613_063300	Song Sparrow	Jesse Peterson	5	15.0				
B	8	XROADS15646_20210615_073300	Song Sparrow	Jesse Peterson	1	23.0				
B	9	XROADS15646_20210617_043300	Song Sparrow	Jesse Peterson	0	0.0				
B	10	XROADS15646_20210619_053300	Song Sparrow	Jesse Peterson	1	12.0				
B	11	XROADS15646_20210622_063400	Song Sparrow	Jesse Peterson	0	34.0	Better at 2:27.0			
B	12	XROADS15646_20210624_073400	Song Sparrow	Jesse Peterson	7	32.0				
B	13	XROADS15646_20210626_043500	Song Sparrow	Jesse Peterson	0	25.0				
B	14	XROADS15646_20210627_053500	Song Sparrow	Jesse Peterson	2	0.0				
B	15	XROADS15646_20210629_063600	Song Sparrow	Jesse Peterson	0	4.0				
B	2	XROADS15646_20210603_053500	Wood Thrush	Jesse Peterson	0	3.5		Nathaniel Reinartz	confirmed	
B	3	XROADS15646_20210605_063500	Wood Thrush	Jesse Peterson	4	20.0				
B	4	XROADS15646_20210607_073400	Wood Thrush	Jesse Peterson	0	20.5				
B	5	XROADS15646_20210609_043300	Wood Thrush	Jesse Peterson	0	2.0				
B	6	XROADS15646_20210611_053300	Wood Thrush	Jesse Peterson	0	0.0				
B	9	XROADS15646_20210617_043300	Wood Thrush	Jesse Peterson	0	2.0				
B	13	XROADS15646_20210626_043500	Wood Thrush	Jesse Peterson	0	3.0				
C	1	XROADS15686_20210601_043600	American Crow	Jesse Peterson	9	49.0		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	American Crow	Jesse Peterson	0	27.0				
C	3	XROADS15686_20210606_063400	American Crow	Jesse Peterson	3	39.5				
C	5	XROADS15686_20210609_043300	American Crow	Jesse Peterson	3	1.0				
C	6	XROADS15686_20210611_053300	American Crow	Jesse Peterson	3	31.5				
C	7	XROADS15686_20210613_063300	American Crow	Jesse Peterson	1	13.0				
C	9	XROADS15686_20210617_043300	American Crow	Jesse Peterson	0	44.5	Better at 8:02.0			
C	10	XROADS15686_20210619_053300	American Crow	Jesse Peterson	0	7.0	Better at 7:43.0			
C	14	XROADS15686_20210627_053500	American Crow	Jesse Peterson	0	4.0				
C	15	XROADS15686_20210629_063600	American Crow	Jesse Peterson	2	34.0				
C	2	XROADS15686_20210603_053500	American Goldfinch	Jesse Peterson	3	29.5		Nathaniel Reinartz	confirmed	
C	3	XROADS15686_20210606_063400	American Goldfinch	Jesse Peterson	0	11.0				
C	4	XROADS15686_20210607_073400	American Goldfinch	Jesse Peterson	1	31.0				
C	5	XROADS15686_20210609_043300	American Goldfinch	Jesse Peterson	7	37.5				
C	6	XROADS15686_20210611_053300	American Goldfinch	Jesse Peterson	1	36.5				
C	7	XROADS15686_20210613_063300	American Goldfinch	Jesse Peterson	8	57.0				
C	12	XROADS15686_20210623_073400	American Goldfinch	Jesse Peterson	0	36.0				
C	13	XROADS15686_20210625_043400	American Goldfinch	Jesse Peterson	9	7.0				
C	15	XROADS15686_20210629_063600	American Goldfinch	Jesse Peterson	9	13.0				
C	2	XROADS15686_20210603_053500	American Redstart	Jesse Peterson	0	5.5		Nathaniel Reinartz	confirmed	
C	3	XROADS15686_20210606_063400	American Redstart	Jesse Peterson	0	3.5				
C	4	XROADS15686_20210607_073400	American Redstart	Jesse Peterson	0	0.5				
C	5	XROADS15686_20210609_043300	American Redstart	Jesse Peterson	0	19.0				
C	6	XROADS15686_20210611_053300	American Redstart	Jesse Peterson	0	2.0				
C	8	XROADS15686_20210615_073300	American Redstart	Jesse Peterson	0	21.0				
C	9	XROADS15686_20210617_043300	American Redstart	Jesse Peterson	0	28.0				
C	10	XROADS15686_20210619_053300	American Redstart	Jesse Peterson	0	7.0				

C	11	XROADS15686_20210622_063400	American Redstart	Jesse Peterson	0	1.0			
C	14	XROADS15686_20210627_053500	American Redstart	Jesse Peterson	3	45.0			
C	15	XROADS15686_20210629_063600	American Redstart	Jesse Peterson	2	23.5			
C	1	XROADS15686_20210601_043600	American Robin	Jesse Peterson	0	0.0		Nathaniel Reinartz	confirmed
C	3	XROADS15686_20210606_063400	American Robin	Jesse Peterson	1	36.0			
C	4	XROADS15686_20210607_073400	American Robin	Jesse Peterson	1	6.0			
C	5	XROADS15686_20210609_043300	American Robin	Jesse Peterson	0	21.0			
C	6	XROADS15686_20210611_053300	American Robin	Jesse Peterson	1	20.0			
C	7	XROADS15686_20210613_063300	American Robin	Jesse Peterson	0	2.0			
C	8	XROADS15686_20210615_073300	American Robin	Jesse Peterson	0	0.0	also 9s, and better at 1:41.0		
C	9	XROADS15686_20210617_043300	American Robin	Jesse Peterson	0	8.0			
C	10	XROADS15686_20210619_053300	American Robin	Jesse Peterson	0	2.0			
C	11	XROADS15686_20210622_063400	American Robin	Jesse Peterson	1	54.0			
C	13	XROADS15686_20210625_043400	American Robin	Jesse Peterson	0	0.0			
C	14	XROADS15686_20210627_053500	American Robin	Jesse Peterson	3	54.0	chip		
C	15	XROADS15686_20210629_063600	American Robin	Jesse Peterson	2	7.0			
C	1	XROADS15686_20210601_043600	Baltimore Oriole	Jesse Peterson	1	41.0		Nathaniel Reinartz	confirmed
C	2	XROADS15686_20210603_053500	Baltimore Oriole	Jesse Peterson	0	6.5			
C	3	XROADS15686_20210606_063400	Baltimore Oriole	Jesse Peterson	0	16.0			
C	4	XROADS15686_20210607_073400	Baltimore Oriole	Jesse Peterson	0	11.5			
C	5	XROADS15686_20210609_043300	Baltimore Oriole	Jesse Peterson	0	0.0			
C	6	XROADS15686_20210611_053300	Baltimore Oriole	Jesse Peterson	2	43.0			
C	7	XROADS15686_20210613_063300	Baltimore Oriole	Jesse Peterson	0	0.0			
C	8	XROADS15686_20210615_073300	Baltimore Oriole	Jesse Peterson	0	44.5			
C	9	XROADS15686_20210617_043300	Baltimore Oriole	Jesse Peterson	2	31.0			
C	10	XROADS15686_20210619_053300	Baltimore Oriole	Jesse Peterson	0	8.0			
C	11	XROADS15686_20210622_063400	Baltimore Oriole	Jesse Peterson	0	13.0			
C	12	XROADS15686_20210623_073400	Baltimore Oriole	Jesse Peterson	1	32.0	Better at 1:49.0		
C	14	XROADS15686_20210627_053500	Baltimore Oriole	Jesse Peterson	5	36.0			
C	15	XROADS15686_20210629_063600	Baltimore Oriole	Jesse Peterson	0	10.0			
C	4	XROADS15686_20210607_073400	Black-capped Chickadee	Jesse Peterson	6	53.0		Nathaniel Reinartz	confirmed
C	8	XROADS15686_20210615_073300	Black-capped Chickadee	Jesse Peterson	5	23.0			
C	11	XROADS15686_20210622_063400	Black-capped Chickadee	Jesse Peterson	6	41.0			
C	14	XROADS15686_20210627_053500	Black-capped Chickadee	Jesse Peterson	6	22.0			
C	2	XROADS15686_20210603_053500	Blue Jay	Jesse Peterson	8	53.0		Nathaniel Reinartz	confirmed
C	5	XROADS15686_20210609_043300	Blue Jay	Jesse Peterson	1	10.0			
C	6	XROADS15686_20210611_053300	Blue Jay	Jesse Peterson	0	20.0			
C	10	XROADS15686_20210619_053300	Blue Jay	Jesse Peterson	0	33.5	Better at 4:37.5		
C	13	XROADS15686_20210625_043400	Blue Jay	Jesse Peterson	5	48.0			
C	2	XROADS15686_20210603_053500	Brown-headed Cowbird	Jesse Peterson	8	0.0	Not certain	Nathaniel Reinartz	confirmed
C	3	XROADS15686_20210606_063400	Brown-headed Cowbird	Jesse Peterson	0	8.0			
C	4	XROADS15686_20210607_073400	Brown-headed Cowbird	Jesse Peterson	0	1.5			
C	11	XROADS15686_20210622_063400	Brown-headed Cowbird	Jesse Peterson	0	52.0			
C	3	XROADS15686_20210606_063400	Canada Goose	Jesse Peterson	9	50.0		Nathaniel Reinartz	confirmed
C	2	XROADS15686_20210603_053500	Cedar Waxwing	Jesse Peterson	6	28.0		Nathaniel Reinartz	confirmed
C	8	XROADS15686_20210615_073300	Cedar Waxwing	Jesse Peterson	8	20.5			
C	11	XROADS15686_20210622_063400	Cedar Waxwing	Jesse Peterson	0	24.0			
C	12	XROADS15686_20210623_073400	Cedar Waxwing	Jesse Peterson	1	34.0			
C	15	XROADS15686_20210629_063600	Cedar Waxwing	Jesse Peterson	8	48.5			
C	1	XROADS15686_20210601_043600	Chipping Sparrow	Jesse Peterson	2	54.0		Nathaniel Reinartz	confirmed
C	5	XROADS15686_20210609_043300	Chipping Sparrow	Jesse Peterson	0	0.0			
C	6	XROADS15686_20210611_053300	Chipping Sparrow	Jesse Peterson	4	54.0			
C	8	XROADS15686_20210615_073300	Chipping Sparrow	Jesse Peterson	3	14.0			
C	9	XROADS15686_20210617_043300	Chipping Sparrow	Jesse Peterson	0	11.5			
C	13	XROADS15686_20210625_043400	Chipping Sparrow	Jesse Peterson	2	29.0			
C	1	XROADS15686_20210601_043600	Common Grackle	Jesse Peterson	8	20.0	Also at 8:37.5	Nathaniel Reinartz	confirmed
C	3	XROADS15686_20210606_063400	Common Grackle	Jesse Peterson	7	10.0			
C	4	XROADS15686_20210607_073400	Common Grackle	Jesse Peterson	0	12.0			
C	6	XROADS15686_20210611_053300	Common Grackle	Jesse Peterson	6	14.0			
C	7	XROADS15686_20210613_063300	Common Grackle	Jesse Peterson	2	41.5			
C	8	XROADS15686_20210615_073300	Common Grackle	Jesse Peterson	0	3.0			
C	10	XROADS15686_20210619_053300	Common Grackle	Jesse Peterson	4	7.0			
C	11	XROADS15686_20210622_063400	Common Grackle	Jesse Peterson	6	18.5			
C	12	XROADS15686_20210623_073400	Common Grackle	Jesse Peterson	3	21.0			
C	14	XROADS15686_20210627_053500	Common Grackle	Jesse Peterson	5	20.0			
C	15	XROADS15686_20210629_063600	Common Grackle	Jesse Peterson	1	36.0			
C	2	XROADS15686_20210603_053500	Common Yellowthroat	Jesse Peterson	0	9.5		Nathaniel Reinartz	confirmed

C	4	XROADS15686_20210607_073400	Common Yellowthroat	Jesse Peterson	6	49.0				
C	6	XROADS15686_20210611_053300	Common Yellowthroat	Jesse Peterson	0	1.0				
C	7	XROADS15686_20210613_063300	Common Yellowthroat	Jesse Peterson	3	19.0	Better at 4:06.0			
C	9	XROADS15686_20210617_043300	Common Yellowthroat	Jesse Peterson	0	19.0				
C	10	XROADS15686_20210619_053300	Common Yellowthroat	Jesse Peterson	0	5.5				
C	11	XROADS15686_20210622_063400	Common Yellowthroat	Jesse Peterson	0	14.5				
C	13	XROADS15686_20210625_043400	Common Yellowthroat	Jesse Peterson	6	7.0				
C	14	XROADS15686_20210627_053500	Common Yellowthroat	Jesse Peterson	1	48.0				
C	15	XROADS15686_20210629_063600	Common Yellowthroat	Jesse Peterson	0	48.5				
C	3	XROADS15686_20210606_063400	Downy Woodpecker	Jesse Peterson	2	39.0		Nathaniel Reinartz	confirmed	
C	4	XROADS15686_20210607_073400	Downy Woodpecker	Jesse Peterson	1	1.0				
C	15	XROADS15686_20210629_063600	Downy Woodpecker	Jesse Peterson	0	35.0				
C	5	XROADS15686_20210609_043300	Eastern Kingbird	Jesse Peterson	8	26.0	Again at 8:27.0, 9:09.0	Nathaniel Reinartz	confirmed	
C	8	XROADS15686_20210615_073300	Eastern Kingbird	Jesse Peterson	2	8.0				
C	10	XROADS15686_20210619_053300	Eastern Kingbird	Jesse Peterson	6	52.5	Single note; Not certain	Nathaniel Reinartz	confirmed	
C	13	XROADS15686_20210625_043400	Eastern Kingbird	Jesse Peterson	9	42.5				
C	15	XROADS15686_20210629_063600	Eastern Kingbird	Jesse Peterson	8	54.0				
C	6	XROADS15686_20210611_053300	Gray Catbird	Jesse Peterson	6	30.0		Nathaniel Reinartz	confirmed	
C	7	XROADS15686_20210613_063300	Gray Catbird	Jesse Peterson	0	9.0	More at 1:19.0			
C	8	XROADS15686_20210615_073300	Gray Catbird	Jesse Peterson	0	7.0				
C	9	XROADS15686_20210617_043300	Gray Catbird	Jesse Peterson	0	35.5				
C	10	XROADS15686_20210619_053300	Gray Catbird	Jesse Peterson	0	36.0	Rattle			
C	15	XROADS15686_20210629_063600	Gray Catbird	Jesse Peterson	0	0.0				
C	6	XROADS15686_20210611_053300	Great Crested Flycatcher	Jesse Peterson	1	40.0		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	Hairy Woodpecker	Jesse Peterson	2	9.5	Also 4:41.0	Nathaniel Reinartz	confirmed	
C	11	XROADS15686_20210622_063400	Hairy Woodpecker	Jesse Peterson	6	53.0	Hard chips at 7:29.0			
C	9	XROADS15686_20210617_043300	House Finch	Jesse Peterson	5	1.0		Nathaniel Reinartz	confirmed	
C	10	XROADS15686_20210619_053300	House Finch	Jesse Peterson	8	19.5				
C	1	XROADS15686_20210601_043600	House Wren	Jesse Peterson	5	37.0		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	House Wren	Jesse Peterson	3	44.5				
C	4	XROADS15686_20210607_073400	House Wren	Jesse Peterson	5	36.0				
C	5	XROADS15686_20210609_043300	House Wren	Jesse Peterson	9	21.0				
C	9	XROADS15686_20210617_043300	House Wren	Jesse Peterson	0	1.0				
C	10	XROADS15686_20210619_053300	House Wren	Jesse Peterson	1	34.0				
C	11	XROADS15686_20210622_063400	House Wren	Jesse Peterson	0	12.0				
C	13	XROADS15686_20210625_043400	House Wren	Jesse Peterson	0	2.0				
C	10	XROADS15686_20210619_053300	Indigo Bunting	Jesse Peterson	1	6.0	Better at 3:15.0	Nathaniel Reinartz	confirmed	
C	14	XROADS15686_20210627_053500	Indigo Bunting	Jesse Peterson	8	58.5	chip			
C	3	XROADS15686_20210606_063400	Killdeer	Jesse Peterson	0	22.0		Nathaniel Reinartz	confirmed	
C	7	XROADS15686_20210613_063300	Killdeer	Jesse Peterson	5	45.0				
C	1	XROADS15686_20210601_043600	Mallard	Jesse Peterson	3	18.0		Nathaniel Reinartz	confirmed	
C	7	XROADS15686_20210613_063300	Mallard	Jesse Peterson	5	57.0				
C	11	XROADS15686_20210622_063400	Mallard	Jesse Peterson	6	14.5				
C	12	XROADS15686_20210623_073400	Mallard	Jesse Peterson	0	22.5				
C	2	XROADS15686_20210603_053500	Mourning Dove	Jesse Peterson	3	11.0		Nathaniel Reinartz	confirmed	
C	3	XROADS15686_20210606_063400	Mourning Dove	Jesse Peterson	0	39.5				
C	5	XROADS15686_20210609_043300	Mourning Dove	Jesse Peterson	0	59.0				
C	6	XROADS15686_20210611_053300	Mourning Dove	Jesse Peterson	0	0.0				
C	7	XROADS15686_20210613_063300	Mourning Dove	Jesse Peterson	0	1.5				
C	8	XROADS15686_20210615_073300	Mourning Dove	Jesse Peterson	1	57.0				
C	9	XROADS15686_20210617_043300	Mourning Dove	Jesse Peterson	6	31.0				
C	10	XROADS15686_20210619_053300	Mourning Dove	Jesse Peterson	1	14.0				
C	12	XROADS15686_20210623_073400	Mourning Dove	Jesse Peterson	6	4.0				
C	14	XROADS15686_20210627_053500	Mourning Dove	Jesse Peterson	0	3.0				
C	15	XROADS15686_20210629_063600	Mourning Dove	Jesse Peterson	1	28.0				
C	1	XROADS15686_20210601_043600	Northern Cardinal	Jesse Peterson	3	10.0		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	Northern Cardinal	Jesse Peterson	0	3.5				
C	3	XROADS15686_20210606_063400	Northern Cardinal	Jesse Peterson	0	2.0				
C	4	XROADS15686_20210607_073400	Northern Cardinal	Jesse Peterson	8	14.0				
C	5	XROADS15686_20210609_043300	Northern Cardinal	Jesse Peterson	0	0.0				
C	6	XROADS15686_20210611_053300	Northern Cardinal	Jesse Peterson	0	41.5				
C	7	XROADS15686_20210613_063300	Northern Cardinal	Jesse Peterson	2	56.0				
C	8	XROADS15686_20210615_073300	Northern Cardinal	Jesse Peterson	9	51.0				
C	9	XROADS15686_20210617_043300	Northern Cardinal	Jesse Peterson	0	2.0				
C	10	XROADS15686_20210619_053300	Northern Cardinal	Jesse Peterson	0	26.0				
C	11	XROADS15686_20210622_063400	Northern Cardinal	Jesse Peterson	5	45.0				
C	13	XROADS15686_20210625_043400	Northern Cardinal	Jesse Peterson	0	2.0				

C	14	XROADS15686_20210627_053500	Northern Cardinal	Jesse Peterson	1	17.0				
C	15	XROADS15686_20210629_063600	Northern Cardinal	Jesse Peterson	2	1.0				
C	15	XROADS15686_20210629_063600	Northern Flicker	Jesse Peterson	0	56.0			Nathaniel Reinartz	confirmed
C	10	XROADS15686_20210619_053300	Red-bellied Woodpecker	Jesse Peterson	7	48.0	Better at 8:35.0		Nathaniel Reinartz	confirmed
C	15	XROADS15686_20210629_063600	Red-bellied Woodpecker	Jesse Peterson	7	56.0				
C	2	XROADS15686_20210603_053500	Red-eyed Vireo	Jesse Peterson	2	16.0			Nathaniel Reinartz	confirmed
C	3	XROADS15686_20210606_063400	Red-eyed Vireo	Jesse Peterson	5	48.0				
C	4	XROADS15686_20210607_073400	Red-eyed Vireo	Jesse Peterson	0	0.5	Better at 0:14.0			
C	5	XROADS15686_20210609_043300	Red-eyed Vireo	Jesse Peterson	1	26.0				
C	6	XROADS15686_20210611_053300	Red-eyed Vireo	Jesse Peterson	0	5.0				
C	15	XROADS15686_20210629_063600	Red-eyed Vireo	Jesse Peterson	9	49.5				
C	1	XROADS15686_20210601_043600	Red-winged Blackbird	Jesse Peterson	0	2.0			Nathaniel Reinartz	confirmed
C	2	XROADS15686_20210603_053500	Red-winged Blackbird	Jesse Peterson	0	0.5				
C	3	XROADS15686_20210606_063400	Red-winged Blackbird	Jesse Peterson	0	1.5	6/5 was all rain noise. Used 6/6 0634 file instead.			
C	4	XROADS15686_20210607_073400	Red-winged Blackbird	Jesse Peterson	0	1.0				
C	5	XROADS15686_20210609_043300	Red-winged Blackbird	Jesse Peterson	8	2.0				
C	6	XROADS15686_20210611_053300	Red-winged Blackbird	Jesse Peterson	0	3.0				
C	7	XROADS15686_20210613_063300	Red-winged Blackbird	Jesse Peterson	0	0.0				
C	8	XROADS15686_20210615_073300	Red-winged Blackbird	Jesse Peterson	0	19.0				
C	9	XROADS15686_20210617_043300	Red-winged Blackbird	Jesse Peterson	0	3.0	Better at 1:17.5			
C	10	XROADS15686_20210619_053300	Red-winged Blackbird	Jesse Peterson	0	13.0				
C	11	XROADS15686_20210622_063400	Red-winged Blackbird	Jesse Peterson	0	0.0	6/21has heavy rain noise; used 6/22 instead			
C	12	XROADS15686_20210623_073400	Red-winged Blackbird	Jesse Peterson	0	24.0				
C	13	XROADS15686_20210625_043400	Red-winged Blackbird	Jesse Peterson	1	2.0				
C	14	XROADS15686_20210627_053500	Red-winged Blackbird	Jesse Peterson	0	1.0				
C	15	XROADS15686_20210629_063600	Red-winged Blackbird	Jesse Peterson	0	0.5				
C	11	XROADS15686_20210622_063400	Rose-breasted Grosbeak	Jesse Peterson	3	46.0			Nathaniel Reinartz	confirmed
C	1	XROADS15686_20210601_043600	Sandhill Crane	Jesse Peterson	2	10.0			Nathaniel Reinartz	confirmed
C	12	XROADS15686_20210623_073400	Sandhill Crane	Jesse Peterson	0	3.0				
C	1	XROADS15686_20210601_043600	Song Sparrow	Jesse Peterson	1	14.5	Not certain		Nathaniel Reinartz	confirmed
C	2	XROADS15686_20210603_053500	Song Sparrow	Jesse Peterson	0	1.0				
C	3	XROADS15686_20210606_063400	Song Sparrow	Jesse Peterson	6	26.0				
C	4	XROADS15686_20210607_073400	Song Sparrow	Jesse Peterson	3	10.0				
C	5	XROADS15686_20210609_043300	Song Sparrow	Jesse Peterson	0	4.0				
C	6	XROADS15686_20210611_053300	Song Sparrow	Jesse Peterson	0	8.5				
C	7	XROADS15686_20210613_063300	Song Sparrow	Jesse Peterson	4	29.0				
C	9	XROADS15686_20210617_043300	Song Sparrow	Jesse Peterson	1	21.0	Better at 3:43.5			
C	10	XROADS15686_20210619_053300	Song Sparrow	Jesse Peterson	6	24.0				
C	11	XROADS15686_20210622_063400	Song Sparrow	Jesse Peterson	0	32.5				
C	13	XROADS15686_20210625_043400	Song Sparrow	Jesse Peterson	5	4.0				
C	15	XROADS15686_20210629_063600	Song Sparrow	Jesse Peterson	8	2.0				
C	2	XROADS15686_20210603_053500	Tree Swallow	Jesse Peterson	6	36.0			Nathaniel Reinartz	confirmed
C	10	XROADS15686_20210619_053300	Tree Swallow	Jesse Peterson	5	31.0				
C	2	XROADS15686_20210603_053500	Warbling Vireo	Jesse Peterson	0	13.0			Nathaniel Reinartz	confirmed
C	3	XROADS15686_20210606_063400	Warbling Vireo	Jesse Peterson	1	45.0				
C	4	XROADS15686_20210607_073400	Warbling Vireo	Jesse Peterson	0	14.0				
C	6	XROADS15686_20210611_053300	Warbling Vireo	Jesse Peterson	1	39.0				
C	7	XROADS15686_20210613_063300	Warbling Vireo	Jesse Peterson	0	18.0				
C	8	XROADS15686_20210615_073300	Warbling Vireo	Jesse Peterson	0	5.0				
C	9	XROADS15686_20210617_043300	Warbling Vireo	Jesse Peterson	0	49.0				
C	10	XROADS15686_20210619_053300	Warbling Vireo	Jesse Peterson	3	2.0				
C	11	XROADS15686_20210622_063400	Warbling Vireo	Jesse Peterson	3	10.5				
C	12	XROADS15686_20210623_073400	Warbling Vireo	Jesse Peterson	1	39.0				
C	14	XROADS15686_20210627_053500	Warbling Vireo	Jesse Peterson	6	39.5				
C	15	XROADS15686_20210629_063600	Warbling Vireo	Jesse Peterson	6	34.0				
C	7	XROADS15686_20210613_063300	White-breasted Nuthatch	Jesse Peterson	9	50.5			Nathaniel Reinartz	confirmed
C	2	XROADS15686_20210603_053500	Yellow Warbler	Jesse Peterson	2	42.0			Nathaniel Reinartz	confirmed
C	5	XROADS15686_20210609_043300	Yellow Warbler	Jesse Peterson	2	49.0				
C	6	XROADS15686_20210611_053300	Yellow Warbler	Jesse Peterson	2	17.0				
C	10	XROADS15686_20210619_053300	Yellow Warbler	Jesse Peterson	5	4.0				
C	15	XROADS15686_20210629_063600	Yellow Warbler	Jesse Peterson	0	8.0				
C	6	XROADS15686_20210611_053300	Yellow-billed Cuckoo	Jesse Peterson	2	36.0	Again at 3:01.0, 3:20.0, best at 4:34.0		Nathaniel Reinartz	confirmed
D	2	XROADS15974_20210605_053500	American Crow	Jesse Peterson	2	18.0			Nathaniel Reinartz	confirmed
D	5	XROADS15974_20210611_043300	American Crow	Jesse Peterson	2	46.0				
D	6	XROADS15974_20210613_053300	American Crow	Jesse Peterson	1	36.0				
D	7	XROADS15974_20210615_063300	American Crow	Jesse Peterson	0	19.0				

D	9	XROADS15974_20210619_043300	American Crow	Jesse Peterson	7	50.0				
D	11	XROADS15974_20210624_063400	American Crow	Jesse Peterson	6	9.0				
D	14	XROADS15974_20210629_053600	American Crow	Jesse Peterson	0	3.5				
D	15	XROADS15974_20210701_063700	American Crow	Jesse Peterson	2	13.0				corrected filename from ..600 to ..700
D	7	XROADS15974_20210615_063300	American Goldfinch	Jesse Peterson	2	16.5		Nathaniel Reinartz	confirmed	
D	8	XROADS15974_20210617_073300	American Goldfinch	Jesse Peterson	9	4.0				
D	7	XROADS15974_20210615_063300	American Redstart	Jesse Peterson	9	31.0	Also at 9:45.5, 9:57.0	Nathaniel Reinartz	confirmed	
D	8	XROADS15974_20210617_073300	American Redstart	Jesse Peterson	1	49.0	Also at 4:10.5, 4:25.0			
D	12	XROADS15974_20210625_073400	American Redstart	Jesse Peterson	1	7.0				
D	14	XROADS15974_20210629_053600	American Redstart	Jesse Peterson	2	20.0				
D	15	XROADS15974_20210701_063700	American Redstart	Jesse Peterson	6	58.5				corrected filename from ..600 to ..700
D	1	XROADS15974_20210603_043500	American Robin	Jesse Peterson	0	0.0		Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	American Robin	Jesse Peterson	2	27.0	Also at 2:49.5			
D	3	XROADS15974_20210607_063400	American Robin	Jesse Peterson	1	51.0	Better at 2:29.0, 2:54.0			
D	4	XROADS15974_20210609_073300	American Robin	Jesse Peterson	0	0.0	Better at 1:03.5			
D	5	XROADS15974_20210611_043300	American Robin	Jesse Peterson	0	0.0				
D	6	XROADS15974_20210613_053300	American Robin	Jesse Peterson	6	11.0				
D	7	XROADS15974_20210615_063300	American Robin	Jesse Peterson	0	43.0	Better at 4:30.0			
D	8	XROADS15974_20210617_073300	American Robin	Jesse Peterson	0	44.0				
D	9	XROADS15974_20210619_043300	American Robin	Jesse Peterson	0	0.0				
D	12	XROADS15974_20210625_073400	American Robin	Jesse Peterson	0	0.5				
D	13	XROADS15974_20210627_043500	American Robin	Jesse Peterson	0	0.0				
D	14	XROADS15974_20210629_053600	American Robin	Jesse Peterson	0	5.0				
D	15	XROADS15974_20210701_063700	American Robin	Jesse Peterson	0	0.0				corrected filename from ..600 to ..700
D	1	XROADS15974_20210603_043500	Baltimore Oriole	Jesse Peterson	0	2.0		Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	Baltimore Oriole	Jesse Peterson	0	38.0				
D	3	XROADS15974_20210607_063400	Baltimore Oriole	Jesse Peterson	0	3.0				
D	4	XROADS15974_20210609_073300	Baltimore Oriole	Jesse Peterson	0	15.0				
D	6	XROADS15974_20210613_053300	Baltimore Oriole	Jesse Peterson	1	53.5				
D	7	XROADS15974_20210615_063300	Baltimore Oriole	Jesse Peterson	0	8.0				
D	8	XROADS15974_20210617_073300	Baltimore Oriole	Jesse Peterson	1	2.5				
D	10	XROADS15974_20210621_053300	Baltimore Oriole	Jesse Peterson	7	3.0				
D	11	XROADS15974_20210624_063400	Baltimore Oriole	Jesse Peterson	5	42.0				
D	12	XROADS15974_20210625_073400	Baltimore Oriole	Jesse Peterson	2	33.0				
D	15	XROADS15974_20210701_063700	Baltimore Oriole	Jesse Peterson	0	9.5				corrected filename from ..600 to ..700
D	5	XROADS15974_20210611_043300	Belted Kingfisher	Jesse Peterson	5	34.5		Nathaniel Reinartz	confirmed	
D	6	XROADS15974_20210613_053300	Belted Kingfisher	Jesse Peterson	0	2.0				
D	7	XROADS15974_20210615_063300	Belted Kingfisher	Jesse Peterson	0	19.5				
D	13	XROADS15974_20210627_043500	Belted Kingfisher	Jesse Peterson	6	42.0				
D	1	XROADS15974_20210603_043500	Black-capped Chickadee	Jesse Peterson	4	7.0		Nathaniel Reinartz	confirmed	
D	3	XROADS15974_20210607_063400	Blue Jay	Jesse Peterson	0	33.0		Nathaniel Reinartz	confirmed	
D	1	XROADS15974_20210603_043500	Canada Goose	Jesse Peterson	0	0.0		Nathaniel Reinartz	confirmed	
D	3	XROADS15974_20210607_063400	Canada Goose	Jesse Peterson	2	52.5				
D	8	XROADS15974_20210617_073300	Canada Goose	Jesse Peterson	1	29.5				
D	2	XROADS15974_20210605_053500	Cedar Waxwing	Jesse Peterson	2	52.0		Nathaniel Reinartz	confirmed	
D	3	XROADS15974_20210607_063400	Cedar Waxwing	Jesse Peterson	4	2.0				
D	4	XROADS15974_20210609_073300	Cedar Waxwing	Jesse Peterson	1	41.0				
D	7	XROADS15974_20210615_063300	Cedar Waxwing	Jesse Peterson	0	51.5				
D	8	XROADS15974_20210617_073300	Cedar Waxwing	Jesse Peterson	7	13.0				
D	9	XROADS15974_20210619_043300	Cedar Waxwing	Jesse Peterson	7	22.0				
D	12	XROADS15974_20210625_073400	Cedar Waxwing	Jesse Peterson	0	33.5				
D	14	XROADS15974_20210629_053600	Cedar Waxwing	Jesse Peterson	0	35.5				
D	15	XROADS15974_20210701_063700	Cedar Waxwing	Jesse Peterson	0	12.0				corrected filename from ..600 to ..700
D	4	XROADS15974_20210609_073300	Chipping Sparrow	Jesse Peterson	1	45.0		Nathaniel Reinartz	confirmed	
D	8	XROADS15974_20210617_073300	Common Grackle	Jesse Peterson	0	58.5		Nathaniel Reinartz	confirmed	
D	10	XROADS15974_20210621_053300	Common Grackle	Jesse Peterson	8	33.0				
D	11	XROADS15974_20210624_063400	Common Grackle	Jesse Peterson	0	55.0				
D	12	XROADS15974_20210625_073400	Common Grackle	Jesse Peterson	0	17.0				
D	14	XROADS15974_20210629_053600	Common Grackle	Jesse Peterson	4	25.0				
D	15	XROADS15974_20210701_063700	Common Grackle	Jesse Peterson	0	42.0				corrected filename from ..600 to ..700
D	3	XROADS15974_20210607_063400	Common Yellowthroat	Jesse Peterson	4	9.5		Nathaniel Reinartz	confirmed	

D	4	XROADS15974_20210609_073300	Common Yellowthroat	Jesse Peterson	0	14.0				
D	5	XROADS15974_20210611_043300	Common Yellowthroat	Jesse Peterson	1	33.0				
D	14	XROADS15974_20210629_053600	Common Yellowthroat	Jesse Peterson	1	52.0				
D	15	XROADS15974_20210701_063700	Common Yellowthroat	Jesse Peterson	6	6.5				corrected filename from ..600 to ..700
D	6	XROADS15974_20210613_053300	Dickcissel	Jesse Peterson	2	13.0	Again at 2:46.5, 2:52.0, 3:14.5	Nathaniel Reinartz	confirmed	
D	15	XROADS15974_20210701_063700	Downy Woodpecker	Jesse Peterson	3	33.5		Nathaniel Reinartz	confirmed--there seems to be a typo in the file name--the correct file is: XROADS15974_20210701_063700	corrected filename from ..600 to ..700
D	14	XROADS15974_20210629_053600	Eastern Wood-Pewee	Jesse Peterson	7	35.0	Again at 8:42.0	Nathaniel Reinartz	confirmed	
D	9	XROADS15974_20210619_043300	Great Blue Heron	Jesse Peterson	6	21.5	Croak; Not certain	Nathaniel Reinartz	confirmed	
D	15	XROADS15974_20210701_063700	Great Crested Flycatcher	Jesse Peterson	3	23.0		Nathaniel Reinartz	confirmed--there seems to be a typo in the file name--the correct file is: XROADS15974_20210701_063700	corrected filename from ..600 to ..700
D	8	XROADS15974_20210617_073300	Hairy Woodpecker	Jesse Peterson	3	3.0		Nathaniel Reinartz	confirmed	
D	4	XROADS15974_20210609_073300	House Wren	Jesse Peterson	0	2.0		Nathaniel Reinartz	confirmed	
D	7	XROADS15974_20210615_063300	House Wren	Jesse Peterson	0	7.0				
D	8	XROADS15974_20210617_073300	House Wren	Jesse Peterson	1	57.0				
D	9	XROADS15974_20210619_043300	House Wren	Jesse Peterson	0	25.5				
D	10	XROADS15974_20210621_053300	House Wren	Jesse Peterson	0	18.0				
D	11	XROADS15974_20210624_063400	House Wren	Jesse Peterson	8	11.0				
D	14	XROADS15974_20210629_053600	House Wren	Jesse Peterson	0	0.5				
D	15	XROADS15974_20210701_063700	House Wren	Jesse Peterson	1	25.0				corrected filename from ..600 to ..700
D	14	XROADS15974_20210629_053600	Indigo Bunting	Jesse Peterson	3	28.0	Again at 3:40.0	Nathaniel Reinartz	confirmed	
D	1	XROADS15974_20210603_043500	Killdeer	Jesse Peterson	0	0.0	Song at 1:04.0	Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	Killdeer	Jesse Peterson	0	7.0	Better at 4:25.0			
D	3	XROADS15974_20210607_063400	Killdeer	Jesse Peterson	0	47.0				
D	4	XROADS15974_20210609_073300	Killdeer	Jesse Peterson	0	20.0				
D	5	XROADS15974_20210611_043300	Killdeer	Jesse Peterson	4	30.0				
D	6	XROADS15974_20210613_053300	Killdeer	Jesse Peterson	0	0.0				
D	7	XROADS15974_20210615_063300	Killdeer	Jesse Peterson	3	2.0				
D	8	XROADS15974_20210617_073300	Killdeer	Jesse Peterson	0	3.0				
D	9	XROADS15974_20210619_043300	Killdeer	Jesse Peterson	0	57.0				
D	10	XROADS15974_20210621_053300	Killdeer	Jesse Peterson	7	11.0				
D	11	XROADS15974_20210624_063400	Killdeer	Jesse Peterson	2	51.0				
D	12	XROADS15974_20210625_073400	Killdeer	Jesse Peterson	0	24.0				
D	13	XROADS15974_20210627_043500	Killdeer	Jesse Peterson	7	54.0				
D	14	XROADS15974_20210629_053600	Killdeer	Jesse Peterson	1	5.0				
D	1	XROADS15974_20210603_043500	Mallard	Jesse Peterson	5	5.0	Better at 6:47.5	Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	Mallard	Jesse Peterson	1	5.0				
D	3	XROADS15974_20210607_063400	Mallard	Jesse Peterson	6	37.5				
D	5	XROADS15974_20210611_043300	Mallard	Jesse Peterson	2	54.0				
D	6	XROADS15974_20210613_053300	Mallard	Jesse Peterson	5	36.0				
D	1	XROADS15974_20210603_043500	Mourning Dove	Jesse Peterson	8	34.5		Nathaniel Reinartz	confirmed	
D	3	XROADS15974_20210607_063400	Mourning Dove	Jesse Peterson	2	20.0				
D	5	XROADS15974_20210611_043300	Mourning Dove	Jesse Peterson	1	44.0				
D	6	XROADS15974_20210613_053300	Mourning Dove	Jesse Peterson	6	3.0				
D	9	XROADS15974_20210619_043300	Mourning Dove	Jesse Peterson	0	0.0				
D	14	XROADS15974_20210629_053600	Mourning Dove	Jesse Peterson	6	32.0				
D	15	XROADS15974_20210701_063700	Mourning Dove	Jesse Peterson	0	7.0				corrected filename from ..600 to ..700
D	6	XROADS15974_20210613_053300	Northern Cardinal	Jesse Peterson	4	14.5		Nathaniel Reinartz	confirmed	
D	9	XROADS15974_20210619_043300	Northern Cardinal	Jesse Peterson	0	0.0				
D	10	XROADS15974_20210621_053300	Northern Cardinal	Jesse Peterson	8	2.0				
D	12	XROADS15974_20210625_073400	Northern Cardinal	Jesse Peterson	0	20.5				
D	13	XROADS15974_20210627_043500	Northern Cardinal	Jesse Peterson	4	17.0				
D	14	XROADS15974_20210629_053600	Northern Cardinal	Jesse Peterson	0	53.5				
D	15	XROADS15974_20210701_063700	Northern Cardinal	Jesse Peterson	4	53.0				corrected filename from ..600 to ..700
D	4	XROADS15974_20210609_073300	Northern Flicker	Jesse Peterson	1	52.0		Nathaniel Reinartz	confirmed	
D	8	XROADS15974_20210617_073300	Pileated Woodpecker	Jesse Peterson	5	3.0	or lazy sounding Northern Flicker	Nathaniel Reinartz	confirmed	
D	14	XROADS15974_20210629_053600	Red-bellied Woodpecker	Jesse Peterson	6	53.0		Nathaniel Reinartz	confirmed	
D	12	XROADS15974_20210625_073400	Red-eyed Vireo	Jesse Peterson	0	50.5	Better at 2:32.0 thru 2:40.0	Nathaniel Reinartz	confirmed	

D	14	XROADS15974_20210629_053600	Red-eyed Vireo	Jesse Peterson	8	6.0				
D	15	XROADS15974_20210701_063700	Red-eyed Vireo	Jesse Peterson	0	29.0				corrected filename from ..600 to ..700
D	1	XROADS15974_20210603_043500	Red-winged Blackbird	Jesse Peterson	0	6.0		Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	Red-winged Blackbird	Jesse Peterson	0	3.0				
D	3	XROADS15974_20210607_063400	Red-winged Blackbird	Jesse Peterson	0	3.0				
D	4	XROADS15974_20210609_073300	Red-winged Blackbird	Jesse Peterson	0	5.0				
D	5	XROADS15974_20210611_043300	Red-winged Blackbird	Jesse Peterson	0	4.0				
D	6	XROADS15974_20210613_053300	Red-winged Blackbird	Jesse Peterson	0	1.0				
D	7	XROADS15974_20210615_063300	Red-winged Blackbird	Jesse Peterson	0	2.0				
D	8	XROADS15974_20210617_073300	Red-winged Blackbird	Jesse Peterson	0	1.0				
D	9	XROADS15974_20210619_043300	Red-winged Blackbird	Jesse Peterson	0	3.0				
D	10	XROADS15974_20210621_053300	Red-winged Blackbird	Jesse Peterson	0	3.0				
D	11	XROADS15974_20210624_063400	Red-winged Blackbird	Jesse Peterson	0	0.0	6/23 files did not work; used 6/24			
D	12	XROADS15974_20210625_073400	Red-winged Blackbird	Jesse Peterson	0	1.5				
D	13	XROADS15974_20210627_043500	Red-winged Blackbird	Jesse Peterson	7	15.5				
D	14	XROADS15974_20210629_053600	Red-winged Blackbird	Jesse Peterson	0	2.0				
D	15	XROADS15974_20210701_063700	Red-winged Blackbird	Jesse Peterson	0	3.0				corrected filename from ..600 to ..700
D	1	XROADS15974_20210603_043500	Rose-breasted Grosbeak	Jesse Peterson	3	44.0		Nathaniel Reinartz	confirmed	
D	9	XROADS15974_20210619_043300	Sandhill Crane	Jesse Peterson	0	11.0		Nathaniel Reinartz	confirmed	
D	1	XROADS15974_20210603_043500	Song Sparrow	Jesse Peterson	4	28.0		Nathaniel Reinartz	confirmed	
D	3	XROADS15974_20210607_063400	Spotted Sandpiper	Jesse Peterson	1	53.0	Lesser Yellowlegs Not certain; may be Killdeer	Nathaniel Reinartz	I think this is a Spotted Sandpiper--I found another on XROADS15974_20210615_063300 at 3:02	G. Casper - agree SPSA
D	4	XROADS15974_20210609_073300	Spotted Sandpiper	Jesse Peterson	4	26.0	Lesser Yellowlegs Not certain; may be Killdeer	Nathaniel Reinartz	I think this is a Spotted Sandpiper--I found another on XROADS15974_20210615_063300 at 3:03	G. Casper - agree SPSA
D	5	XROADS15974_20210611_043300	Spotted Sandpiper	Jesse Peterson	1	0.0	Unknown	Nathaniel Reinartz	Spotted Sandpiper	G. Casper - agree SPSA
D	8	XROADS15974_20210617_073300	Spotted Sandpiper	Jesse Peterson	9	25.0	Is this a Killdeer?	Nathaniel Reinartz	Spotted Sandpiper	G. Casper - agree SPSA
D	1	XROADS15974_20210603_043500	Tree Swallow	Jesse Peterson	3	53.5		Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	Tree Swallow	Jesse Peterson	1	0.5				
D	3	XROADS15974_20210607_063400	Tree Swallow	Jesse Peterson	0	12.0				
D	5	XROADS15974_20210611_043300	Tree Swallow	Jesse Peterson	7	40.0				
D	6	XROADS15974_20210613_053300	Tree Swallow	Jesse Peterson	3	26.0				
D	8	XROADS15974_20210617_073300	Tree Swallow	Jesse Peterson	4	39.0				
D	15	XROADS15974_20210701_063700	Tree Swallow	Jesse Peterson	0	2.0				corrected filename from ..600 to ..700
D	3	XROADS15974_20210607_063400	Warbling Vireo	Jesse Peterson	3	20.0	better at 7:11.0	Nathaniel Reinartz	confirmed	
D	4	XROADS15974_20210609_073300	Warbling Vireo	Jesse Peterson	0	7.0				
D	5	XROADS15974_20210611_043300	Warbling Vireo	Jesse Peterson	6	17.0				
D	8	XROADS15974_20210617_073300	Warbling Vireo	Jesse Peterson	1	21.0				
D	15	XROADS15974_20210701_063700	Warbling Vireo	Jesse Peterson	0	51.0				corrected filename from ..600 to ..700
D	9	XROADS15974_20210619_043300	Wood Duck	Jesse Peterson	6	26.0		Nathaniel Reinartz	confirmed	
D	11	XROADS15974_20210624_063400	Wood Duck	Jesse Peterson	3	39.5				
D	3	XROADS15974_20210607_063400	Yellow Warbler	Jesse Peterson	2	14.5		Nathaniel Reinartz	confirmed	
D	4	XROADS15974_20210609_073300	Yellow Warbler	Jesse Peterson	0	1.0				
D	6	XROADS15974_20210613_053300	Yellow Warbler	Jesse Peterson	3	51.0				
D	7	XROADS15974_20210615_063300	Yellow Warbler	Jesse Peterson	5	38.0				
D	11	XROADS15974_20210624_063400	Yellow Warbler	Jesse Peterson	5	35.0	Again at 5:50.0			
E	1	XROADS-SM3_0+1_20210601_044000	American Crow	Jesse Peterson	3	27.0		Nathaniel Reinartz	confirmed	
E	2	XROADS-SM3_0+1_20210603_053900	American Crow	Jesse Peterson	0	31.0				
E	3	XROADS-SM3_0+1_20210605_063800	American Crow	Jesse Peterson	2	27.0				
E	4	XROADS-SM3_0+1_20210607_073800	American Crow	Jesse Peterson	0	41.0				
E	5	XROADS-SM3_0+1_20210609_043700	American Crow	Jesse Peterson	0	11.0				
E	9	XROADS-SM3_0+1_20210617_043700	American Crow	Jesse Peterson	2	52.5				
E	10	XROADS-SM3_0+1_20210619_053700	American Crow	Jesse Peterson	1	42.5				
E	12	XROADS-SM3_0+1_20210623_073800	American Crow	Jesse Peterson	2	37.0				
E	2	XROADS-SM3_0+1_20210603_053900	American Goldfinch	Jesse Peterson	0	10.0		Nathaniel Reinartz	confirmed	
E	3	XROADS-SM3_0+1_20210605_063800	American Goldfinch	Jesse Peterson	2	51.0				
E	4	XROADS-SM3_0+1_20210607_073800	American Goldfinch	Jesse Peterson	0	17.0				
E	6	XROADS-SM3_0+1_20210611_053700	American Goldfinch	Jesse Peterson	5	45.0				
E	7	XROADS-SM3_0+1_20210613_063700	American Goldfinch	Jesse Peterson	0	52.5				

E	8	XROADS-SM3_0+1_20210615_073700	American Goldfinch	Jesse Peterson	0	33.0				
E	10	XROADS-SM3_0+1_20210619_053700	American Goldfinch	Jesse Peterson	0	37.0				
E	11	XROADS-SM3_0+1_20210622_063800	American Goldfinch	Jesse Peterson	3	13.0				
E	12	XROADS-SM3_0+1_20210623_073800	American Goldfinch	Jesse Peterson	5	57.0	Better at 8:01.0			
E	13	XROADS-SM3_0+1_20210625_043800	American Goldfinch	Jesse Peterson	8	32.0				
E	15	XROADS-SM3_0+1_20210629_064000	American Goldfinch	Jesse Peterson	0	12.5	Bet at 0:54.5			
E	4	XROADS-SM3_0+1_20210607_073800	American Redstart	Jesse Peterson	1	4.5		Nathaniel Reinartz	confirmed	
E	5	XROADS-SM3_0+1_20210609_043700	American Redstart	Jesse Peterson	0	15.0				
E	1	XROADS-SM3_0+1_20210601_044000	American Robin	Jesse Peterson	0	2.0		Nathaniel Reinartz	confirmed	
E	2	XROADS-SM3_0+1_20210603_053900	American Robin	Jesse Peterson	2	25.0				
E	4	XROADS-SM3_0+1_20210607_073800	American Robin	Jesse Peterson	6	5.0				
E	5	XROADS-SM3_0+1_20210609_043700	American Robin	Jesse Peterson	0	4.0				
E	8	XROADS-SM3_0+1_20210615_073700	American Robin	Jesse Peterson	2	14.0				
E	9	XROADS-SM3_0+1_20210617_043700	American Robin	Jesse Peterson	0	0.0				
E	10	XROADS-SM3_0+1_20210619_053700	American Robin	Jesse Peterson	0	2.0				
E	11	XROADS-SM3_0+1_20210622_063800	American Robin	Jesse Peterson	0	2.5	6/21 was all rain noise; used 6/22 file instead			
E	12	XROADS-SM3_0+1_20210623_073800	American Robin	Jesse Peterson	0	42.5				
E	13	XROADS-SM3_0+1_20210625_043800	American Robin	Jesse Peterson	0	7.0				
E	14	XROADS-SM3_0+1_20210627_053900	American Robin	Jesse Peterson	6	1.0				
E	15	XROADS-SM3_0+1_20210629_064000	American Robin	Jesse Peterson	0	27.5	Song at 2:03.0			
E	4	XROADS-SM3_0+1_20210607_073800	Baltimore Oriole	Jesse Peterson	2	50.0		Nathaniel Reinartz	confirmed	
E	1	XROADS-SM3_0+1_20210601_044000	Black-capped Chickadee	Jesse Peterson	1	43.0		Nathaniel Reinartz	confirmed	
E	4	XROADS-SM3_0+1_20210607_073800	Black-capped Chickadee	Jesse Peterson	4	29.0				
E	5	XROADS-SM3_0+1_20210609_043700	Black-capped Chickadee	Jesse Peterson	1	5.5				
E	6	XROADS-SM3_0+1_20210611_053700	Black-capped Chickadee	Jesse Peterson	5	21.5				
E	9	XROADS-SM3_0+1_20210617_043700	Black-capped Chickadee	Jesse Peterson	0	2.0				
E	10	XROADS-SM3_0+1_20210619_053700	Black-capped Chickadee	Jesse Peterson	7	19.0				
E	13	XROADS-SM3_0+1_20210625_043800	Black-capped Chickadee	Jesse Peterson	0	0.0				
E	14	XROADS-SM3_0+1_20210627_053900	Black-capped Chickadee	Jesse Peterson	0	6.5				
E	5	XROADS-SM3_0+1_20210609_043700	Blue Jay	Jesse Peterson	5	53.0		Nathaniel Reinartz	confirmed	
E	7	XROADS-SM3_0+1_20210613_063700	Blue Jay	Jesse Peterson	9	15.5				
E	9	XROADS-SM3_0+1_20210617_043700	Blue Jay	Jesse Peterson	0	4.0				
E	13	XROADS-SM3_0+1_20210625_043800	Blue Jay	Jesse Peterson	3	18.0				
E	15	XROADS-SM3_0+1_20210629_064000	Blue Jay	Jesse Peterson	7	18.5				
E	10	XROADS-SM3_0+1_20210619_053700	Blue-winged Warbler	Jesse Peterson	7	22.5		Nathaniel Reinartz	confirmed	
E	12	XROADS-SM3_0+1_20210623_073800	Cedar Waxwing	Jesse Peterson	3	22.0		Nathaniel Reinartz	confirmed	
E	6	XROADS-SM3_0+1_20210611_053700	Chipping Sparrow	Jesse Peterson	8	12.0		Nathaniel Reinartz	confirmed	
E	11	XROADS-SM3_0+1_20210622_063800	Common Grackle	Jesse Peterson	5	2.5		Nathaniel Reinartz	confirmed	
E	2	XROADS-SM3_0+1_20210603_053900	Common Yellowthroat	Jesse Peterson	0	3.0		Nathaniel Reinartz	confirmed	
E	4	XROADS-SM3_0+1_20210607_073800	Common Yellowthroat	Jesse Peterson	0	2.0				
E	6	XROADS-SM3_0+1_20210611_053700	Common Yellowthroat	Jesse Peterson	0	15.0		Gary Casper	confirmed	
E	11	XROADS-SM3_0+1_20210622_063800	Downy Woodpecker	Jesse Peterson	6	38.5	Chip; more at 7:56.0	Nathaniel Reinartz	confirmed	
E	4	XROADS-SM3_0+1_20210607_073800	Eastern Wood-Pewee	Jesse Peterson	2	52.0		Nathaniel Reinartz	confirmed	
E	5	XROADS-SM3_0+1_20210609_043700	Eastern Wood-Pewee	Jesse Peterson	6	18.5				
E	6	XROADS-SM3_0+1_20210611_053700	Eastern Wood-Pewee	Jesse Peterson	0	4.0				
E	7	XROADS-SM3_0+1_20210613_063700	Eastern Wood-Pewee	Jesse Peterson	0	7.0				
E	8	XROADS-SM3_0+1_20210615_073700	Eastern Wood-Pewee	Jesse Peterson	1	6.0				
E	12	XROADS-SM3_0+1_20210623_073800	Eastern Wood-Pewee	Jesse Peterson	8	40.5				
E	10	XROADS-SM3_0+1_20210619_053700	European Starling	Jesse Peterson	9	53.0	Not certain	Nathaniel Reinartz	confirmed	
E	6	XROADS-SM3_0+1_20210611_053700	Gray Catbird	Jesse Peterson	0	45.0	Continues beyond 1:15	Nathaniel Reinartz	confirmed	
E	2	XROADS-SM3_0+1_20210603_053900	Great Crested Flycatcher	Jesse Peterson	0	12.0		Nathaniel Reinartz	confirmed	
E	7	XROADS-SM3_0+1_20210613_063700	Great Crested Flycatcher	Jesse Peterson	2	45.0	Better at 4:18.0			
E	12	XROADS-SM3_0+1_20210623_073800	Great Crested Flycatcher	Jesse Peterson	1	21.0				
E	13	XROADS-SM3_0+1_20210625_043800	Great Crested Flycatcher	Jesse Peterson	8	37.0				
E	6	XROADS-SM3_0+1_20210611_053700	Green Heron	Jesse Peterson	3	50.0	Squawk	Nathaniel Reinartz	confirmed	
E	2	XROADS-SM3_0+1_20210603_053900	House Wren	Jesse Peterson	0	30.0		Nathaniel Reinartz	confirmed	
E	4	XROADS-SM3_0+1_20210607_073800	House Wren	Jesse Peterson	4	7.0				
E	5	XROADS-SM3_0+1_20210609_043700	House Wren	Jesse Peterson	0	2.0				
E	7	XROADS-SM3_0+1_20210613_063700	House Wren	Jesse Peterson	0	57.5				
E	8	XROADS-SM3_0+1_20210615_073700	House Wren	Jesse Peterson	7	26.0				
E	10	XROADS-SM3_0+1_20210619_053700	House Wren	Jesse Peterson	1	37.0				
E	4	XROADS-SM3_0+1_20210607_073800	Indigo Bunting	Jesse Peterson	0	13.5		Nathaniel Reinartz	confirmed	
E	5	XROADS-SM3_0+1_20210609_043700	Indigo Bunting	Jesse Peterson	0	41.0				
E	6	XROADS-SM3_0+1_20210611_053700	Indigo Bunting	Jesse Peterson	0	10.0				
E	8	XROADS-SM3_0+1_20210615_073700	Indigo Bunting	Jesse Peterson	0	49.0	Better at 1:22.0			
E	9	XROADS-SM3_0+1_20210617_043700	Indigo Bunting	Jesse Peterson	1	53.0				
E	10	XROADS-SM3_0+1_20210619_053700	Indigo Bunting	Jesse Peterson	0	33.5				

E	11	XROADS-SM3_0+1_20210622_063800	Indigo Bunting	Jesse Peterson	0	26.0			
E	13	XROADS-SM3_0+1_20210625_043800	Indigo Bunting	Jesse Peterson	0	4.0			
E	14	XROADS-SM3_0+1_20210627_053900	Indigo Bunting	Jesse Peterson	0	3.0	Deafening tree frogs and spring peepers throughout.		
E	14	XROADS-SM3_0+1_20210627_053900	Mourning Dove	Jesse Peterson	1	30.0		Nathaniel Reinartz	confirmed
E	1	XROADS-SM3_0+1_20210601_044000	Northern Cardinal	Jesse Peterson	0	0.0		Nathaniel Reinartz	confirmed
E	2	XROADS-SM3_0+1_20210603_053900	Northern Cardinal	Jesse Peterson	3	47.5	Chip; song at 5:22.0		
E	3	XROADS-SM3_0+1_20210605_063800	Northern Cardinal	Jesse Peterson	0	4.0			
E	5	XROADS-SM3_0+1_20210609_043700	Northern Cardinal	Jesse Peterson	0	0.5			
E	6	XROADS-SM3_0+1_20210611_053700	Northern Cardinal	Jesse Peterson	0	19.0			
E	7	XROADS-SM3_0+1_20210613_063700	Northern Cardinal	Jesse Peterson	2	43.0			
E	9	XROADS-SM3_0+1_20210617_043700	Northern Cardinal	Jesse Peterson	0	5.0			
E	10	XROADS-SM3_0+1_20210619_053700	Northern Cardinal	Jesse Peterson	4	45.0			
E	11	XROADS-SM3_0+1_20210622_063800	Northern Cardinal	Jesse Peterson	2	0.0			
E	12	XROADS-SM3_0+1_20210623_073800	Northern Cardinal	Jesse Peterson	1	5.0			
E	13	XROADS-SM3_0+1_20210625_043800	Northern Cardinal	Jesse Peterson	0	1.5			
E	8	XROADS-SM3_0+1_20210615_073700	Red-bellied Woodpecker	Jesse Peterson	6	59.0		Nathaniel Reinartz	confirmed
E	9	XROADS-SM3_0+1_20210617_043700	Red-bellied Woodpecker	Jesse Peterson	2	56.0			
E	2	XROADS-SM3_0+1_20210603_053900	Red-breasted Nuthatch	Jesse Peterson	2	55.0		Nathaniel Reinartz	confirmed
E	6	XROADS-SM3_0+1_20210611_053700	Red-breasted Nuthatch	Jesse Peterson	0	33.5			
E	9	XROADS-SM3_0+1_20210617_043700	Red-breasted Nuthatch	Jesse Peterson	0	56.0			
E	10	XROADS-SM3_0+1_20210619_053700	Red-breasted Nuthatch	Jesse Peterson	6	49.5			
E	2	XROADS-SM3_0+1_20210603_053900	Red-eyed Vireo	Jesse Peterson	3	9.5	Better at 4:17.0	Nathaniel Reinartz	confirmed
E	4	XROADS-SM3_0+1_20210607_073800	Red-eyed Vireo	Jesse Peterson	0	0.5	Better at 4:48.0		
E	5	XROADS-SM3_0+1_20210609_043700	Red-eyed Vireo	Jesse Peterson	1	44.0			
E	6	XROADS-SM3_0+1_20210611_053700	Red-eyed Vireo	Jesse Peterson	1	36.5			
E	7	XROADS-SM3_0+1_20210613_063700	Red-eyed Vireo	Jesse Peterson	2	35.0			
E	8	XROADS-SM3_0+1_20210615_073700	Red-eyed Vireo	Jesse Peterson	2	21.5			
E	9	XROADS-SM3_0+1_20210617_043700	Red-eyed Vireo	Jesse Peterson	1	20.0	Better at 2:05.0		
E	10	XROADS-SM3_0+1_20210619_053700	Red-eyed Vireo	Jesse Peterson	0	3.0			
E	14	XROADS-SM3_0+1_20210627_053900	Red-eyed Vireo	Jesse Peterson	4	54.0			
E	15	XROADS-SM3_0+1_20210629_064000	Red-eyed Vireo	Jesse Peterson	6	59.0			
E	1	XROADS-SM3_0+1_20210601_044000	Red-winged Blackbird	Jesse Peterson	1	10.0		Nathaniel Reinartz	confirmed
E	2	XROADS-SM3_0+1_20210603_053900	Red-winged Blackbird	Jesse Peterson	0	24.0			
E	4	XROADS-SM3_0+1_20210607_073800	Red-winged Blackbird	Jesse Peterson	0	40.5			
E	6	XROADS-SM3_0+1_20210611_053700	Red-winged Blackbird	Jesse Peterson	0	0.0			
E	7	XROADS-SM3_0+1_20210613_063700	Red-winged Blackbird	Jesse Peterson	0	5.5			
E	8	XROADS-SM3_0+1_20210615_073700	Red-winged Blackbird	Jesse Peterson	1	25.0			
E	10	XROADS-SM3_0+1_20210619_053700	Red-winged Blackbird	Jesse Peterson	9	30.0			
E	11	XROADS-SM3_0+1_20210622_063800	Red-winged Blackbird	Jesse Peterson	6	52.0			
E	12	XROADS-SM3_0+1_20210623_073800	Red-winged Blackbird	Jesse Peterson	1	36.0			
E	14	XROADS-SM3_0+1_20210627_053900	Red-winged Blackbird	Jesse Peterson	0	53.0			
E	15	XROADS-SM3_0+1_20210629_064000	Red-winged Blackbird	Jesse Peterson	5	30.0			
E	1	XROADS-SM3_0+1_20210601_044000	Song Sparrow	Jesse Peterson	0	7.5		Nathaniel Reinartz	confirmed
E	4	XROADS-SM3_0+1_20210607_073800	Song Sparrow	Jesse Peterson	0	32.0			
E	8	XROADS-SM3_0+1_20210615_073700	Song Sparrow	Jesse Peterson	2	7.0			
E	11	XROADS-SM3_0+1_20210622_063800	Song Sparrow	Jesse Peterson	7	44.0			
E	12	XROADS-SM3_0+1_20210623_073800	Song Sparrow	Jesse Peterson	4	17.0			
E	15	XROADS-SM3_0+1_20210629_064000	Song Sparrow	Jesse Peterson	0	5.5			
E	1	XROADS-SM3_0+1_20210601_044000	Tree Swallow	Jesse Peterson	4	9.0		Nathaniel Reinartz	confirmed
E	5	XROADS-SM3_0+1_20210609_043700	Warbling Vireo	Jesse Peterson	6	27.0		Nathaniel Reinartz	confirmed
E	8	XROADS-SM3_0+1_20210615_073700	Warbling Vireo	Jesse Peterson	3	8.0			
E	5	XROADS-SM3_0+1_20210609_043700	Wood Thrush	Jesse Peterson	7	34.0		Nathaniel Reinartz	confirmed
E	6	XROADS-SM3_0+1_20210611_053700	Wood Thrush	Jesse Peterson	0	2.0			
E	9	XROADS-SM3_0+1_20210617_043700	Wood Thrush	Jesse Peterson	8	22.0			
E	13	XROADS-SM3_0+1_20210625_043800	Wood Thrush	Jesse Peterson	0	43.0			
E	1	XROADS-SM3_0+1_20210601_044000	Yellow-rumped Warbler	Jesse Peterson	0	3.5		Nathaniel Reinartz	confirmed
E	9	XROADS-SM3_0+1_20210617_043700	Yellow-rumped Warbler	Jesse Peterson	0	5.5			
E	10	XROADS-SM3_0+1_20210619_053700	Yellow-rumped Warbler	Jesse Peterson	0	1.0			
E	13	XROADS-SM3_0+1_20210625_043800	Yellow-rumped Warbler	Jesse Peterson	0	49.0			
E	15	XROADS-SM3_0+1_20210629_064000	Yellow-rumped Warbler	Jesse Peterson	0	5.0			

Site	Sample	File Name	Date	Species	Observer 1	First Min	First Sec	Notes (e.g. background noise)	Observer 2	Observer 2 results (Confirmed or not, notes)	Observer 3 notes (if needed)
A	1	XROADS15507_20210601_043600	6/1/21	American Crow	Jesse Peterson	1	21.0				
A	2	XROADS15507_20210603_053500	6/3/21	American Crow	Jesse Peterson	0	5.0				
A	4	XROADS15507_20210607_073400	6/7/21	American Crow	Jesse Peterson	3	18.0				
A	6	XROADS15507_20210611_053300	6/11/21	American Crow	Jesse Peterson	9	56.0				
A	9	XROADS15507_20210617_043300	6/17/21	American Crow	Jesse Peterson	6	20.0				
A	10	XROADS15507_20210619_053300	6/19/21	American Crow	Jesse Peterson	0	3.5		Gary Casper	confirmed	
A	2	XROADS15507_20210603_053500	6/3/21	American Goldfinch	Jesse Peterson	1	14.5		Nathaniel Reinartz	confirmed	
A	3	XROADS15507_20210605_063500	6/5/21	American Goldfinch	Jesse Peterson	7	20.5				
A	4	XROADS15507_20210607_073400	6/7/21	American Goldfinch	Jesse Peterson	0	42.5				
A	6	XROADS15507_20210611_053300	6/11/21	American Goldfinch	Jesse Peterson	0	0.0				
A	7	XROADS15507_20210613_063300	6/13/21	American Goldfinch	Jesse Peterson	1	19.5				
A	8	XROADS15507_20210615_073300	6/15/21	American Goldfinch	Jesse Peterson	0	45.5				
A	10	XROADS15507_20210619_053300	6/19/21	American Goldfinch	Jesse Peterson	6	39.0				
A	11	XROADS15507_20210621_063300	6/21/21	American Goldfinch	Jesse Peterson	0	21.0				
A	12	XROADS15507_20210623_073400	6/23/21	American Goldfinch	Jesse Peterson	1	22.0				
A	15	XROADS15507_20210630_063700	6/30/21	American Goldfinch	Jesse Peterson	0	11.0				
A	3	XROADS15507_20210605_063500	6/5/21	American Redstart	Jesse Peterson	1	7.0		Gary Casper	confirmed	
A	4	XROADS15507_20210607_073400	6/7/21	American Redstart	Jesse Peterson	0	12.5		Nathaniel Reinartz	confirmed	
A	6	XROADS15507_20210611_053300	6/11/21	American Redstart	Jesse Peterson	5	26.0	Better at 8:31.5			
A	15	XROADS15507_20210630_063700	6/30/21	American Redstart	Jesse Peterson	0	40.5				
A	4	XROADS15507_20210607_073400	6/7/21	American Robin	Jesse Peterson	2	56.0	Better at 3:34.0	Nathaniel Reinartz	confirmed	
A	5	XROADS15507_20210609_040000	6/9/21	American Robin	Jesse Peterson	1	19.0	20210609_043300 file would not work, 20210609_0533 looked very "noisy," so used 20210609_040000			
A	7	XROADS15507_20210613_063300	6/13/21	American Robin	Jesse Peterson	3	8.5				
A	13	XROADS15507_20210625_043400	6/25/21	American Robin	Jesse Peterson	1	21.0				
A	15	XROADS15507_20210630_063700	6/30/21	American Robin	Jesse Peterson	0	4.0				
A	1	XROADS15507_20210601_043600	6/1/21	Baltimore Oriole	Jesse Peterson	0	2.0		Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	6/3/21	Baltimore Oriole	Jesse Peterson	8	54.0				
A	3	XROADS15507_20210605_063500	6/5/21	Baltimore Oriole	Jesse Peterson	0	3.0				
A	4	XROADS15507_20210607_073400	6/7/21	Baltimore Oriole	Jesse Peterson	1	52.5				
A	6	XROADS15507_20210611_053300	6/11/21	Baltimore Oriole	Jesse Peterson	0	33.0				
A	7	XROADS15507_20210613_063300	6/13/21	Baltimore Oriole	Jesse Peterson	4	27.0				
A	2	XROADS15507_20210603_053500	6/3/21	Black-and-white Warbler	Jesse Peterson	0	5.0		Nathaniel Reinartz	confirmed	
A	1	XROADS15507_20210601_043600	6/1/21	Black-capped Chickadee	Jesse Peterson	3	19.5	Better at 3:48.5	Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	6/3/21	Black-capped Chickadee	Jesse Peterson	1	39.0				
A	6	XROADS15507_20210611_053300	6/11/21	Black-capped Chickadee	Jesse Peterson	0	14.0				
A	9	XROADS15507_20210617_043300	6/17/21	Black-capped Chickadee	Jesse Peterson	0	2.5				
A	10	XROADS15507_20210619_053300	6/19/21	Black-capped Chickadee	Jesse Peterson	1	52.5				
A	13	XROADS15507_20210625_043400	6/25/21	Black-capped Chickadee	Jesse Peterson	6	7.5		Gary Casper	confirmed	
A	2	XROADS15507_20210603_053500	6/3/21	Black-throated Green Warbler	Jesse Peterson	3	12.0		Nathaniel Reinartz	confirmed	
A	6	XROADS15507_20210611_053300	6/11/21	Blue Jay	Jesse Peterson	2	38.5	Better at 2:47.0	Nathaniel Reinartz	confirmed	
A	8	XROADS15507_20210615_073300	6/15/21	Blue Jay	Jesse Peterson	1	7.5	Better at 1:19.0			
A	9	XROADS15507_20210617_043300	6/17/21	Blue Jay	Jesse Peterson	2	58.5				
A	13	XROADS15507_20210625_043400	6/25/21	Blue Jay	Jesse Peterson	6	55.0				
A	2	XROADS15507_20210603_053500	6/3/21	Blue-winged Warbler	Jesse Peterson	3	1.5		Nathaniel Reinartz	confirmed	
A	7	XROADS15507_20210613_063300	6/13/21	Blue-winged Warbler	Jesse Peterson	1	28.5	Better at 6:18.0			
A	9	XROADS15507_20210617_043300	6/17/21	Blue-winged Warbler	Jesse Peterson	1	6.0				
A	10	XROADS15507_20210619_053300	6/19/21	Blue-winged Warbler	Jesse Peterson	5	45.5				
A	15	XROADS15507_20210630_063700	6/30/21	Blue-winged Warbler	Jesse Peterson	3	14.0				
A	3	XROADS15507_20210605_063500	6/5/21	Brown-headed Cowbird	Jesse Peterson	0	8.5		Nathaniel Reinartz	confirmed	
A	4	XROADS15507_20210607_073400	6/7/21	Brown-headed Cowbird	Jesse Peterson	2	48.0				
A	8	XROADS15507_20210615_073300	6/15/21	Brown-headed Cowbird	Jesse Peterson	2	52.5				
A	15	XROADS15507_20210630_063700	6/30/21	Brown-headed Cowbird	Jesse Peterson	6	27.0				
A	3	XROADS15507_20210605_063500	6/5/21	Cedar Waxwing	Jesse Peterson	4	49.0		Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	6/3/21	Chipping Sparrow	Jesse Peterson	4	5.0		Nathaniel Reinartz	confirmed	
A	8	XROADS15507_20210615_073300	6/15/21	Chipping Sparrow	Jesse Peterson	6	42.0	Not certain; Call too long?	Nathaniel Reinartz	confirmed	
A	1	XROADS15507_20210601_043600	6/1/21	Clay-colored Sparrow	Jesse Peterson	0	1.0		Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	6/3/21	Common Grackle	Jesse Peterson	0	17.5		Nathaniel Reinartz	confirmed	
A	1	XROADS15507_20210601_043600	6/1/21	Common Yellowthroat	Jesse Peterson	0	0.0	Best at 7:37.0	Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	6/3/21	Common Yellowthroat	Jesse Peterson	0	3.0				
A	4	XROADS15507_20210607_073400	6/7/21	Common Yellowthroat	Jesse Peterson	4	50.0				
A	7	XROADS15507_20210613_063300	6/13/21	Common Yellowthroat	Jesse Peterson	0	57.0				
A	8	XROADS15507_20210615_073300	6/15/21	Common Yellowthroat	Jesse Peterson	0	4.0				
A	9	XROADS15507_20210617_043300	6/17/21	Common Yellowthroat	Jesse Peterson	0	4.0				
A	12	XROADS15507_20210623_073400	6/23/21	Common Yellowthroat	Jesse Peterson	8	22.0				
A	13	XROADS15507_20210625_043400	6/25/21	Common Yellowthroat	Jesse Peterson	0	0.0				
A	15	XROADS15507_20210630_063700	6/30/21	Common Yellowthroat	Jesse Peterson	0	1.0		Gary Casper	confirmed	
A	2	XROADS15507_20210603_053500	6/3/21	Eastern Kingbird	Jesse Peterson	0	8.5	Not certain; again at 0:10.5	Nathaniel Reinartz	confirmed	
A	3	XROADS15507_20210605_063500	6/5/21	Eastern Towhee	Jesse Peterson	5	7.5		Nathaniel Reinartz	confirmed	

A	4	XROADS15507_20210607_073400	6/7/21	Eastern Towhee	Jesse Peterson	9	54.0				
A	2	XROADS15507_20210603_053500	6/3/21	Field Sparrow	Jesse Peterson	9	17.5			Nathaniel Reinartz	confirmed
A	3	XROADS15507_20210605_063500	6/5/21	Field Sparrow	Jesse Peterson	5	2.0				
A	4	XROADS15507_20210607_073400	6/7/21	Field Sparrow	Jesse Peterson	0	38.5				
A	5	XROADS15507_20210609_040000	6/9/21	Field Sparrow	Jesse Peterson	3	32.0				
A	6	XROADS15507_20210611_053300	6/11/21	Field Sparrow	Jesse Peterson	3	36.5				
A	7	XROADS15507_20210613_063300	6/13/21	Field Sparrow	Jesse Peterson	1	14.0				
A	8	XROADS15507_20210615_073300	6/15/21	Field Sparrow	Jesse Peterson	0	54.0				
A	9	XROADS15507_20210617_043300	6/17/21	Field Sparrow	Jesse Peterson	1	23.5				
A	13	XROADS15507_20210625_043400	6/25/21	Field Sparrow	Jesse Peterson	0	1.5			Gary Casper	confirmed
A	1	XROADS15507_20210601_043600	6/1/21	Gray Catbird	Jesse Peterson	0	35.0			Nathaniel Reinartz	confirmed
A	12	XROADS15507_20210623_073400	6/23/21	Gray Catbird	Jesse Peterson	0	2.0				
A	13	XROADS15507_20210625_043400	6/25/21	Gray Catbird	Jesse Peterson	9	51.0				
A	15	XROADS15507_20210630_063700	6/30/21	Gray Catbird	Jesse Peterson	0	5.0				
A	1	XROADS15507_20210601_043600	6/1/21	Great Crested Flycatcher	Jesse Peterson	9	24.5	Uncertain; Also at 9:28.0		Nathaniel Reinartz	confirmed
A	4	XROADS15507_20210607_073400	6/7/21	Great Crested Flycatcher	Jesse Peterson	7	47.5				
A	6	XROADS15507_20210611_053300	6/11/21	Great Crested Flycatcher	Jesse Peterson	8	20.0				
A	15	XROADS15507_20210630_063700	6/30/21	Great Crested Flycatcher	Jesse Peterson	4	36.5			Gary Casper	confirmed
A	1	XROADS15507_20210601_043600	6/1/21	House Wren	Jesse Peterson	0	23.0			Nathaniel Reinartz	confirmed
A	2	XROADS15507_20210603_053500	6/3/21	House Wren	Jesse Peterson	3	13.0				
A	3	XROADS15507_20210605_063500	6/5/21	House Wren	Jesse Peterson	0	5.0				
A	4	XROADS15507_20210607_073400	6/7/21	House Wren	Jesse Peterson	0	4.0				
A	6	XROADS15507_20210611_053300	6/11/21	House Wren	Jesse Peterson	3	7.5				
A	7	XROADS15507_20210613_063300	6/13/21	House Wren	Jesse Peterson	0	6.0			Gary Casper	confirmed
A	4	XROADS15507_20210607_073400	6/7/21	Indigo Bunting	Jesse Peterson	1	59.0			Nathaniel Reinartz	confirmed
A	6	XROADS15507_20210611_053300	6/11/21	Indigo Bunting	Jesse Peterson	6	53.0				
A	7	XROADS15507_20210613_063300	6/13/21	Indigo Bunting	Jesse Peterson	0	7.5				
A	8	XROADS15507_20210615_073300	6/15/21	Indigo Bunting	Jesse Peterson	0	0.0				
A	10	XROADS15507_20210619_053300	6/19/21	Indigo Bunting	Jesse Peterson	4	23.0				
A	12	XROADS15507_20210623_073400	6/23/21	Indigo Bunting	Jesse Peterson	6	47.0				
A	13	XROADS15507_20210625_043400	6/25/21	Indigo Bunting	Jesse Peterson	4	25.0				
A	5	XROADS15507_20210609_040000	6/9/21	Killdeer	Jesse Peterson	2	14.0			Nathaniel Reinartz	confirmed
A	15	XROADS15507_20210630_063700	6/30/21	Killdeer	Jesse Peterson	7	40.5				
A	4	XROADS15507_20210607_073400	6/7/21	Mallard	Jesse Peterson	3	11.0			Nathaniel Reinartz	confirmed
A	10	XROADS15507_20210619_053300	6/19/21	Mourning Dove	Jesse Peterson	0	4.5			Nathaniel Reinartz	confirmed
A	1	XROADS15507_20210601_043600	6/1/21	Northern Cardinal	Jesse Peterson	0	3.5			Nathaniel Reinartz	confirmed
A	2	XROADS15507_20210603_053500	6/3/21	Northern Cardinal	Jesse Peterson	6	5.0	Chip note; Song at 8:08.0			
A	3	XROADS15507_20210605_063500	6/5/21	Northern Cardinal	Jesse Peterson	3	21.0				
A	4	XROADS15507_20210607_073400	6/7/21	Northern Cardinal	Jesse Peterson	0	1.0	Chip note; Song at 1:02.0			
A	6	XROADS15507_20210611_053300	6/11/21	Northern Cardinal	Jesse Peterson	0	0.0				
A	7	XROADS15507_20210613_063300	6/13/21	Northern Cardinal	Jesse Peterson	9	7.0				
A	8	XROADS15507_20210615_073300	6/15/21	Northern Cardinal	Jesse Peterson	6	52.0				
A	9	XROADS15507_20210617_043300	6/17/21	Northern Cardinal	Jesse Peterson	0	10.0				
A	10	XROADS15507_20210619_053300	6/19/21	Northern Cardinal	Jesse Peterson	0	0.5				
A	12	XROADS15507_20210623_073400	6/23/21	Northern Cardinal	Jesse Peterson	5	32.5				
A	13	XROADS15507_20210625_043400	6/25/21	Northern Cardinal	Jesse Peterson	0	0.0				
A	14	XROADS15507_20210627_053500	6/27/21	Northern Cardinal	Jesse Peterson	8	32.0	Chip			
A	15	XROADS15507_20210630_063700	6/30/21	Northern Cardinal	Jesse Peterson	0	48.5				
A	15	XROADS15507_20210630_063700	6/30/21	Northern Flicker	Jesse Peterson	4	46.5	Common Flicker		Nathaniel Reinartz	confirmed--should be Northern Flicker
A	8	XROADS15507_20210615_073300	6/15/21	Ovenbird	Jesse Peterson	4	24.0	Better at 4:58.0		Nathaniel Reinartz	confirmed
A	2	XROADS15507_20210603_053500	6/3/21	Red-eyed Vireo	Jesse Peterson	0	8.0			Nathaniel Reinartz	confirmed
A	3	XROADS15507_20210605_063500	6/5/21	Red-eyed Vireo	Jesse Peterson	3	23.0				
A	4	XROADS15507_20210607_073400	6/7/21	Red-eyed Vireo	Jesse Peterson	0	0.0				
A	6	XROADS15507_20210611_053300	6/11/21	Red-eyed Vireo	Jesse Peterson	0	50.0				
A	7	XROADS15507_20210613_063300	6/13/21	Red-eyed Vireo	Jesse Peterson	0	4.0				
A	8	XROADS15507_20210615_073300	6/15/21	Red-eyed Vireo	Jesse Peterson	0	48.0	Better at 3:54.0			
A	9	XROADS15507_20210617_043300	6/17/21	Red-eyed Vireo	Jesse Peterson	0	0.0				
A	10	XROADS15507_20210619_053300	6/19/21	Red-eyed Vireo	Jesse Peterson	0	1.0				
A	11	XROADS15507_20210621_063300	6/21/21	Red-eyed Vireo	Jesse Peterson	2	50.0				
A	13	XROADS15507_20210625_043400	6/25/21	Red-eyed Vireo	Jesse Peterson	8	15.5				
A	14	XROADS15507_20210627_053500	6/27/21	Red-eyed Vireo	Jesse Peterson	0	6.0				
A	15	XROADS15507_20210630_063700	6/30/21	Red-eyed Vireo	Jesse Peterson	4	29.0	Better at 8:20.0			
A	3	XROADS15507_20210605_063500	6/5/21	Red-winged Blackbird	Jesse Peterson	7	16.0			Nathaniel Reinartz	confirmed
A	7	XROADS15507_20210613_063300	6/13/21	Red-winged Blackbird	Jesse Peterson	2	16.5				
A	8	XROADS15507_20210615_073300	6/15/21	Red-winged Blackbird	Jesse Peterson	2	26.0				
A	10	XROADS15507_20210619_053300	6/19/21	Red-winged Blackbird	Jesse Peterson	2	54.0				
A	11	XROADS15507_20210621_063300	6/21/21	Red-winged Blackbird	Jesse Peterson	9	10.0				
A	12	XROADS15507_20210623_073400	6/23/21	Red-winged Blackbird	Jesse Peterson	0	59.0				
A	13	XROADS15507_20210625_043400	6/25/21	Red-winged Blackbird	Jesse Peterson	3	57.0				
A	1	XROADS15507_20210601_043600	6/1/21	Rose-breasted Grosbeak	Jesse Peterson	0	15.0			Nathaniel Reinartz	confirmed
A	7	XROADS15507_20210613_063300	6/13/21	Scarlet Tanager	Jesse Peterson	0	50.0			Nathaniel Reinartz	confirmed

A	6	XROADS15507_20210611_053300	6/11/21	Song Sparrow	Jesse Peterson	2	21.0		Nathaniel Reinartz	confirmed	
A	10	XROADS15507_20210619_053300	6/19/21	Song Sparrow	Jesse Peterson	6	48.0	Distant			
A	15	XROADS15507_20210630_063700	6/30/21	Song Sparrow	Jesse Peterson	2	5.0	Better at 7:21.0			
A	1	XROADS15507_20210601_043600	6/1/21	Tree Swallow	Jesse Peterson	8	17.0		Nathaniel Reinartz	confirmed	
A	2	XROADS15507_20210603_053500	6/3/21	Tree Swallow	Jesse Peterson	5	2.0				
A	1	XROADS15507_20210601_043600	6/1/21	Warbling Vireo	Jesse Peterson	0	57.0		Nathaniel Reinartz	confirmed	
A	3	XROADS15507_20210605_063500	6/5/21	Yellow Warbler	Jesse Peterson	3	19.0		Nathaniel Reinartz	confirmed	
A	7	XROADS15507_20210613_063300	6/13/21	Yellow Warbler	Jesse Peterson	2	14.0				
B	1	XROADS15646_20210602_053600	6/2/21	American Crow	Jesse Peterson	0	0.0		Nathaniel Reinartz	confirmed	
B	2	XROADS15646_20210603_053500	6/3/21	American Crow	Jesse Peterson	1	49.0				
B	5	XROADS15646_20210609_043300	6/9/21	American Crow	Jesse Peterson	2	38.0				
B	6	XROADS15646_20210611_053300	6/11/21	American Crow	Jesse Peterson	0	13.0				
B	8	XROADS15646_20210615_073300	6/15/21	American Crow	Jesse Peterson	0	15.0				
B	9	XROADS15646_20210617_043300	6/17/21	American Crow	Jesse Peterson	6	32.0				
B	10	XROADS15646_20210619_053300	6/19/21	American Crow	Jesse Peterson	0	23.0				
B	14	XROADS15646_20210627_053500	6/27/21	American Crow	Jesse Peterson	6	47.0				
B	4	XROADS15646_20210607_073400	6/7/21	American Goldfinch	Jesse Peterson	1	58.0		Nathaniel Reinartz	confirmed	
B	15	XROADS15646_20210629_063600	6/29/21	American Goldfinch	Jesse Peterson	0	43.5				
B	5	XROADS15646_20210609_043300	6/9/21	American Robin	Jesse Peterson	0	44.0		Nathaniel Reinartz	confirmed	
B	7	XROADS15646_20210613_063300	6/13/21	American Robin	Jesse Peterson	0	22.0		Nathaniel Reinartz	confirmed	
B	9	XROADS15646_20210617_043300	6/17/21	American Robin	Jesse Peterson	0	18.0				
B	10	XROADS15646_20210619_053300	6/19/21	American Robin	Jesse Peterson	0	0.0				
B	11	XROADS15646_20210622_063400	6/22/21	American Robin	Jesse Peterson	0	0.0	6/21 was all rain noise. Used 6/22 instead			
B	13	XROADS15646_20210626_043500	6/26/21	American Robin	Jesse Peterson	0	0.0	6/25 file would not work. Used 6/26 instead			
B	15	XROADS15646_20210629_063600	6/29/21	American Robin	Jesse Peterson	6	30.0				
B	1	XROADS15646_20210602_053600	6/2/21	Baltimore Oriole	Jesse Peterson	0	48.0		Nathaniel Reinartz	confirmed	
B	4	XROADS15646_20210607_073400	6/7/21	Baltimore Oriole	Jesse Peterson	0	12.0				
B	7	XROADS15646_20210613_063300	6/13/21	Baltimore Oriole	Jesse Peterson	7	48.5				
B	1	XROADS15646_20210602_053600	6/2/21	Black-capped Chickadee	Jesse Peterson	1	55.0		Nathaniel Reinartz	confirmed	
B	4	XROADS15646_20210607_073400	6/7/21	Black-capped Chickadee	Jesse Peterson	1	55.0				
B	8	XROADS15646_20210615_073300	6/15/21	Black-capped Chickadee	Jesse Peterson	1	7.0				
B	9	XROADS15646_20210617_043300	6/17/21	Black-capped Chickadee	Jesse Peterson	0	30.0				
B	10	XROADS15646_20210619_053300	6/19/21	Black-capped Chickadee	Jesse Peterson	0	42.5				
B	11	XROADS15646_20210622_063400	6/22/21	Black-capped Chickadee	Jesse Peterson	2	4.0				
B	12	XROADS15646_20210624_073400	6/24/21	Black-capped Chickadee	Jesse Peterson	3	45.5				
B	13	XROADS15646_20210626_043500	6/26/21	Black-capped Chickadee	Jesse Peterson	6	24.0				
B	15	XROADS15646_20210629_063600	6/29/21	Black-capped Chickadee	Jesse Peterson	0	2.0				
B	1	XROADS15646_20210602_053600	6/2/21	Blue Jay	Jesse Peterson	2	2.0	Rain between 4:30 and 8:00	Nathaniel Reinartz	confirmed	
B	2	XROADS15646_20210603_053500	6/3/21	Blue Jay	Jesse Peterson	3	41.0				
B	4	XROADS15646_20210607_073400	6/7/21	Blue Jay	Jesse Peterson	3	3.0				
B	7	XROADS15646_20210613_063300	6/13/21	Blue Jay	Jesse Peterson	2	40.5				
B	12	XROADS15646_20210624_073400	6/24/21	Blue Jay	Jesse Peterson	8	2.5				
B	7	XROADS15646_20210613_063300	6/13/21	Blue-gray Gnatcatcher	Jesse Peterson	0	36.5		Nathaniel Reinartz	confirmed	
B	10	XROADS15646_20210619_053300	6/19/21	Blue-gray Gnatcatcher	Jesse Peterson	0	9.5	Better at 2:39.0			
B	11	XROADS15646_20210622_063400	6/22/21	Blue-gray Gnatcatcher	Jesse Peterson	3	27.0				
B	4	XROADS15646_20210607_073400	6/7/21	Cedar Waxwing	Jesse Peterson	5	41.0		Nathaniel Reinartz	confirmed	
B	11	XROADS15646_20210622_063400	6/22/21	Chipping Sparrow	Jesse Peterson	0	14.0		Nathaniel Reinartz	confirmed	
B	15	XROADS15646_20210629_063600	6/29/21	Chipping Sparrow	Jesse Peterson	9	31.0				
B	10	XROADS15646_20210619_053300	6/19/21	Common Grackle	Jesse Peterson	8	51.0		Nathaniel Reinartz	confirmed	
B	11	XROADS15646_20210622_063400	6/22/21	Common Grackle	Jesse Peterson	0	42.0				
B	15	XROADS15646_20210629_063600	6/29/21	Common Grackle	Jesse Peterson	7	35.0				
B	1	XROADS15646_20210602_053600	6/2/21	Common Yellowthroat	Jesse Peterson	0	16.0		Nathaniel Reinartz	confirmed	
B	2	XROADS15646_20210603_053500	6/3/21	Common Yellowthroat	Jesse Peterson	0	6.0				
B	3	XROADS15646_20210605_063500	6/5/21	Common Yellowthroat	Jesse Peterson	0	3.0				
B	4	XROADS15646_20210607_073400	6/7/21	Common Yellowthroat	Jesse Peterson	0	2.0				
B	5	XROADS15646_20210609_043300	6/9/21	Common Yellowthroat	Jesse Peterson	0	3.0				
B	6	XROADS15646_20210611_053300	6/11/21	Common Yellowthroat	Jesse Peterson	0	0.5				
B	7	XROADS15646_20210613_063300	6/13/21	Common Yellowthroat	Jesse Peterson	0	8.5	Better at 0:52.0			
B	9	XROADS15646_20210617_043300	6/17/21	Common Yellowthroat	Jesse Peterson	0	1.0				
B	10	XROADS15646_20210619_053300	6/19/21	Common Yellowthroat	Jesse Peterson	0	54.0				
B	13	XROADS15646_20210626_043500	6/26/21	Common Yellowthroat	Jesse Peterson	2	2.0				
B	2	XROADS15646_20210603_053500	6/3/21	Eastern Kingbird	Jesse Peterson	6	50.0	Not certain	Nathaniel Reinartz	confirmed	
B	3	XROADS15646_20210605_063500	6/5/21	Eastern Kingbird	Jesse Peterson	0	2.5				
B	2	XROADS15646_20210603_053500	6/3/21	Eastern Wood-Pewee	Jesse Peterson	3	6.5		Nathaniel Reinartz	confirmed	
B	4	XROADS15646_20210607_073400	6/7/21	Eastern Wood-Pewee	Jesse Peterson	0	17.0				
B	5	XROADS15646_20210609_043300	6/9/21	Eastern Wood-Pewee	Jesse Peterson	0	5.0				
B	6	XROADS15646_20210611_053300	6/11/21	Eastern Wood-Pewee	Jesse Peterson	0	5.5				
B	7	XROADS15646_20210613_063300	6/13/21	Eastern Wood-Pewee	Jesse Peterson	0	2.5				
B	10	XROADS15646_20210619_053300	6/19/21	Eastern Wood-Pewee	Jesse Peterson	1	6.0				
B	2	XROADS15646_20210603_053500	6/3/21	Great Crested Flycatcher	Jesse Peterson	0	4.5	Better at 1:17.0	Nathaniel Reinartz	confirmed	
B	4	XROADS15646_20210607_073400	6/7/21	Great Crested Flycatcher	Jesse Peterson	1	36.5				
B	7	XROADS15646_20210613_063300	6/13/21	Great Crested Flycatcher	Jesse Peterson	2	47.5				

B	9	XROADS15646_20210617_043300	6/17/21	Great Crested Flycatcher	Jesse Peterson	2	54.0				
B	6	XROADS15646_20210611_053300	6/11/21	Green Heron	Jesse Peterson	8	2.5	Squawk		Nathaniel Reinartz	confirmed
B	1	XROADS15646_20210602_053600	6/2/21	House Wren	Jesse Peterson	0	18.0			Nathaniel Reinartz	confirmed
B	2	XROADS15646_20210603_053500	6/3/21	House Wren	Jesse Peterson	0	24.0				
B	3	XROADS15646_20210605_063500	6/5/21	House Wren	Jesse Peterson	0	6.0				
B	4	XROADS15646_20210607_073400	6/7/21	House Wren	Jesse Peterson	0	0.5				
B	5	XROADS15646_20210609_043300	6/9/21	House Wren	Jesse Peterson	0	40.0				
B	6	XROADS15646_20210611_053300	6/11/21	House Wren	Jesse Peterson	2	8.0				
B	7	XROADS15646_20210613_063300	6/13/21	House Wren	Jesse Peterson	0	20.5				
B	8	XROADS15646_20210615_073300	6/15/21	House Wren	Jesse Peterson	0	11.0				
B	9	XROADS15646_20210617_043300	6/17/21	House Wren	Jesse Peterson	4	47.0				
B	10	XROADS15646_20210619_053300	6/19/21	House Wren	Jesse Peterson	5	46.5				
B	11	XROADS15646_20210622_063400	6/22/21	House Wren	Jesse Peterson	0	25.5				
B	4	XROADS15646_20210607_073400	6/7/21	Indigo Bunting	Jesse Peterson	2	10.5	Abbreviated song; better at 4:46.0		Nathaniel Reinartz	confirmed
B	6	XROADS15646_20210611_053300	6/11/21	Indigo Bunting	Jesse Peterson	0	6.0				
B	7	XROADS15646_20210613_063300	6/13/21	Indigo Bunting	Jesse Peterson	0	0.0				
B	8	XROADS15646_20210615_073300	6/15/21	Indigo Bunting	Jesse Peterson	0	0.5				
B	10	XROADS15646_20210619_053300	6/19/21	Indigo Bunting	Jesse Peterson	2	1.5	Spit			
B	11	XROADS15646_20210622_063400	6/22/21	Indigo Bunting	Jesse Peterson	0	6.0				
B	15	XROADS15646_20210629_063600	6/29/21	Indigo Bunting	Jesse Peterson	0	2.5				
B	7	XROADS15646_20210613_063300	6/13/21	Killdeer	Jesse Peterson	3	2.5			Nathaniel Reinartz	confirmed
B	7	XROADS15646_20210613_063300	6/13/21	Mourning Dove	Jesse Peterson	1	34.0			Nathaniel Reinartz	confirmed
B	9	XROADS15646_20210617_043300	6/17/21	Mourning Dove	Jesse Peterson	0	59.0				
B	10	XROADS15646_20210619_053300	6/19/21	Mourning Dove	Jesse Peterson	0	36.5				
B	14	XROADS15646_20210627_053500	6/27/21	Mourning Dove	Jesse Peterson	3	38.0				
B	1	XROADS15646_20210602_053600	6/2/21	Northern Cardinal	Jesse Peterson	0	3.0			Nathaniel Reinartz	confirmed
B	2	XROADS15646_20210603_053500	6/3/21	Northern Cardinal	Jesse Peterson	0	0.0				
B	3	XROADS15646_20210605_063500	6/5/21	Northern Cardinal	Jesse Peterson	4	18.0				
B	4	XROADS15646_20210607_073400	6/7/21	Northern Cardinal	Jesse Peterson	0	2.0	Chip; song at 1:53.0			
B	5	XROADS15646_20210609_043300	6/9/21	Northern Cardinal	Jesse Peterson	3	22.0	Chip; song at 6:58.0			
B	6	XROADS15646_20210611_053300	6/11/21	Northern Cardinal	Jesse Peterson	0	9.0				
B	7	XROADS15646_20210613_063300	6/13/21	Northern Cardinal	Jesse Peterson	0	34.0				
B	9	XROADS15646_20210617_043300	6/17/21	Northern Cardinal	Jesse Peterson	0	4.0				
B	10	XROADS15646_20210619_053300	6/19/21	Northern Cardinal	Jesse Peterson	0	34.5				
B	11	XROADS15646_20210622_063400	6/22/21	Northern Cardinal	Jesse Peterson	1	40.0				
B	12	XROADS15646_20210624_073400	6/24/21	Northern Cardinal	Jesse Peterson	0	0.0	6/23 was all rain noise. Used 6/24 instead			
B	13	XROADS15646_20210626_043500	6/26/21	Northern Cardinal	Jesse Peterson	0	4.5				
B	14	XROADS15646_20210627_053500	6/27/21	Northern Cardinal	Jesse Peterson	3	37.0				
B	8	XROADS15646_20210615_073300	6/15/21	Northern Flicker	Jesse Peterson	4	46.5			Nathaniel Reinartz	confirmed--should be Northern Flicker
B	1	XROADS15646_20210602_053600	6/2/21	Ovenbird	Jesse Peterson	8	14.5			Nathaniel Reinartz	confirmed
B	2	XROADS15646_20210603_053500	6/3/21	Ovenbird	Jesse Peterson	1	12.0				
B	4	XROADS15646_20210607_073400	6/7/21	Ovenbird	Jesse Peterson	0	38.5				
B	6	XROADS15646_20210611_053300	6/11/21	Ovenbird	Jesse Peterson	4	41.5	Distant; better at 8:59.0			
B	11	XROADS15646_20210622_063400	6/22/21	Ovenbird	Jesse Peterson	0	3.0				
B	14	XROADS15646_20210627_053500	6/27/21	Ovenbird	Jesse Peterson	6	42.0				
B	6	XROADS15646_20210611_053300	6/11/21	Red-bellied Woodpecker	Jesse Peterson	0	48.5	Again at 2:11.0		Nathaniel Reinartz	confirmed
B	8	XROADS15646_20210615_073300	6/15/21	Red-bellied Woodpecker	Jesse Peterson	8	31.0				
B	10	XROADS15646_20210619_053300	6/19/21	Red-bellied Woodpecker	Jesse Peterson	0	2.0				
B	1	XROADS15646_20210602_053600	6/2/21	Red-eyed Vireo	Jesse Peterson	0	31.0			Nathaniel Reinartz	confirmed
B	2	XROADS15646_20210603_053500	6/3/21	Red-eyed Vireo	Jesse Peterson	0	1.0				
B	3	XROADS15646_20210605_063500	6/5/21	Red-eyed Vireo	Jesse Peterson	0	44.5				
B	4	XROADS15646_20210607_073400	6/7/21	Red-eyed Vireo	Jesse Peterson	0	14.5				
B	6	XROADS15646_20210611_053300	6/11/21	Red-eyed Vireo	Jesse Peterson	0	3.0				
B	7	XROADS15646_20210613_063300	6/13/21	Red-eyed Vireo	Jesse Peterson	0	4.0				
B	8	XROADS15646_20210615_073300	6/15/21	Red-eyed Vireo	Jesse Peterson	5	43.5				
B	9	XROADS15646_20210617_043300	6/17/21	Red-eyed Vireo	Jesse Peterson	9	29.0				
B	10	XROADS15646_20210619_053300	6/19/21	Red-eyed Vireo	Jesse Peterson	0	3.5				
B	11	XROADS15646_20210622_063400	6/22/21	Red-eyed Vireo	Jesse Peterson	0	30.5				
B	15	XROADS15646_20210629_063600	6/29/21	Red-eyed Vireo	Jesse Peterson	9	8.0				
B	1	XROADS15646_20210602_053600	6/2/21	Red-winged Blackbird	Jesse Peterson	0	12.0	Better at 3:30.0		Nathaniel Reinartz	confirmed
B	2	XROADS15646_20210603_053500	6/3/21	Red-winged Blackbird	Jesse Peterson	0	50.0				
B	3	XROADS15646_20210605_063500	6/5/21	Red-winged Blackbird	Jesse Peterson	1	3.0				
B	4	XROADS15646_20210607_073400	6/7/21	Red-winged Blackbird	Jesse Peterson	0	37.5				
B	5	XROADS15646_20210609_043300	6/9/21	Red-winged Blackbird	Jesse Peterson	1	44.0				
B	7	XROADS15646_20210613_063300	6/13/21	Red-winged Blackbird	Jesse Peterson	1	20.0				
B	8	XROADS15646_20210615_073300	6/15/21	Red-winged Blackbird	Jesse Peterson	0	9.0				
B	10	XROADS15646_20210619_053300	6/19/21	Red-winged Blackbird	Jesse Peterson	3	19.0				
B	15	XROADS15646_20210629_063600	6/29/21	Red-winged Blackbird	Jesse Peterson	8	56.0				
B	12	XROADS15646_20210624_073400	6/24/21	Rose-breasted Grosbeak	Jesse Peterson	0	15.0			Nathaniel Reinartz	confirmed
B	1	XROADS15646_20210602_053600	6/2/21	Song Sparrow	Jesse Peterson	0	0.5			Nathaniel Reinartz	confirmed
B	2	XROADS15646_20210603_053500	6/3/21	Song Sparrow	Jesse Peterson	0	20.0	Better at 0:38.0			

B	3	XROADS15646_20210605_063500	6/5/21	Song Sparrow	Jesse Peterson	0	5.0	Better at 0:30.0			
B	4	XROADS15646_20210607_073400	6/7/21	Song Sparrow	Jesse Peterson	0	8.0				
B	5	XROADS15646_20210609_043300	6/9/21	Song Sparrow	Jesse Peterson	0	4.0				
B	6	XROADS15646_20210611_053300	6/11/21	Song Sparrow	Jesse Peterson	1	17.5				
B	7	XROADS15646_20210613_063300	6/13/21	Song Sparrow	Jesse Peterson	5	15.0				
B	8	XROADS15646_20210615_073300	6/15/21	Song Sparrow	Jesse Peterson	1	23.0				
B	9	XROADS15646_20210617_043300	6/17/21	Song Sparrow	Jesse Peterson	0	0.0				
B	10	XROADS15646_20210619_053300	6/19/21	Song Sparrow	Jesse Peterson	1	12.0				
B	11	XROADS15646_20210622_063400	6/22/21	Song Sparrow	Jesse Peterson	0	34.0	Better at 2:27.0			
B	12	XROADS15646_20210624_073400	6/24/21	Song Sparrow	Jesse Peterson	7	32.0				
B	13	XROADS15646_20210626_043500	6/26/21	Song Sparrow	Jesse Peterson	0	25.0				
B	14	XROADS15646_20210627_053500	6/27/21	Song Sparrow	Jesse Peterson	2	0.0				
B	15	XROADS15646_20210629_063600	6/29/21	Song Sparrow	Jesse Peterson	0	4.0				
B	2	XROADS15646_20210603_053500	6/3/21	Wood Thrush	Jesse Peterson	0	3.5		Nathaniel Reinartz	confirmed	
B	3	XROADS15646_20210605_063500	6/5/21	Wood Thrush	Jesse Peterson	4	20.0				
B	4	XROADS15646_20210607_073400	6/7/21	Wood Thrush	Jesse Peterson	0	20.5				
B	5	XROADS15646_20210609_043300	6/9/21	Wood Thrush	Jesse Peterson	0	2.0				
B	6	XROADS15646_20210611_053300	6/11/21	Wood Thrush	Jesse Peterson	0	0.0				
B	9	XROADS15646_20210617_043300	6/17/21	Wood Thrush	Jesse Peterson	0	2.0				
B	13	XROADS15646_20210626_043500	6/26/21	Wood Thrush	Jesse Peterson	0	3.0				
C	1	XROADS15686_20210601_043600	6/1/21	American Crow	Jesse Peterson	9	49.0		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	6/3/21	American Crow	Jesse Peterson	0	27.0				
C	3	XROADS15686_20210606_063400	6/6/21	American Crow	Jesse Peterson	3	39.5				
C	5	XROADS15686_20210609_043300	6/9/21	American Crow	Jesse Peterson	3	1.0				
C	6	XROADS15686_20210611_053300	6/11/21	American Crow	Jesse Peterson	3	31.5				
C	7	XROADS15686_20210613_063300	6/13/21	American Crow	Jesse Peterson	1	13.0				
C	9	XROADS15686_20210617_043300	6/17/21	American Crow	Jesse Peterson	0	44.5	Better at 8:02.0			
C	10	XROADS15686_20210619_053300	6/19/21	American Crow	Jesse Peterson	0	7.0	Better at 7:43.0			
C	14	XROADS15686_20210627_053500	6/27/21	American Crow	Jesse Peterson	0	4.0				
C	15	XROADS15686_20210629_063600	6/29/21	American Crow	Jesse Peterson	2	34.0				
C	2	XROADS15686_20210603_053500	6/3/21	American Goldfinch	Jesse Peterson	3	29.5		Nathaniel Reinartz	confirmed	
C	3	XROADS15686_20210606_063400	6/6/21	American Goldfinch	Jesse Peterson	0	11.0				
C	4	XROADS15686_20210607_073400	6/7/21	American Goldfinch	Jesse Peterson	1	31.0				
C	5	XROADS15686_20210609_043300	6/9/21	American Goldfinch	Jesse Peterson	7	37.5				
C	6	XROADS15686_20210611_053300	6/11/21	American Goldfinch	Jesse Peterson	1	36.5				
C	7	XROADS15686_20210613_063300	6/13/21	American Goldfinch	Jesse Peterson	8	57.0				
C	12	XROADS15686_20210623_073400	6/23/21	American Goldfinch	Jesse Peterson	0	36.0				
C	13	XROADS15686_20210625_043400	6/25/21	American Goldfinch	Jesse Peterson	9	7.0				
C	15	XROADS15686_20210629_063600	6/29/21	American Goldfinch	Jesse Peterson	9	13.0				
C	2	XROADS15686_20210603_053500	6/3/21	American Redstart	Jesse Peterson	0	5.5		Nathaniel Reinartz	confirmed	
C	3	XROADS15686_20210606_063400	6/6/21	American Redstart	Jesse Peterson	0	3.5				
C	4	XROADS15686_20210607_073400	6/7/21	American Redstart	Jesse Peterson	0	0.5				
C	5	XROADS15686_20210609_043300	6/9/21	American Redstart	Jesse Peterson	0	19.0				
C	6	XROADS15686_20210611_053300	6/11/21	American Redstart	Jesse Peterson	0	2.0				
C	8	XROADS15686_20210615_073300	6/15/21	American Redstart	Jesse Peterson	0	21.0				
C	9	XROADS15686_20210617_043300	6/17/21	American Redstart	Jesse Peterson	0	28.0				
C	10	XROADS15686_20210619_053300	6/19/21	American Redstart	Jesse Peterson	0	7.0				
C	11	XROADS15686_20210622_063400	6/22/21	American Redstart	Jesse Peterson	0	1.0				
C	14	XROADS15686_20210627_053500	6/27/21	American Redstart	Jesse Peterson	3	45.0				
C	15	XROADS15686_20210629_063600	6/29/21	American Redstart	Jesse Peterson	2	23.5				
C	1	XROADS15686_20210601_043600	6/1/21	American Robin	Jesse Peterson	0	0.0		Nathaniel Reinartz	confirmed	
C	3	XROADS15686_20210606_063400	6/6/21	American Robin	Jesse Peterson	1	36.0				
C	4	XROADS15686_20210607_073400	6/7/21	American Robin	Jesse Peterson	1	6.0				
C	5	XROADS15686_20210609_043300	6/9/21	American Robin	Jesse Peterson	0	21.0				
C	6	XROADS15686_20210611_053300	6/11/21	American Robin	Jesse Peterson	1	20.0				
C	7	XROADS15686_20210613_063300	6/13/21	American Robin	Jesse Peterson	0	2.0				
C	8	XROADS15686_20210615_073300	6/15/21	American Robin	Jesse Peterson	0	0.0	also 9s, and better at 1:41.0			
C	9	XROADS15686_20210617_043300	6/17/21	American Robin	Jesse Peterson	0	8.0				
C	10	XROADS15686_20210619_053300	6/19/21	American Robin	Jesse Peterson	0	2.0				
C	11	XROADS15686_20210622_063400	6/22/21	American Robin	Jesse Peterson	1	54.0				
C	13	XROADS15686_20210625_043400	6/25/21	American Robin	Jesse Peterson	0	0.0				
C	14	XROADS15686_20210627_053500	6/27/21	American Robin	Jesse Peterson	3	54.0	chip			
C	15	XROADS15686_20210629_063600	6/29/21	American Robin	Jesse Peterson	2	7.0				
C	1	XROADS15686_20210601_043600	6/1/21	Baltimore Oriole	Jesse Peterson	1	41.0		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	6/3/21	Baltimore Oriole	Jesse Peterson	0	6.5				
C	3	XROADS15686_20210606_063400	6/6/21	Baltimore Oriole	Jesse Peterson	0	16.0				
C	4	XROADS15686_20210607_073400	6/7/21	Baltimore Oriole	Jesse Peterson	0	11.5				
C	5	XROADS15686_20210609_043300	6/9/21	Baltimore Oriole	Jesse Peterson	0	0.0				
C	6	XROADS15686_20210611_053300	6/11/21	Baltimore Oriole	Jesse Peterson	2	43.0				
C	7	XROADS15686_20210613_063300	6/13/21	Baltimore Oriole	Jesse Peterson	0	0.0				
C	8	XROADS15686_20210615_073300	6/15/21	Baltimore Oriole	Jesse Peterson	0	44.5				
C	9	XROADS15686_20210617_043300	6/17/21	Baltimore Oriole	Jesse Peterson	2	31.0				

C	10	XROADS15686_20210619_053300	6/19/21	Baltimore Oriole	Jesse Peterson	0	8.0				
C	11	XROADS15686_20210622_063400	6/22/21	Baltimore Oriole	Jesse Peterson	0	13.0				
C	12	XROADS15686_20210623_073400	6/23/21	Baltimore Oriole	Jesse Peterson	1	32.0	Better at 1:49.0			
C	14	XROADS15686_20210627_053500	6/27/21	Baltimore Oriole	Jesse Peterson	5	36.0				
C	15	XROADS15686_20210629_063600	6/29/21	Baltimore Oriole	Jesse Peterson	0	10.0				
C	4	XROADS15686_20210607_073400	6/7/21	Black-capped Chickadee	Jesse Peterson	6	53.0		Nathaniel Reinartz	confirmed	
C	8	XROADS15686_20210615_073300	6/15/21	Black-capped Chickadee	Jesse Peterson	5	23.0				
C	11	XROADS15686_20210622_063400	6/22/21	Black-capped Chickadee	Jesse Peterson	6	41.0				
C	14	XROADS15686_20210627_053500	6/27/21	Black-capped Chickadee	Jesse Peterson	6	22.0				
C	2	XROADS15686_20210603_053500	6/3/21	Blue Jay	Jesse Peterson	8	53.0		Nathaniel Reinartz	confirmed	
C	5	XROADS15686_20210609_043300	6/9/21	Blue Jay	Jesse Peterson	1	10.0				
C	6	XROADS15686_20210611_053300	6/11/21	Blue Jay	Jesse Peterson	0	20.0				
C	10	XROADS15686_20210619_053300	6/19/21	Blue Jay	Jesse Peterson	0	33.5	Better at 4:37.5			
C	13	XROADS15686_20210625_043400	6/25/21	Blue Jay	Jesse Peterson	5	48.0				
C	2	XROADS15686_20210603_053500	6/3/21	Brown-headed Cowbird	Jesse Peterson	8	0.0	Not certain	Nathaniel Reinartz	confirmed	
C	3	XROADS15686_20210606_063400	6/6/21	Brown-headed Cowbird	Jesse Peterson	0	8.0				
C	4	XROADS15686_20210607_073400	6/7/21	Brown-headed Cowbird	Jesse Peterson	0	1.5				
C	11	XROADS15686_20210622_063400	6/22/21	Brown-headed Cowbird	Jesse Peterson	0	52.0				
C	3	XROADS15686_20210606_063400	6/6/21	Canada Goose	Jesse Peterson	9	50.0		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	6/3/21	Cedar Waxwing	Jesse Peterson	6	28.0		Nathaniel Reinartz	confirmed	
C	8	XROADS15686_20210615_073300	6/15/21	Cedar Waxwing	Jesse Peterson	8	20.5				
C	11	XROADS15686_20210622_063400	6/22/21	Cedar Waxwing	Jesse Peterson	0	24.0				
C	12	XROADS15686_20210623_073400	6/23/21	Cedar Waxwing	Jesse Peterson	1	34.0				
C	15	XROADS15686_20210629_063600	6/29/21	Cedar Waxwing	Jesse Peterson	8	48.5				
C	1	XROADS15686_20210601_043600	6/1/21	Chipping Sparrow	Jesse Peterson	2	54.0		Nathaniel Reinartz	confirmed	
C	5	XROADS15686_20210609_043300	6/9/21	Chipping Sparrow	Jesse Peterson	0	0.0				
C	6	XROADS15686_20210611_053300	6/11/21	Chipping Sparrow	Jesse Peterson	4	54.0				
C	8	XROADS15686_20210615_073300	6/15/21	Chipping Sparrow	Jesse Peterson	3	14.0				
C	9	XROADS15686_20210617_043300	6/17/21	Chipping Sparrow	Jesse Peterson	0	11.5				
C	13	XROADS15686_20210625_043400	6/25/21	Chipping Sparrow	Jesse Peterson	2	29.0				
C	1	XROADS15686_20210601_043600	6/1/21	Common Grackle	Jesse Peterson	8	20.0	Also at 8:37.5	Nathaniel Reinartz	confirmed	
C	3	XROADS15686_20210606_063400	6/6/21	Common Grackle	Jesse Peterson	7	10.0				
C	4	XROADS15686_20210607_073400	6/7/21	Common Grackle	Jesse Peterson	0	12.0				
C	6	XROADS15686_20210611_053300	6/11/21	Common Grackle	Jesse Peterson	6	14.0				
C	7	XROADS15686_20210613_063300	6/13/21	Common Grackle	Jesse Peterson	2	41.5				
C	8	XROADS15686_20210615_073300	6/15/21	Common Grackle	Jesse Peterson	0	3.0				
C	10	XROADS15686_20210619_053300	6/19/21	Common Grackle	Jesse Peterson	4	7.0				
C	11	XROADS15686_20210622_063400	6/22/21	Common Grackle	Jesse Peterson	6	18.5				
C	12	XROADS15686_20210623_073400	6/23/21	Common Grackle	Jesse Peterson	3	21.0				
C	14	XROADS15686_20210627_053500	6/27/21	Common Grackle	Jesse Peterson	5	20.0				
C	15	XROADS15686_20210629_063600	6/29/21	Common Grackle	Jesse Peterson	1	36.0				
C	2	XROADS15686_20210603_053500	6/3/21	Common Yellowthroat	Jesse Peterson	0	9.5		Nathaniel Reinartz	confirmed	
C	4	XROADS15686_20210607_073400	6/7/21	Common Yellowthroat	Jesse Peterson	6	49.0				
C	6	XROADS15686_20210611_053300	6/11/21	Common Yellowthroat	Jesse Peterson	0	1.0				
C	7	XROADS15686_20210613_063300	6/13/21	Common Yellowthroat	Jesse Peterson	3	19.0	Better at 4:06.0			
C	9	XROADS15686_20210617_043300	6/17/21	Common Yellowthroat	Jesse Peterson	0	19.0				
C	10	XROADS15686_20210619_053300	6/19/21	Common Yellowthroat	Jesse Peterson	0	5.5				
C	11	XROADS15686_20210622_063400	6/22/21	Common Yellowthroat	Jesse Peterson	0	14.5				
C	13	XROADS15686_20210625_043400	6/25/21	Common Yellowthroat	Jesse Peterson	6	7.0				
C	14	XROADS15686_20210627_053500	6/27/21	Common Yellowthroat	Jesse Peterson	1	48.0				
C	15	XROADS15686_20210629_063600	6/29/21	Common Yellowthroat	Jesse Peterson	0	48.5				
C	3	XROADS15686_20210606_063400	6/6/21	Downy Woodpecker	Jesse Peterson	2	39.0		Nathaniel Reinartz	confirmed	
C	4	XROADS15686_20210607_073400	6/7/21	Downy Woodpecker	Jesse Peterson	1	1.0				
C	15	XROADS15686_20210629_063600	6/29/21	Downy Woodpecker	Jesse Peterson	0	35.0				
C	5	XROADS15686_20210609_043300	6/9/21	Eastern Kingbird	Jesse Peterson	8	26.0	Again at 8:27.0, 9:09.0	Nathaniel Reinartz	confirmed	
C	8	XROADS15686_20210615_073300	6/15/21	Eastern Kingbird	Jesse Peterson	2	8.0				
C	10	XROADS15686_20210619_053300	6/19/21	Eastern Kingbird	Jesse Peterson	6	52.5	Single note; Not certain	Nathaniel Reinartz	confirmed	
C	13	XROADS15686_20210625_043400	6/25/21	Eastern Kingbird	Jesse Peterson	9	42.5				
C	15	XROADS15686_20210629_063600	6/29/21	Eastern Kingbird	Jesse Peterson	8	54.0				
C	6	XROADS15686_20210611_053300	6/11/21	Gray Catbird	Jesse Peterson	6	30.0		Nathaniel Reinartz	confirmed	
C	7	XROADS15686_20210613_063300	6/13/21	Gray Catbird	Jesse Peterson	0	9.0	More at 1:19.0			
C	8	XROADS15686_20210615_073300	6/15/21	Gray Catbird	Jesse Peterson	0	7.0				
C	9	XROADS15686_20210617_043300	6/17/21	Gray Catbird	Jesse Peterson	0	35.5				
C	10	XROADS15686_20210619_053300	6/19/21	Gray Catbird	Jesse Peterson	0	36.0	Rattle			
C	15	XROADS15686_20210629_063600	6/29/21	Gray Catbird	Jesse Peterson	0	0.0				
C	6	XROADS15686_20210611_053300	6/11/21	Great Crested Flycatcher	Jesse Peterson	1	40.0		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	6/3/21	Hairy Woodpecker	Jesse Peterson	2	9.5	Also 4:41.0	Nathaniel Reinartz	confirmed	
C	11	XROADS15686_20210622_063400	6/22/21	Hairy Woodpecker	Jesse Peterson	6	53.0	Hard chips at 7:29.0			
C	9	XROADS15686_20210617_043300	6/17/21	House Finch	Jesse Peterson	5	1.0		Nathaniel Reinartz	confirmed	
C	10	XROADS15686_20210619_053300	6/19/21	House Finch	Jesse Peterson	8	19.5				
C	1	XROADS15686_20210601_043600	6/1/21	House Wren	Jesse Peterson	5	37.0		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	6/3/21	House Wren	Jesse Peterson	3	44.5				

C	4	XROADS15686_20210607_073400	6/7/21	House Wren	Jesse Peterson	5	36.0				
C	5	XROADS15686_20210609_043300	6/9/21	House Wren	Jesse Peterson	9	21.0				
C	9	XROADS15686_20210617_043300	6/17/21	House Wren	Jesse Peterson	0	1.0				
C	10	XROADS15686_20210619_053300	6/19/21	House Wren	Jesse Peterson	1	34.0				
C	11	XROADS15686_20210622_063400	6/22/21	House Wren	Jesse Peterson	0	12.0				
C	13	XROADS15686_20210625_043400	6/25/21	House Wren	Jesse Peterson	0	2.0				
C	10	XROADS15686_20210619_053300	6/19/21	Indigo Bunting	Jesse Peterson	1	6.0	Better at 3:15.0	Nathaniel Reinartz	confirmed	
C	14	XROADS15686_20210627_053500	6/27/21	Indigo Bunting	Jesse Peterson	8	58.5	chip			
C	3	XROADS15686_20210606_063400	6/6/21	Killdeer	Jesse Peterson	0	22.0		Nathaniel Reinartz	confirmed	
C	7	XROADS15686_20210613_063300	6/13/21	Killdeer	Jesse Peterson	5	45.0				
C	1	XROADS15686_20210601_043600	6/1/21	Mallard	Jesse Peterson	3	18.0		Nathaniel Reinartz	confirmed	
C	7	XROADS15686_20210613_063300	6/13/21	Mallard	Jesse Peterson	5	57.0				
C	11	XROADS15686_20210622_063400	6/22/21	Mallard	Jesse Peterson	6	14.5				
C	12	XROADS15686_20210623_073400	6/23/21	Mallard	Jesse Peterson	0	22.5				
C	2	XROADS15686_20210603_053500	6/3/21	Mourning Dove	Jesse Peterson	3	11.0		Nathaniel Reinartz	confirmed	
C	3	XROADS15686_20210606_063400	6/6/21	Mourning Dove	Jesse Peterson	0	39.5				
C	5	XROADS15686_20210609_043300	6/9/21	Mourning Dove	Jesse Peterson	0	59.0				
C	6	XROADS15686_20210611_053300	6/11/21	Mourning Dove	Jesse Peterson	0	0.0				
C	7	XROADS15686_20210613_063300	6/13/21	Mourning Dove	Jesse Peterson	0	1.5				
C	8	XROADS15686_20210615_073300	6/15/21	Mourning Dove	Jesse Peterson	1	57.0				
C	9	XROADS15686_20210617_043300	6/17/21	Mourning Dove	Jesse Peterson	6	31.0				
C	10	XROADS15686_20210619_053300	6/19/21	Mourning Dove	Jesse Peterson	1	14.0				
C	12	XROADS15686_20210623_073400	6/23/21	Mourning Dove	Jesse Peterson	6	4.0				
C	14	XROADS15686_20210627_053500	6/27/21	Mourning Dove	Jesse Peterson	0	3.0				
C	15	XROADS15686_20210629_063600	6/29/21	Mourning Dove	Jesse Peterson	1	28.0				
C	1	XROADS15686_20210601_043600	6/1/21	Northern Cardinal	Jesse Peterson	3	10.0		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	6/3/21	Northern Cardinal	Jesse Peterson	0	3.5				
C	3	XROADS15686_20210606_063400	6/6/21	Northern Cardinal	Jesse Peterson	0	2.0				
C	4	XROADS15686_20210607_073400	6/7/21	Northern Cardinal	Jesse Peterson	8	14.0				
C	5	XROADS15686_20210609_043300	6/9/21	Northern Cardinal	Jesse Peterson	0	0.0				
C	6	XROADS15686_20210611_053300	6/11/21	Northern Cardinal	Jesse Peterson	0	41.5				
C	7	XROADS15686_20210613_063300	6/13/21	Northern Cardinal	Jesse Peterson	2	56.0				
C	8	XROADS15686_20210615_073300	6/15/21	Northern Cardinal	Jesse Peterson	9	51.0				
C	9	XROADS15686_20210617_043300	6/17/21	Northern Cardinal	Jesse Peterson	0	2.0				
C	10	XROADS15686_20210619_053300	6/19/21	Northern Cardinal	Jesse Peterson	0	26.0				
C	11	XROADS15686_20210622_063400	6/22/21	Northern Cardinal	Jesse Peterson	5	45.0				
C	13	XROADS15686_20210625_043400	6/25/21	Northern Cardinal	Jesse Peterson	0	2.0				
C	14	XROADS15686_20210627_053500	6/27/21	Northern Cardinal	Jesse Peterson	1	17.0				
C	15	XROADS15686_20210629_063600	6/29/21	Northern Cardinal	Jesse Peterson	2	1.0				
C	15	XROADS15686_20210629_063600	6/29/21	Northern Flicker	Jesse Peterson	0	56.0		Nathaniel Reinartz	confirmed	
C	10	XROADS15686_20210619_053300	6/19/21	Red-bellied Woodpecker	Jesse Peterson	7	48.0	Better at 8:35.0	Nathaniel Reinartz	confirmed	
C	15	XROADS15686_20210629_063600	6/29/21	Red-bellied Woodpecker	Jesse Peterson	7	56.0				
C	2	XROADS15686_20210603_053500	6/3/21	Red-eyed Vireo	Jesse Peterson	2	16.0		Nathaniel Reinartz	confirmed	
C	3	XROADS15686_20210606_063400	6/6/21	Red-eyed Vireo	Jesse Peterson	5	48.0				
C	4	XROADS15686_20210607_073400	6/7/21	Red-eyed Vireo	Jesse Peterson	0	0.5	Better at 0:14.0			
C	5	XROADS15686_20210609_043300	6/9/21	Red-eyed Vireo	Jesse Peterson	1	26.0				
C	6	XROADS15686_20210611_053300	6/11/21	Red-eyed Vireo	Jesse Peterson	0	5.0				
C	15	XROADS15686_20210629_063600	6/29/21	Red-eyed Vireo	Jesse Peterson	9	49.5				
C	1	XROADS15686_20210601_043600	6/1/21	Red-winged Blackbird	Jesse Peterson	0	2.0		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	6/3/21	Red-winged Blackbird	Jesse Peterson	0	0.5				
C	3	XROADS15686_20210606_063400	6/6/21	Red-winged Blackbird	Jesse Peterson	0	1.5	6/5 was all rain noise. Used 6/6 0634 file instead.			
C	4	XROADS15686_20210607_073400	6/7/21	Red-winged Blackbird	Jesse Peterson	0	1.0				
C	5	XROADS15686_20210609_043300	6/9/21	Red-winged Blackbird	Jesse Peterson	8	2.0				
C	6	XROADS15686_20210611_053300	6/11/21	Red-winged Blackbird	Jesse Peterson	0	3.0				
C	7	XROADS15686_20210613_063300	6/13/21	Red-winged Blackbird	Jesse Peterson	0	0.0				
C	8	XROADS15686_20210615_073300	6/15/21	Red-winged Blackbird	Jesse Peterson	0	19.0				
C	9	XROADS15686_20210617_043300	6/17/21	Red-winged Blackbird	Jesse Peterson	0	3.0	Better at 1:17.5			
C	10	XROADS15686_20210619_053300	6/19/21	Red-winged Blackbird	Jesse Peterson	0	13.0				
C	11	XROADS15686_20210622_063400	6/22/21	Red-winged Blackbird	Jesse Peterson	0	0.0	6/21has heavy rain noise; used 6/22 instead			
C	12	XROADS15686_20210623_073400	6/23/21	Red-winged Blackbird	Jesse Peterson	0	24.0				
C	13	XROADS15686_20210625_043400	6/25/21	Red-winged Blackbird	Jesse Peterson	1	2.0				
C	14	XROADS15686_20210627_053500	6/27/21	Red-winged Blackbird	Jesse Peterson	0	1.0				
C	15	XROADS15686_20210629_063600	6/29/21	Red-winged Blackbird	Jesse Peterson	0	0.5				
C	11	XROADS15686_20210622_063400	6/22/21	Rose-breasted Grosbeak	Jesse Peterson	3	46.0		Nathaniel Reinartz	confirmed	
C	1	XROADS15686_20210601_043600	6/1/21	Sandhill Crane	Jesse Peterson	2	10.0		Nathaniel Reinartz	confirmed	
C	12	XROADS15686_20210623_073400	6/23/21	Sandhill Crane	Jesse Peterson	0	3.0				
C	1	XROADS15686_20210601_043600	6/1/21	Song Sparrow	Jesse Peterson	1	14.5	Not certain	Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	6/3/21	Song Sparrow	Jesse Peterson	0	1.0				
C	3	XROADS15686_20210606_063400	6/6/21	Song Sparrow	Jesse Peterson	6	26.0				
C	4	XROADS15686_20210607_073400	6/7/21	Song Sparrow	Jesse Peterson	3	10.0				
C	5	XROADS15686_20210609_043300	6/9/21	Song Sparrow	Jesse Peterson	0	4.0				

C	6	XROADS15686_20210611_053300	6/11/21	Song Sparrow	Jesse Peterson	0	8.5				
C	7	XROADS15686_20210613_063300	6/13/21	Song Sparrow	Jesse Peterson	4	29.0				
C	9	XROADS15686_20210617_043300	6/17/21	Song Sparrow	Jesse Peterson	1	21.0	Better at 3:43.5			
C	10	XROADS15686_20210619_053300	6/19/21	Song Sparrow	Jesse Peterson	6	24.0				
C	11	XROADS15686_20210622_063400	6/22/21	Song Sparrow	Jesse Peterson	0	32.5				
C	13	XROADS15686_20210625_043400	6/25/21	Song Sparrow	Jesse Peterson	5	4.0				
C	15	XROADS15686_20210629_063600	6/29/21	Song Sparrow	Jesse Peterson	8	2.0				
C	2	XROADS15686_20210603_053500	6/3/21	Tree Swallow	Jesse Peterson	6	36.0		Nathaniel Reinartz	confirmed	
C	10	XROADS15686_20210619_053300	6/19/21	Tree Swallow	Jesse Peterson	5	31.0				
C	2	XROADS15686_20210603_053500	6/3/21	Warbling Vireo	Jesse Peterson	0	13.0		Nathaniel Reinartz	confirmed	
C	3	XROADS15686_20210606_063400	6/6/21	Warbling Vireo	Jesse Peterson	1	45.0				
C	4	XROADS15686_20210607_073400	6/7/21	Warbling Vireo	Jesse Peterson	0	14.0				
C	6	XROADS15686_20210611_053300	6/11/21	Warbling Vireo	Jesse Peterson	1	39.0				
C	7	XROADS15686_20210613_063300	6/13/21	Warbling Vireo	Jesse Peterson	0	18.0				
C	8	XROADS15686_20210615_073300	6/15/21	Warbling Vireo	Jesse Peterson	0	5.0				
C	9	XROADS15686_20210617_043300	6/17/21	Warbling Vireo	Jesse Peterson	0	49.0				
C	10	XROADS15686_20210619_053300	6/19/21	Warbling Vireo	Jesse Peterson	3	2.0				
C	11	XROADS15686_20210622_063400	6/22/21	Warbling Vireo	Jesse Peterson	3	10.5				
C	12	XROADS15686_20210623_073400	6/23/21	Warbling Vireo	Jesse Peterson	1	39.0				
C	14	XROADS15686_20210627_053500	6/27/21	Warbling Vireo	Jesse Peterson	6	39.5				
C	15	XROADS15686_20210629_063600	6/29/21	Warbling Vireo	Jesse Peterson	6	34.0				
C	7	XROADS15686_20210613_063300	6/13/21	White-breasted Nuthatch	Jesse Peterson	9	50.5		Nathaniel Reinartz	confirmed	
C	2	XROADS15686_20210603_053500	6/3/21	Yellow Warbler	Jesse Peterson	2	42.0		Nathaniel Reinartz	confirmed	
C	5	XROADS15686_20210609_043300	6/9/21	Yellow Warbler	Jesse Peterson	2	49.0				
C	6	XROADS15686_20210611_053300	6/11/21	Yellow Warbler	Jesse Peterson	2	17.0				
C	10	XROADS15686_20210619_053300	6/19/21	Yellow Warbler	Jesse Peterson	5	4.0				
C	15	XROADS15686_20210629_063600	6/29/21	Yellow Warbler	Jesse Peterson	0	8.0				
C	6	XROADS15686_20210611_053300	6/11/21	Yellow-billed Cuckoo	Jesse Peterson	2	36.0	Again at 3:01.0, 3:20.0, best at 4:34.0	Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	6/5/21	American Crow	Jesse Peterson	2	18.0		Nathaniel Reinartz	confirmed	
D	5	XROADS15974_20210611_043300	6/11/21	American Crow	Jesse Peterson	2	46.0				
D	6	XROADS15974_20210613_053300	6/13/21	American Crow	Jesse Peterson	1	36.0				
D	7	XROADS15974_20210615_063300	6/15/21	American Crow	Jesse Peterson	0	19.0				
D	9	XROADS15974_20210619_043300	6/19/21	American Crow	Jesse Peterson	7	50.0				
D	11	XROADS15974_20210624_063400	6/24/21	American Crow	Jesse Peterson	6	9.0				
D	14	XROADS15974_20210629_053600	6/29/21	American Crow	Jesse Peterson	0	3.5				
D	15	XROADS15974_20210701_063700	6/1/21	American Crow	Jesse Peterson	2	13.0				corrected filename from .600 to .700
D	7	XROADS15974_20210615_063300	6/15/21	American Goldfinch	Jesse Peterson	2	16.5		Nathaniel Reinartz	confirmed	
D	8	XROADS15974_20210617_073300	6/17/21	American Goldfinch	Jesse Peterson	9	4.0				
D	7	XROADS15974_20210615_063300	6/15/21	American Redstart	Jesse Peterson	9	31.0	Also at 9:45.5, 9:57.0	Nathaniel Reinartz	confirmed	
D	8	XROADS15974_20210617_073300	6/17/21	American Redstart	Jesse Peterson	1	49.0	Also at 4:10.5, 4:25.0			
D	12	XROADS15974_20210625_073400	6/25/21	American Redstart	Jesse Peterson	1	7.0				
D	14	XROADS15974_20210629_053600	6/29/21	American Redstart	Jesse Peterson	2	20.0				
D	15	XROADS15974_20210701_063700	6/1/21	American Redstart	Jesse Peterson	6	58.5				corrected filename from .600 to .700
D	1	XROADS15974_20210603_043500	6/3/21	American Robin	Jesse Peterson	0	0.0		Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	6/5/21	American Robin	Jesse Peterson	2	27.0	Also at 2:49.5			
D	3	XROADS15974_20210607_063400	6/7/21	American Robin	Jesse Peterson	1	51.0	Better at 2:29.0, 2:54.0			
D	4	XROADS15974_20210609_073300	6/9/21	American Robin	Jesse Peterson	0	0.0	Better at 1:03.5			
D	5	XROADS15974_20210611_043300	6/11/21	American Robin	Jesse Peterson	0	0.0				
D	6	XROADS15974_20210613_053300	6/13/21	American Robin	Jesse Peterson	6	11.0				
D	7	XROADS15974_20210615_063300	6/15/21	American Robin	Jesse Peterson	0	43.0	Better at 4:30.0			
D	8	XROADS15974_20210617_073300	6/17/21	American Robin	Jesse Peterson	0	44.0				
D	9	XROADS15974_20210619_043300	6/19/21	American Robin	Jesse Peterson	0	0.0				
D	12	XROADS15974_20210625_073400	6/25/21	American Robin	Jesse Peterson	0	0.5				
D	13	XROADS15974_20210627_043500	6/27/21	American Robin	Jesse Peterson	0	0.0				
D	14	XROADS15974_20210629_053600	6/29/21	American Robin	Jesse Peterson	0	5.0				
D	15	XROADS15974_20210701_063700	6/1/21	American Robin	Jesse Peterson	0	0.0				corrected filename from .600 to .700
D	1	XROADS15974_20210603_043500	6/3/21	Baltimore Oriole	Jesse Peterson	0	2.0		Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	6/5/21	Baltimore Oriole	Jesse Peterson	0	38.0				
D	3	XROADS15974_20210607_063400	6/7/21	Baltimore Oriole	Jesse Peterson	0	3.0				
D	4	XROADS15974_20210609_073300	6/9/21	Baltimore Oriole	Jesse Peterson	0	15.0				
D	6	XROADS15974_20210613_053300	6/13/21	Baltimore Oriole	Jesse Peterson	1	53.5				
D	7	XROADS15974_20210615_063300	6/15/21	Baltimore Oriole	Jesse Peterson	0	8.0				
D	8	XROADS15974_20210617_073300	6/17/21	Baltimore Oriole	Jesse Peterson	1	2.5				
D	10	XROADS15974_20210621_053300	6/21/21	Baltimore Oriole	Jesse Peterson	7	3.0				
D	11	XROADS15974_20210624_063400	6/24/21	Baltimore Oriole	Jesse Peterson	5	42.0				
D	12	XROADS15974_20210625_073400	6/25/21	Baltimore Oriole	Jesse Peterson	2	33.0				
D	15	XROADS15974_20210701_063700	6/1/21	Baltimore Oriole	Jesse Peterson	0	9.5				corrected filename from .600 to .700
D	5	XROADS15974_20210611_043300	6/11/21	Belted Kingfisher	Jesse Peterson	5	34.5		Nathaniel Reinartz	confirmed	

D	6	XROADS15974_20210613_053300	6/13/21	Belted Kingfisher	Jesse Peterson	0	2.0				
D	7	XROADS15974_20210615_063300	6/15/21	Belted Kingfisher	Jesse Peterson	0	19.5				
D	13	XROADS15974_20210627_043500	6/27/21	Belted Kingfisher	Jesse Peterson	6	42.0				
D	1	XROADS15974_20210603_043500	6/3/21	Black-capped Chickadee	Jesse Peterson	4	7.0		Nathaniel Reinartz	confirmed	
D	3	XROADS15974_20210607_063400	6/7/21	Blue Jay	Jesse Peterson	0	33.0		Nathaniel Reinartz	confirmed	
D	1	XROADS15974_20210603_043500	6/3/21	Canada Goose	Jesse Peterson	0	0.0		Nathaniel Reinartz	confirmed	
D	3	XROADS15974_20210607_063400	6/7/21	Canada Goose	Jesse Peterson	2	52.5				
D	8	XROADS15974_20210617_073300	6/17/21	Canada Goose	Jesse Peterson	1	29.5				
D	2	XROADS15974_20210605_053500	6/5/21	Cedar Waxwing	Jesse Peterson	2	52.0		Nathaniel Reinartz	confirmed	
D	3	XROADS15974_20210607_063400	6/7/21	Cedar Waxwing	Jesse Peterson	4	2.0				
D	4	XROADS15974_20210609_073300	6/9/21	Cedar Waxwing	Jesse Peterson	1	41.0				
D	7	XROADS15974_20210615_063300	6/15/21	Cedar Waxwing	Jesse Peterson	0	51.5				
D	8	XROADS15974_20210617_073300	6/17/21	Cedar Waxwing	Jesse Peterson	7	13.0				
D	9	XROADS15974_20210619_043300	6/19/21	Cedar Waxwing	Jesse Peterson	7	22.0				
D	12	XROADS15974_20210625_073400	6/25/21	Cedar Waxwing	Jesse Peterson	0	33.5				
D	14	XROADS15974_20210629_053600	6/29/21	Cedar Waxwing	Jesse Peterson	0	35.5				
D	15	XROADS15974_20210701_063700	6/1/21	Cedar Waxwing	Jesse Peterson	0	12.0				corrected filename from .600 to .700
D	4	XROADS15974_20210609_073300	6/9/21	Chipping Sparrow	Jesse Peterson	1	45.0		Nathaniel Reinartz	confirmed	
D	8	XROADS15974_20210617_073300	6/17/21	Common Grackle	Jesse Peterson	0	58.5		Nathaniel Reinartz	confirmed	
D	10	XROADS15974_20210621_053300	6/21/21	Common Grackle	Jesse Peterson	8	33.0				
D	11	XROADS15974_20210624_063400	6/24/21	Common Grackle	Jesse Peterson	0	55.0				
D	12	XROADS15974_20210625_073400	6/25/21	Common Grackle	Jesse Peterson	0	17.0				
D	14	XROADS15974_20210629_053600	6/29/21	Common Grackle	Jesse Peterson	4	25.0				
D	15	XROADS15974_20210701_063700	6/1/21	Common Grackle	Jesse Peterson	0	42.0				corrected filename from .600 to .700
D	3	XROADS15974_20210607_063400	6/7/21	Common Yellowthroat	Jesse Peterson	4	9.5		Nathaniel Reinartz	confirmed	
D	4	XROADS15974_20210609_073300	6/9/21	Common Yellowthroat	Jesse Peterson	0	14.0				
D	5	XROADS15974_20210611_043300	6/11/21	Common Yellowthroat	Jesse Peterson	1	33.0				
D	14	XROADS15974_20210629_053600	6/29/21	Common Yellowthroat	Jesse Peterson	1	52.0				
D	15	XROADS15974_20210701_063700	6/1/21	Common Yellowthroat	Jesse Peterson	6	6.5				corrected filename from .600 to .700
D	6	XROADS15974_20210613_053300	6/13/21	Dickcissel	Jesse Peterson	2	13.0	Again at 2:46.5, 2:52.0, 3:14.5	Nathaniel Reinartz	confirmed	
D	15	XROADS15974_20210701_063700	6/1/21	Downy Woodpecker	Jesse Peterson	3	33.5		Nathaniel Reinartz	confirmed--there seems to be a typo in the file name--the correct file is: XROADS15974_20210701_063700	corrected filename from .600 to .700
D	14	XROADS15974_20210629_053600	6/29/21	Eastern Wood-Pewee	Jesse Peterson	7	35.0	Again at 8:42.0	Nathaniel Reinartz	confirmed	
D	9	XROADS15974_20210619_043300	6/19/21	Great Blue Heron	Jesse Peterson	6	21.5	Croak; Not certain	Nathaniel Reinartz	confirmed	
D	15	XROADS15974_20210701_063700	6/1/21	Great Crested Flycatcher	Jesse Peterson	3	23.0		Nathaniel Reinartz	confirmed--there seems to be a typo in the file name--the correct file is: XROADS15974_20210701_063700	corrected filename from .600 to .700
D	8	XROADS15974_20210617_073300	6/17/21	Hairy Woodpecker	Jesse Peterson	3	3.0		Nathaniel Reinartz	confirmed	
D	4	XROADS15974_20210609_073300	6/9/21	House Wren	Jesse Peterson	0	2.0		Nathaniel Reinartz	confirmed	
D	7	XROADS15974_20210615_063300	6/15/21	House Wren	Jesse Peterson	0	7.0				
D	8	XROADS15974_20210617_073300	6/17/21	House Wren	Jesse Peterson	1	57.0				
D	9	XROADS15974_20210619_043300	6/19/21	House Wren	Jesse Peterson	0	25.5				
D	10	XROADS15974_20210621_053300	6/21/21	House Wren	Jesse Peterson	0	18.0				
D	11	XROADS15974_20210624_063400	6/24/21	House Wren	Jesse Peterson	8	11.0				
D	14	XROADS15974_20210629_053600	6/29/21	House Wren	Jesse Peterson	0	0.5				
D	15	XROADS15974_20210701_063700	6/1/21	House Wren	Jesse Peterson	1	25.0				corrected filename from .600 to .700
D	14	XROADS15974_20210629_053600	6/29/21	Indigo Bunting	Jesse Peterson	3	28.0	Again at 3:40.0	Nathaniel Reinartz	confirmed	
D	1	XROADS15974_20210603_043500	6/3/21	Killdeer	Jesse Peterson	0	0.0	Song at 1:04.0	Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	6/5/21	Killdeer	Jesse Peterson	0	7.0	Better at 4:25.0			
D	3	XROADS15974_20210607_063400	6/7/21	Killdeer	Jesse Peterson	0	47.0				
D	4	XROADS15974_20210609_073300	6/9/21	Killdeer	Jesse Peterson	0	20.0				
D	5	XROADS15974_20210611_043300	6/11/21	Killdeer	Jesse Peterson	4	30.0				
D	6	XROADS15974_20210613_053300	6/13/21	Killdeer	Jesse Peterson	0	0.0				
D	7	XROADS15974_20210615_063300	6/15/21	Killdeer	Jesse Peterson	3	2.0				
D	8	XROADS15974_20210617_073300	6/17/21	Killdeer	Jesse Peterson	0	3.0				
D	9	XROADS15974_20210619_043300	6/19/21	Killdeer	Jesse Peterson	0	57.0				
D	10	XROADS15974_20210621_053300	6/21/21	Killdeer	Jesse Peterson	7	11.0				
D	11	XROADS15974_20210624_063400	6/24/21	Killdeer	Jesse Peterson	2	51.0				
D	12	XROADS15974_20210625_073400	6/25/21	Killdeer	Jesse Peterson	0	24.0				
D	13	XROADS15974_20210627_043500	6/27/21	Killdeer	Jesse Peterson	7	54.0				
D	14	XROADS15974_20210629_053600	6/29/21	Killdeer	Jesse Peterson	1	5.0				
D	1	XROADS15974_20210603_043500	6/3/21	Mallard	Jesse Peterson	5	5.0	Better at 6:47.5	Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	6/5/21	Mallard	Jesse Peterson	1	5.0				
D	3	XROADS15974_20210607_063400	6/7/21	Mallard	Jesse Peterson	6	37.5				

D	5	XROADS15974_20210611_043300	6/11/21	Mallard	Jesse Peterson	2	54.0					
D	6	XROADS15974_20210613_053300	6/13/21	Mallard	Jesse Peterson	5	36.0					
D	1	XROADS15974_20210603_043500	6/3/21	Mourning Dove	Jesse Peterson	8	34.5			Nathaniel Reinartz	confirmed	
D	3	XROADS15974_20210607_063400	6/7/21	Mourning Dove	Jesse Peterson	2	20.0					
D	5	XROADS15974_20210611_043300	6/11/21	Mourning Dove	Jesse Peterson	1	44.0					
D	6	XROADS15974_20210613_053300	6/13/21	Mourning Dove	Jesse Peterson	6	3.0					
D	9	XROADS15974_20210619_043300	6/19/21	Mourning Dove	Jesse Peterson	0	0.0					
D	14	XROADS15974_20210629_053600	6/29/21	Mourning Dove	Jesse Peterson	6	32.0					
D	15	XROADS15974_20210701_063700	6/1/21	Mourning Dove	Jesse Peterson	0	7.0					corrected filename from .600 to .700
D	6	XROADS15974_20210613_053300	6/13/21	Northern Cardinal	Jesse Peterson	4	14.5			Nathaniel Reinartz	confirmed	
D	9	XROADS15974_20210619_043300	6/19/21	Northern Cardinal	Jesse Peterson	0	0.0					
D	10	XROADS15974_20210621_053300	6/21/21	Northern Cardinal	Jesse Peterson	8	2.0					
D	12	XROADS15974_20210625_073400	6/25/21	Northern Cardinal	Jesse Peterson	0	20.5					
D	13	XROADS15974_20210627_043500	6/27/21	Northern Cardinal	Jesse Peterson	4	17.0					
D	14	XROADS15974_20210629_053600	6/29/21	Northern Cardinal	Jesse Peterson	0	53.5					
D	15	XROADS15974_20210701_063700	6/1/21	Northern Cardinal	Jesse Peterson	4	53.0					corrected filename from .600 to .700
D	4	XROADS15974_20210609_073300	6/9/21	Northern Flicker	Jesse Peterson	1	52.0			Nathaniel Reinartz	confirmed	
D	8	XROADS15974_20210617_073300	6/17/21	Pileated Woodpecker	Jesse Peterson	5	3.0	or lazy sounding Northern Flicker		Nathaniel Reinartz	confirmed	
D	14	XROADS15974_20210629_053600	6/29/21	Red-bellied Woodpecker	Jesse Peterson	6	53.0			Nathaniel Reinartz	confirmed	
D	12	XROADS15974_20210625_073400	6/25/21	Red-eyed Vireo	Jesse Peterson	0	50.5	Better at 2:32.0 thru 2:40.0		Nathaniel Reinartz	confirmed	
D	14	XROADS15974_20210629_053600	6/29/21	Red-eyed Vireo	Jesse Peterson	8	6.0					
D	15	XROADS15974_20210701_063700	6/1/21	Red-eyed Vireo	Jesse Peterson	0	29.0					corrected filename from .600 to .700
D	1	XROADS15974_20210603_043500	6/3/21	Red-winged Blackbird	Jesse Peterson	0	6.0			Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	6/5/21	Red-winged Blackbird	Jesse Peterson	0	3.0					
D	3	XROADS15974_20210607_063400	6/7/21	Red-winged Blackbird	Jesse Peterson	0	3.0					
D	4	XROADS15974_20210609_073300	6/9/21	Red-winged Blackbird	Jesse Peterson	0	5.0					
D	5	XROADS15974_20210611_043300	6/11/21	Red-winged Blackbird	Jesse Peterson	0	4.0					
D	6	XROADS15974_20210613_053300	6/13/21	Red-winged Blackbird	Jesse Peterson	0	1.0					
D	7	XROADS15974_20210615_063300	6/15/21	Red-winged Blackbird	Jesse Peterson	0	2.0					
D	8	XROADS15974_20210617_073300	6/17/21	Red-winged Blackbird	Jesse Peterson	0	1.0					
D	9	XROADS15974_20210619_043300	6/19/21	Red-winged Blackbird	Jesse Peterson	0	3.0					
D	10	XROADS15974_20210621_053300	6/21/21	Red-winged Blackbird	Jesse Peterson	0	3.0					
D	11	XROADS15974_20210624_063400	6/24/21	Red-winged Blackbird	Jesse Peterson	0	0.0	6/23 files did not work; used 6/24				
D	12	XROADS15974_20210625_073400	6/25/21	Red-winged Blackbird	Jesse Peterson	0	1.5					
D	13	XROADS15974_20210627_043500	6/27/21	Red-winged Blackbird	Jesse Peterson	7	15.5					
D	14	XROADS15974_20210629_053600	6/29/21	Red-winged Blackbird	Jesse Peterson	0	2.0					
D	15	XROADS15974_20210701_063700	6/1/21	Red-winged Blackbird	Jesse Peterson	0	3.0					corrected filename from .600 to .700
D	1	XROADS15974_20210603_043500	6/3/21	Rose-breasted Grosbeak	Jesse Peterson	3	44.0			Nathaniel Reinartz	confirmed	
D	9	XROADS15974_20210619_043300	6/19/21	Sandhill Crane	Jesse Peterson	0	11.0			Nathaniel Reinartz	confirmed	
D	1	XROADS15974_20210603_043500	6/3/21	Song Sparrow	Jesse Peterson	4	28.0			Nathaniel Reinartz	confirmed	
D	3	XROADS15974_20210607_063400	6/7/21	Spotted Sandpiper	Jesse Peterson	1	53.0	Lesser Yellowlegs Not certain; may be Killdeer		Nathaniel Reinartz	I think this is a Spotted Sandpiper--I found another on XROADS15974_20210615_063300 at 3:02	G. Casper - agree SPSA
D	4	XROADS15974_20210609_073300	6/9/21	Spotted Sandpiper	Jesse Peterson	4	26.0	Lesser Yellowlegs Not certain; may be Killdeer		Nathaniel Reinartz	I think this is a Spotted Sandpiper--I found another on XROADS15974_20210615_063300 at 3:03	G. Casper - agree SPSA
D	5	XROADS15974_20210611_043300	6/11/21	Spotted Sandpiper	Jesse Peterson	1	0.0	Unknown		Nathaniel Reinartz	Spotted Sandpiper	G. Casper - agree SPSA
D	8	XROADS15974_20210617_073300	6/17/21	Spotted Sandpiper	Jesse Peterson	9	25.0	Is this a Killdeer?		Nathaniel Reinartz	Spotted Sandpiper	G. Casper - agree SPSA
D	1	XROADS15974_20210603_043500	6/3/21	Tree Swallow	Jesse Peterson	3	53.5			Nathaniel Reinartz	confirmed	
D	2	XROADS15974_20210605_053500	6/5/21	Tree Swallow	Jesse Peterson	1	0.5					
D	3	XROADS15974_20210607_063400	6/7/21	Tree Swallow	Jesse Peterson	0	12.0					
D	5	XROADS15974_20210611_043300	6/11/21	Tree Swallow	Jesse Peterson	7	40.0					
D	6	XROADS15974_20210613_053300	6/13/21	Tree Swallow	Jesse Peterson	3	26.0					
D	8	XROADS15974_20210617_073300	6/17/21	Tree Swallow	Jesse Peterson	4	39.0					
D	15	XROADS15974_20210701_063700	6/1/21	Tree Swallow	Jesse Peterson	0	2.0					corrected filename from .600 to .700
D	3	XROADS15974_20210607_063400	6/7/21	Warbling Vireo	Jesse Peterson	3	20.0	better at 7:11.0		Nathaniel Reinartz	confirmed	
D	4	XROADS15974_20210609_073300	6/9/21	Warbling Vireo	Jesse Peterson	0	7.0					
D	5	XROADS15974_20210611_043300	6/11/21	Warbling Vireo	Jesse Peterson	6	17.0					
D	8	XROADS15974_20210617_073300	6/17/21	Warbling Vireo	Jesse Peterson	1	21.0					
D	15	XROADS15974_20210701_063700	6/1/21	Warbling Vireo	Jesse Peterson	0	51.0					corrected filename from .600 to .700
D	9	XROADS15974_20210619_043300	6/19/21	Wood Duck	Jesse Peterson	6	26.0			Nathaniel Reinartz	confirmed	
D	11	XROADS15974_20210624_063400	6/24/21	Wood Duck	Jesse Peterson	3	39.5					
D	3	XROADS15974_20210607_063400	6/7/21	Yellow Warbler	Jesse Peterson	2	14.5			Nathaniel Reinartz	confirmed	

D	4	XROADS15974_20210609_073300	6/9/21	Yellow Warbler	Jesse Peterson	0	1.0				
D	6	XROADS15974_20210613_053300	6/13/21	Yellow Warbler	Jesse Peterson	3	51.0				
D	7	XROADS15974_20210615_063300	6/15/21	Yellow Warbler	Jesse Peterson	5	38.0				
D	11	XROADS15974_20210624_063400	6/24/21	Yellow Warbler	Jesse Peterson	5	35.0	Again at 5:50.0			
E	1	XROADS-SM3_0+1_20210601_044000	6/1/21	American Crow	Jesse Peterson	3	27.0		Nathaniel Reinartz	confirmed	
E	2	XROADS-SM3_0+1_20210603_053900	6/3/21	American Crow	Jesse Peterson	0	31.0				
E	3	XROADS-SM3_0+1_20210605_063800	6/5/21	American Crow	Jesse Peterson	2	27.0				
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	American Crow	Jesse Peterson	0	41.0				
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	American Crow	Jesse Peterson	0	11.0				
E	9	XROADS-SM3_0+1_20210617_043700	6/17/21	American Crow	Jesse Peterson	2	52.5				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	American Crow	Jesse Peterson	1	42.5				
E	12	XROADS-SM3_0+1_20210623_073800	6/23/21	American Crow	Jesse Peterson	2	37.0				
E	2	XROADS-SM3_0+1_20210603_053900	6/3/21	American Goldfinch	Jesse Peterson	0	10.0		Nathaniel Reinartz	confirmed	
E	3	XROADS-SM3_0+1_20210605_063800	6/5/21	American Goldfinch	Jesse Peterson	2	51.0				
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	American Goldfinch	Jesse Peterson	0	17.0				
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	American Goldfinch	Jesse Peterson	5	45.0				
E	7	XROADS-SM3_0+1_20210613_063700	6/13/21	American Goldfinch	Jesse Peterson	0	52.5				
E	8	XROADS-SM3_0+1_20210615_073700	6/15/21	American Goldfinch	Jesse Peterson	0	33.0				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	American Goldfinch	Jesse Peterson	0	37.0				
E	11	XROADS-SM3_0+1_20210622_063800	6/22/21	American Goldfinch	Jesse Peterson	3	13.0				
E	12	XROADS-SM3_0+1_20210623_073800	6/23/21	American Goldfinch	Jesse Peterson	5	57.0	Better at 8:01.0			
E	13	XROADS-SM3_0+1_20210625_043800	6/25/21	American Goldfinch	Jesse Peterson	8	32.0				
E	15	XROADS-SM3_0+1_20210629_064000	6/29/21	American Goldfinch	Jesse Peterson	0	12.5	Bet at 0:54.5			
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	American Redstart	Jesse Peterson	1	4.5		Nathaniel Reinartz	confirmed	
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	American Redstart	Jesse Peterson	0	15.0				
E	1	XROADS-SM3_0+1_20210601_044000	6/1/21	American Robin	Jesse Peterson	0	2.0		Nathaniel Reinartz	confirmed	
E	2	XROADS-SM3_0+1_20210603_053900	6/3/21	American Robin	Jesse Peterson	2	25.0				
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	American Robin	Jesse Peterson	6	5.0				
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	American Robin	Jesse Peterson	0	4.0				
E	8	XROADS-SM3_0+1_20210615_073700	6/15/21	American Robin	Jesse Peterson	2	14.0				
E	9	XROADS-SM3_0+1_20210617_043700	6/17/21	American Robin	Jesse Peterson	0	0.0				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	American Robin	Jesse Peterson	0	2.0				
E	11	XROADS-SM3_0+1_20210622_063800	6/22/21	American Robin	Jesse Peterson	0	2.5	6/21 was all rain noise; used 6/22 file instead			
E	12	XROADS-SM3_0+1_20210623_073800	6/23/21	American Robin	Jesse Peterson	0	42.5				
E	13	XROADS-SM3_0+1_20210625_043800	6/25/21	American Robin	Jesse Peterson	0	7.0				
E	14	XROADS-SM3_0+1_20210627_053900	6/27/21	American Robin	Jesse Peterson	6	1.0				
E	15	XROADS-SM3_0+1_20210629_064000	6/29/21	American Robin	Jesse Peterson	0	27.5	Song at 2:03.0			
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	Baltimore Oriole	Jesse Peterson	2	50.0		Nathaniel Reinartz	confirmed	
E	1	XROADS-SM3_0+1_20210601_044000	6/1/21	Black-capped Chickadee	Jesse Peterson	1	43.0		Nathaniel Reinartz	confirmed	
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	Black-capped Chickadee	Jesse Peterson	4	29.0				
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	Black-capped Chickadee	Jesse Peterson	1	5.5				
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Black-capped Chickadee	Jesse Peterson	5	21.5				
E	9	XROADS-SM3_0+1_20210617_043700	6/17/21	Black-capped Chickadee	Jesse Peterson	0	2.0				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	Black-capped Chickadee	Jesse Peterson	7	19.0				
E	13	XROADS-SM3_0+1_20210625_043800	6/25/21	Black-capped Chickadee	Jesse Peterson	0	0.0				
E	14	XROADS-SM3_0+1_20210627_053900	6/27/21	Black-capped Chickadee	Jesse Peterson	0	6.5				
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	Blue Jay	Jesse Peterson	5	53.0		Nathaniel Reinartz	confirmed	
E	7	XROADS-SM3_0+1_20210613_063700	6/13/21	Blue Jay	Jesse Peterson	9	15.5				
E	9	XROADS-SM3_0+1_20210617_043700	6/17/21	Blue Jay	Jesse Peterson	0	4.0				
E	13	XROADS-SM3_0+1_20210625_043800	6/25/21	Blue Jay	Jesse Peterson	3	18.0				
E	15	XROADS-SM3_0+1_20210629_064000	6/29/21	Blue Jay	Jesse Peterson	7	18.5				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	Blue-winged Warbler	Jesse Peterson	7	22.5		Nathaniel Reinartz	confirmed	
E	12	XROADS-SM3_0+1_20210623_073800	6/23/21	Cedar Waxwing	Jesse Peterson	3	22.0		Nathaniel Reinartz	confirmed	
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Chipping Sparrow	Jesse Peterson	8	12.0		Nathaniel Reinartz	confirmed	
E	11	XROADS-SM3_0+1_20210622_063800	6/22/21	Common Grackle	Jesse Peterson	5	2.5		Nathaniel Reinartz	confirmed	
E	2	XROADS-SM3_0+1_20210603_053900	6/3/21	Common Yellowthroat	Jesse Peterson	0	3.0		Nathaniel Reinartz	confirmed	
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	Common Yellowthroat	Jesse Peterson	0	2.0				
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Common Yellowthroat	Jesse Peterson	0	15.0				
E	11	XROADS-SM3_0+1_20210622_063800	6/22/21	Downy Woodpecker	Jesse Peterson	6	38.5	Chip; more at 7:56.0	Nathaniel Reinartz	confirmed	
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	Eastern Wood-Pewee	Jesse Peterson	2	52.0		Nathaniel Reinartz	confirmed	
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	Eastern Wood-Pewee	Jesse Peterson	6	18.5				
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Eastern Wood-Pewee	Jesse Peterson	0	4.0				
E	7	XROADS-SM3_0+1_20210613_063700	6/13/21	Eastern Wood-Pewee	Jesse Peterson	0	7.0				
E	8	XROADS-SM3_0+1_20210615_073700	6/15/21	Eastern Wood-Pewee	Jesse Peterson	1	6.0				
E	12	XROADS-SM3_0+1_20210623_073800	6/23/21	Eastern Wood-Pewee	Jesse Peterson	8	40.5				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	European Starling	Jesse Peterson	9	53.0	Not certain	Nathaniel Reinartz	confirmed	
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Gray Catbird	Jesse Peterson	0	45.0	Continues beyond 1:15	Nathaniel Reinartz	confirmed	
E	2	XROADS-SM3_0+1_20210603_053900	6/3/21	Great Crested Flycatcher	Jesse Peterson	0	12.0		Nathaniel Reinartz	confirmed	
E	7	XROADS-SM3_0+1_20210613_063700	6/13/21	Great Crested Flycatcher	Jesse Peterson	2	45.0	Better at 4:18.0			
E	12	XROADS-SM3_0+1_20210623_073800	6/23/21	Great Crested Flycatcher	Jesse Peterson	1	21.0				
E	13	XROADS-SM3_0+1_20210625_043800	6/25/21	Great Crested Flycatcher	Jesse Peterson	8	37.0				
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Green Heron	Jesse Peterson	3	50.0	Squawk	Nathaniel Reinartz	confirmed	

E	2	XROADS-SM3_0+1_20210603_053900	6/3/21	House Wren	Jesse Peterson	0	30.0		Nathaniel Reinartz	confirmed	
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	House Wren	Jesse Peterson	4	7.0				
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	House Wren	Jesse Peterson	0	2.0				
E	7	XROADS-SM3_0+1_20210613_063700	6/13/21	House Wren	Jesse Peterson	0	57.5				
E	8	XROADS-SM3_0+1_20210615_073700	6/15/21	House Wren	Jesse Peterson	7	26.0				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	House Wren	Jesse Peterson	1	37.0				
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	Indigo Bunting	Jesse Peterson	0	13.5		Nathaniel Reinartz	confirmed	
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	Indigo Bunting	Jesse Peterson	0	41.0				
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Indigo Bunting	Jesse Peterson	0	10.0				
E	8	XROADS-SM3_0+1_20210615_073700	6/15/21	Indigo Bunting	Jesse Peterson	0	49.0	Better at 1:22.0			
E	9	XROADS-SM3_0+1_20210617_043700	6/17/21	Indigo Bunting	Jesse Peterson	1	53.0				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	Indigo Bunting	Jesse Peterson	0	33.5				
E	11	XROADS-SM3_0+1_20210622_063800	6/22/21	Indigo Bunting	Jesse Peterson	0	26.0				
E	13	XROADS-SM3_0+1_20210625_043800	6/25/21	Indigo Bunting	Jesse Peterson	0	4.0				
E	14	XROADS-SM3_0+1_20210627_053900	6/27/21	Indigo Bunting	Jesse Peterson	0	3.0	Deafening tree frogs & spring peepers throughout.			
E	14	XROADS-SM3_0+1_20210627_053900	6/27/21	Mourning Dove	Jesse Peterson	1	30.0		Nathaniel Reinartz	confirmed	
E	1	XROADS-SM3_0+1_20210601_044000	6/1/21	Northern Cardinal	Jesse Peterson	0	0.0		Nathaniel Reinartz	confirmed	
E	2	XROADS-SM3_0+1_20210603_053900	6/3/21	Northern Cardinal	Jesse Peterson	3	47.5	Chip; song at 5:22.0			
E	3	XROADS-SM3_0+1_20210605_063800	6/5/21	Northern Cardinal	Jesse Peterson	0	4.0				
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	Northern Cardinal	Jesse Peterson	0	0.5				
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Northern Cardinal	Jesse Peterson	0	19.0				
E	7	XROADS-SM3_0+1_20210613_063700	6/13/21	Northern Cardinal	Jesse Peterson	2	43.0				
E	9	XROADS-SM3_0+1_20210617_043700	6/17/21	Northern Cardinal	Jesse Peterson	0	5.0				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	Northern Cardinal	Jesse Peterson	4	45.0				
E	11	XROADS-SM3_0+1_20210622_063800	6/22/21	Northern Cardinal	Jesse Peterson	2	0.0				
E	12	XROADS-SM3_0+1_20210623_073800	6/23/21	Northern Cardinal	Jesse Peterson	1	5.0				
E	13	XROADS-SM3_0+1_20210625_043800	6/25/21	Northern Cardinal	Jesse Peterson	0	1.5				
E	8	XROADS-SM3_0+1_20210615_073700	6/15/21	Red-bellied Woodpecker	Jesse Peterson	6	59.0		Nathaniel Reinartz	confirmed	
E	9	XROADS-SM3_0+1_20210617_043700	6/17/21	Red-bellied Woodpecker	Jesse Peterson	2	56.0				
E	2	XROADS-SM3_0+1_20210603_053900	6/3/21	Red-breasted Nuthatch	Jesse Peterson	2	55.0		Nathaniel Reinartz	confirmed	
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Red-breasted Nuthatch	Jesse Peterson	0	33.5				
E	9	XROADS-SM3_0+1_20210617_043700	6/17/21	Red-breasted Nuthatch	Jesse Peterson	0	56.0				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	Red-breasted Nuthatch	Jesse Peterson	6	49.5				
E	2	XROADS-SM3_0+1_20210603_053900	6/3/21	Red-eyed Vireo	Jesse Peterson	3	9.5	Better at 4:17.0	Nathaniel Reinartz	confirmed	
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	Red-eyed Vireo	Jesse Peterson	0	0.5	Better at 4:48.0			
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	Red-eyed Vireo	Jesse Peterson	1	44.0				
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Red-eyed Vireo	Jesse Peterson	1	36.5				
E	7	XROADS-SM3_0+1_20210613_063700	6/13/21	Red-eyed Vireo	Jesse Peterson	2	35.0				
E	8	XROADS-SM3_0+1_20210615_073700	6/15/21	Red-eyed Vireo	Jesse Peterson	2	21.5				
E	9	XROADS-SM3_0+1_20210617_043700	6/17/21	Red-eyed Vireo	Jesse Peterson	1	20.0	Better at 2:05.0			
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	Red-eyed Vireo	Jesse Peterson	0	3.0				
E	14	XROADS-SM3_0+1_20210627_053900	6/27/21	Red-eyed Vireo	Jesse Peterson	4	54.0				
E	15	XROADS-SM3_0+1_20210629_064000	6/29/21	Red-eyed Vireo	Jesse Peterson	6	59.0				
E	1	XROADS-SM3_0+1_20210601_044000	6/1/21	Red-winged Blackbird	Jesse Peterson	1	10.0		Nathaniel Reinartz	confirmed	
E	2	XROADS-SM3_0+1_20210603_053900	6/3/21	Red-winged Blackbird	Jesse Peterson	0	24.0				
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	Red-winged Blackbird	Jesse Peterson	0	40.5				
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Red-winged Blackbird	Jesse Peterson	0	0.0				
E	7	XROADS-SM3_0+1_20210613_063700	6/13/21	Red-winged Blackbird	Jesse Peterson	0	5.5				
E	8	XROADS-SM3_0+1_20210615_073700	6/15/21	Red-winged Blackbird	Jesse Peterson	1	25.0				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	Red-winged Blackbird	Jesse Peterson	9	30.0				
E	11	XROADS-SM3_0+1_20210622_063800	6/22/21	Red-winged Blackbird	Jesse Peterson	6	52.0				
E	12	XROADS-SM3_0+1_20210623_073800	6/23/21	Red-winged Blackbird	Jesse Peterson	1	36.0				
E	14	XROADS-SM3_0+1_20210627_053900	6/27/21	Red-winged Blackbird	Jesse Peterson	0	53.0				
E	15	XROADS-SM3_0+1_20210629_064000	6/29/21	Red-winged Blackbird	Jesse Peterson	5	30.0				
E	1	XROADS-SM3_0+1_20210601_044000	6/1/21	Song Sparrow	Jesse Peterson	0	7.5		Nathaniel Reinartz	confirmed	
E	4	XROADS-SM3_0+1_20210607_073800	6/7/21	Song Sparrow	Jesse Peterson	0	32.0				
E	8	XROADS-SM3_0+1_20210615_073700	6/15/21	Song Sparrow	Jesse Peterson	2	7.0				
E	11	XROADS-SM3_0+1_20210622_063800	6/22/21	Song Sparrow	Jesse Peterson	7	44.0				
E	12	XROADS-SM3_0+1_20210623_073800	6/23/21	Song Sparrow	Jesse Peterson	4	17.0				
E	15	XROADS-SM3_0+1_20210629_064000	6/29/21	Song Sparrow	Jesse Peterson	0	5.5				
E	1	XROADS-SM3_0+1_20210601_044000	6/1/21	Tree Swallow	Jesse Peterson	4	9.0		Nathaniel Reinartz	confirmed	
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	Warbling Vireo	Jesse Peterson	6	27.0		Nathaniel Reinartz	confirmed	
E	8	XROADS-SM3_0+1_20210615_073700	6/15/21	Warbling Vireo	Jesse Peterson	3	8.0				
E	5	XROADS-SM3_0+1_20210609_043700	6/9/21	Wood Thrush	Jesse Peterson	7	34.0		Nathaniel Reinartz	confirmed	
E	6	XROADS-SM3_0+1_20210611_053700	6/11/21	Wood Thrush	Jesse Peterson	0	2.0				
E	9	XROADS-SM3_0+1_20210617_043700	6/17/21	Wood Thrush	Jesse Peterson	8	22.0				
E	13	XROADS-SM3_0+1_20210625_043800	6/25/21	Wood Thrush	Jesse Peterson	0	43.0				
E	1	XROADS-SM3_0+1_20210601_044000	6/1/21	Yellow-rumped Warbler	Jesse Peterson	0	3.5		Nathaniel Reinartz	confirmed	
E	9	XROADS-SM3_0+1_20210617_043700	6/17/21	Yellow-rumped Warbler	Jesse Peterson	0	5.5				
E	10	XROADS-SM3_0+1_20210619_053700	6/19/21	Yellow-rumped Warbler	Jesse Peterson	0	1.0				
E	13	XROADS-SM3_0+1_20210625_043800	6/25/21	Yellow-rumped Warbler	Jesse Peterson	0	49.0				
E	15	XROADS-SM3_0+1_20210629_064000	6/29/21	Yellow-rumped Warbler	Jesse Peterson	0	5.0				

Standard Operating Procedure for: Breeding Bird Point Count Surveys Version 2.2a

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1.0 Introduction

This standard operating procedure addresses methods for performing breeding bird point count surveys. Point counts are a survey method which can be used for inventory, or for long-term monitoring, of breeding birds.

2.0 Timeline

February-April:

- Contact potential surveyors and obtain commitments for properties for June surveys.

May:

- Distribute survey instructions, forms, and supplies to all surveyors.

June:

- Check in with surveyors to ensure surveys are being run efficiently.

July:

- Collect and proof data with surveyors.

3.0 Instructions

Strict adherence to the rules is essential for proper analysis of results. If unable to conduct the survey please contact the coordinator. Please read all instructions prior to conducting surveys. If unable to meet the desired level of effort (number of surveys), please discuss with the coordinator.

3.1 Read the Entire Protocol

Periodically read through the entire protocol. Be sure to understand the purpose for which the various types of data will be collected and review the types of measurements and samples needed. Be alert for items that may need revision and bring these to the attention of the coordinator.

3.2 Requirements

All surveyors are required to know how to identify all species likely to be encountered. Numerous books and online resources are available. Notify the coordinator if you need any materials to be provided. It is highly recommended that new volunteers first train with an established volunteer, and successfully complete the Birder Certification Online program (<https://www.birdercertification.org/>). It is advisable, even for experienced observers, to learn the less common species on the available records and tapes. Since identification by songs and calls is required, acute hearing is extremely important. An observer with a hearing loss should not conduct Breeding Bird Surveys. Always wear proper clothing and be safe.

3.3 Standard Operating Procedure

3.3.1 Timing of Sampling

Breeding bird surveys must be conducted in June between 0.5 hour before sunrise and 10:00 A.M.

3.3.2 Proper Conditions for Sampling

Surveys must be run under satisfactory weather conditions: good visibility, little or no precipitation, light winds. Occasional light drizzle or a very brief shower should not affect bird activity but fog, steady drizzle, or prolonged rain should be avoided. Counts preferably should be made on mornings when the wind is less than 8 mph (13 kph) and not taken if the wind exceeds 12 mph (19 kph). If you can walk faster than the wind is blowing, wind conditions are very satisfactory (see attached wind and sky codes).

3.3.3 Pre-survey Preparation

1. *Scout the site(s) if possible.* A site map will be provided with the point locations and access instructions. The minimum distance between point count stations is 250 m. Listen from these points. Observers should visit the site(s) if possible prior to beginning surveys to become familiar with the area. For sites being sampled the first time, the locations on the maps are close to where counts should be made, but surveyors can move spots somewhat to coincide with a landmark or to make them easier to find on subsequent surveys. Always GPS new points and provide coordinates to the coordinator.
2. *Prepare Vehicles.* Make sure your vehicle has enough gas to complete the survey.
3. *Safety.* Tell someone where you are going before heading out for the survey.
4. *Equipment.* Make certain you have all necessary equipment: data forms, property map with survey locations, clipboard, binoculars, watch or stop-watch with second hand (or timer), bird field guide, WSO bird codes list, thermometer, pencils (dark, soft lead) or pen (dark ink), bug spray (optional), appropriate outdoor clothing.

3.3.4 Survey Procedure

1. *Sampling effort.* Conduct 8-9 counts at each point, either 2 replicates on each of 4 mornings, 3 replicates on each of 3 mornings, or single counts on 8-9 mornings following the rules below. On a given morning, count at each point once, then rotate back and repeat a second time (and third if appropriate). Wait at least 30 minutes between counts of the same point on the same day.
2. *Survey locations:* Listen and observe from the point(s) provided. It is important that the survey(s) be run from exactly the same location from year to year.
3. *Counting:* One and only one observer should count birds. Counting should be done from the stationary point. Every bird seen or heard by the one observer should be counted during the 10 minutes at each point with the minute of first detection of the species recorded. Do not exceed 10 minutes because you are sure a certain "good bird" is there and not singing - it will probably be recorded some

other year or on your next count. Do not stay less or more than 10 minutes. Absolutely no method of coaxing birds is allowed under any circumstances during the 10 minute counting periods - no “spishing” or tape playing or any other technique. It is crucial that all surveys be done consistently, because one goal of the survey is to track trends in occupancy by comparing consistent effort. *Birds seen between stops, before and after the 10 minutes, or on scouting runs should be noted on the bottom of the data sheet under “Comments”* – these contribute to a species checklist for the property and help to validate the 10-minute count data.

4. *Which birds to count:* Count individuals (except dependent young including downy chicks of water and shorebirds) of all species seen or heard during each minute of the 10-minute period. Estimates should be used only for flocks too large to count in the brief time they are seen. Do not use check marks (i.e. marking presence of bird rather than actual number of individuals) even for abundant species. No one will detect all birds within hearing or seeing distance. Many birds present may not be active during each 10-minute count, and you must not try to guess how many you are missing. Report only those birds actually seen or heard during the prescribed 10-minute counts. Do not re-count individual birds if they are detected more than once within a single 10-minute count period (you can re-count them on a subsequent count period the same or another day). Record only the first detection of a species along with the minute (0, 1, 2, 3...9) it was first observed (then adjust the count of individuals as the remaining time elapses). The first time period is coded 0, since that is what a timer will indicate. This is relatively easy to do and allows the data analyst to group times together in an optimal way. Any bird known to be a non-breeder (late migrant, injured bird, or summer vagrant) should be included but marked on the data sheet as such under “Notes”. Easily identifiable subspecies of birds such as Northern Flicker may be identified. Any species unusual in the area should be supported by including some details of the observation.
5. Note any evidence of reproduction under Breeding Criteria and Codes. Follow Wisconsin Breeding Bird Atlas guidance for this as provided (http://wsobirds.org/images/atlas/WBBA_II_Handbook.pdf).
6. *Sky, Wind, and Noise Codes:* Use the code system provided on the data sheet to record these metrics.
7. *Route Problems:* If any problems arise notify the coordinator as soon as possible.
8. *Record Keeping:* Record data as you go. Do not wait to record birds after the 10 minutes have been completed. This leads to errors of omission and significantly delays the completion of the survey. Please scan (or copy) and submit your paper data forms when your surveys are complete, and retain a copy in your office for reference and backup. Dictating observations to a tape recorder is not recommended because data can be lost by one manner of malfunction or another. Transferring the taped data is tedious and also subject to error. Another problem is that the tape is technically the original field sheet and it would be unreasonable for people to send us tapes. If you must use a tape recorder indicate this on the assistant line and please be careful. With practice an observer can count and

record birds alone. Remember to record weather data at start and finish. Record the start and finish time for each point. Each point should have its own data sheet for each 10-minute count. Use a dark pencil or permanent marker on field sheets. Do not use a felt tip or ball point pens – the ink is not waterproof and can smudge or wash out. Complete a datasheet for each point even if no birds are detected.

9. *Abbreviations:* If you abbreviate bird names use the standard WSO banding codes provided. Please carefully enter WSO codes as some are not intuitive and ***incorrect codes are the largest source of error in our data processing.*** If you are not sure please use the common name. You must use common names when transcribing data to the Excel template.

3.3.5 Post-survey

1. Consolidate all data sheets and place them in a secure dry location.
2. Transcribe data from the data sheets into the provided Excel spreadsheet (using common names not WSO codes). This should be done as soon as possible to minimize errors while memory is fresh.
3. Place paper data sheets in a safe dry place and make copies or scans for your own records.
4. At the end of the last survey, email the spreadsheet and deliver original (or legible scans of) paper field data sheets to the coordinator. **Congratulate yourself on a job well done!**

4.0 Forms and Attachments

- Breeding Bird Survey Form
- Excel data entry spreadsheet template
- WSO Codes