



Gulf Coast Network Breeding Bird Monitoring Annual Report

2014 Results from Gulf Islands National Seashore

Natural Resource Data Series NPS/GUIS/NRDS—2015/755



ON THE COVER

Eastern Towhee (*Pipilo erythrophthalmus*) from GUIS Naval Live Oaks Unit
Photograph by: William Finney, NPS Gulf Coast Network

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All manuscripts in the series receive the appropriate level of peer review to ensure that the information is scientifically credible, technically accurate, appropriately written for the intended audience, and designed and published in a professional manner.

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Acknowledgments

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Introduction

In 2012, the Gulf Coast Inventory and Monitoring Network (GULN) of the National Park Service implemented the first year of their long-term landbird monitoring protocol on Gulf Islands National Seashore (GUIS; Twedt 2010). Dan Twedt, of the USGS Patuxent Wildlife Research Center, developed a protocol building on existing peer reviewed methods for monitoring birds on each park in the GULN. This annual report provides a summary of 2014 breeding bird monitoring efforts on GUIS, including: (1) a summary of the monitoring protocol, (2) a summary of point count results, and (3) a summary of birds detected at each of the park districts where monitoring occurred.

The GULN is located in portions of six states, spanning from Brownsville, Texas, to Pensacola, Florida, and north to Nashville, Tennessee. The network includes eight National Park Service (NPS) units: Big Thicket National Preserve (BITH), Gulf Islands National Seashore (GUIS), Jean Lafitte National Historical Park and Preserve (JELA), Natchez Trace Parkway (NATR), Palo Alto Battlefield National Historical Park (PAAL), Padre Island National Seashore (PAIS), San Antonio Missions National Historical Park (SAAN), and Vicksburg National Military Park (VICK).

GUIS is comprised of nearly 2,400 ha of emergent land divided between the Florida (GUIS-FL) and Mississippi (GUIS-MS) Districts (Figure 1). Over 80% of the resources within the park are submerged by water. The Mississippi District encompasses five large barrier islands (Horn Island, Petit Bois Island, East Ship Island, West Ship Island, and portions of Cat Island) that are accessible only by boat, in addition to the Davis Bayou Area located on the mainland south of Ocean Springs, MS. The Florida District includes portions of Santa Rosa Island, Perdido Key, and the Naval Live Oaks Area on the mainland. Bird monitoring strategies were developed, and are presented, separately for the Florida and Mississippi Districts.

Landbird monitoring contributes to the vital signs monitoring program that has been developed by the GULN (Segura et al. 2007). Breeding landbirds ranked highly among all of the potential vital signs evaluated by the GULN. Key reasons for monitoring landbirds in GUIS are that landbirds (1) come under the legal mandate related to the Endangered Species Act and Migratory Bird Treaty Act; (2) are specifically identified in the management objectives of the park; and (3) are potential indicators of the effects of local and regional changes in ecosystems because of their rapid metabolism and high ecological position in most food webs. In addition, comparable regional and national datasets exist for landbird monitoring adjacent to several GULN parks. The Gulf Coast is widely recognized to be a major flyway, breeding, and over-wintering area for many migratory species. Monitoring birds in parks can provide insight regarding habitat changes within parks and may contribute to regional or national databases that further our understanding of continental bird population trends. Ecologically, birds are an important and diverse component of park ecosystems.

This annual report provides an overview of the methodology and implementation of yearly field surveys. Results presented in this report are limited to general information about bird species presence at the sampling sites. Additional analyses and synthesis reports will be completed every five years starting from 2012, to include results of species detectability and density, community and habitat structure, and breeding bird status and trends.

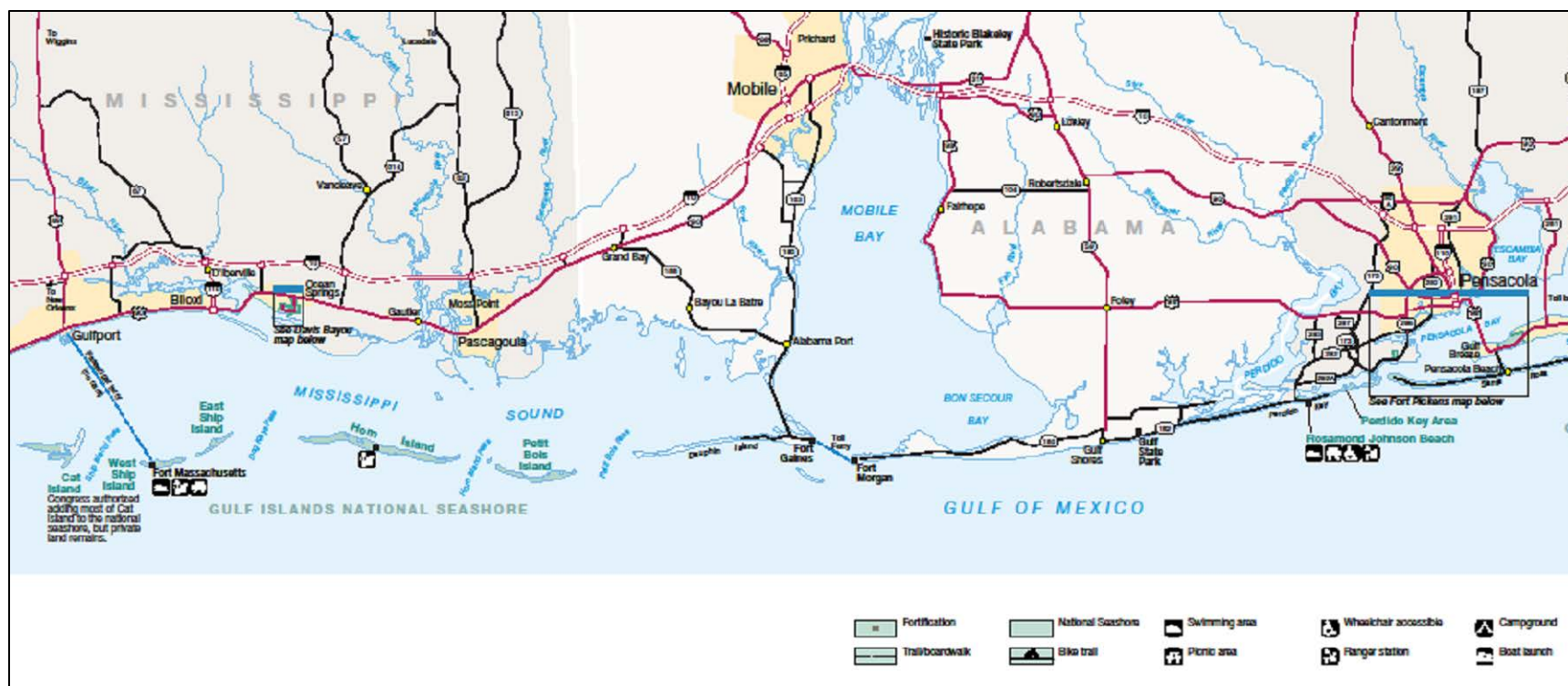


Figure 1. Park map of both MS and FL districts.

Methods

Sampling Design

Methods employed at GUIS to monitor breeding birds utilize a random location 10 minute point count with time and distance variables. Random points were derived using Hawth's Analysis Tool (Version 3.27) within ArcMap 9.2 GIS to select 48 survey points (separated by ≥ 250 m) for GUIS-FL district and 40 survey points for the GUIS-MS district. This allocation omitted land cover designated as barren (beach or dunes), water, or herbaceous emergent marsh as identified within 2001 National Land Cover data (Homer et al. 2007). The survey points were divided into four panels for each district, with two panels sampled each year during the breeding season. Surveys were conducted between one-half hour before sunrise and four hours after sunrise ($\sim 10:00$ h) during clement weather (i.e., no rain or high winds). At the first detection of each individual bird, observers recorded species identity, the time within 1-minute intervals (i.e., 0:00–:59 sec, 1:00–1:59 min, 2:00–2:59 min, 3:00–3:59 min, 4:00–4:59 min, 5:00–5:59 min, 6:00–6:59 min, 7:00–7:59 min, 8:00–8:59 min, 9:00–9:59 min), and estimated distance within four distance annuli (0–25 m, 25–50 m, 50–100 m, and > 100 m). Individual birds were recorded only once (at their first detection), not in each time interval within which they were detected (Twedt 2010).

Monitoring schedule

In accordance with the GULN landbird monitoring plan, GUIS is monitored every year during the breeding bird season between the optimal dates 15 May and 15 June, but, if necessary surveys may be conducted between 1 May and 30 June. In 2012, sampling was conducted from June 19 to June 30 and covered sampling points in panels one and two for both MS (20 points) and FL (24 points) districts (Figures 2, 3, and 4). Sampling was conducted by Dr. Mark Woodrey through a CESU cooperative agreement with Mississippi State University. Panels three and four of both districts are scheduled to be sampled during the breeding bird season of 2013.

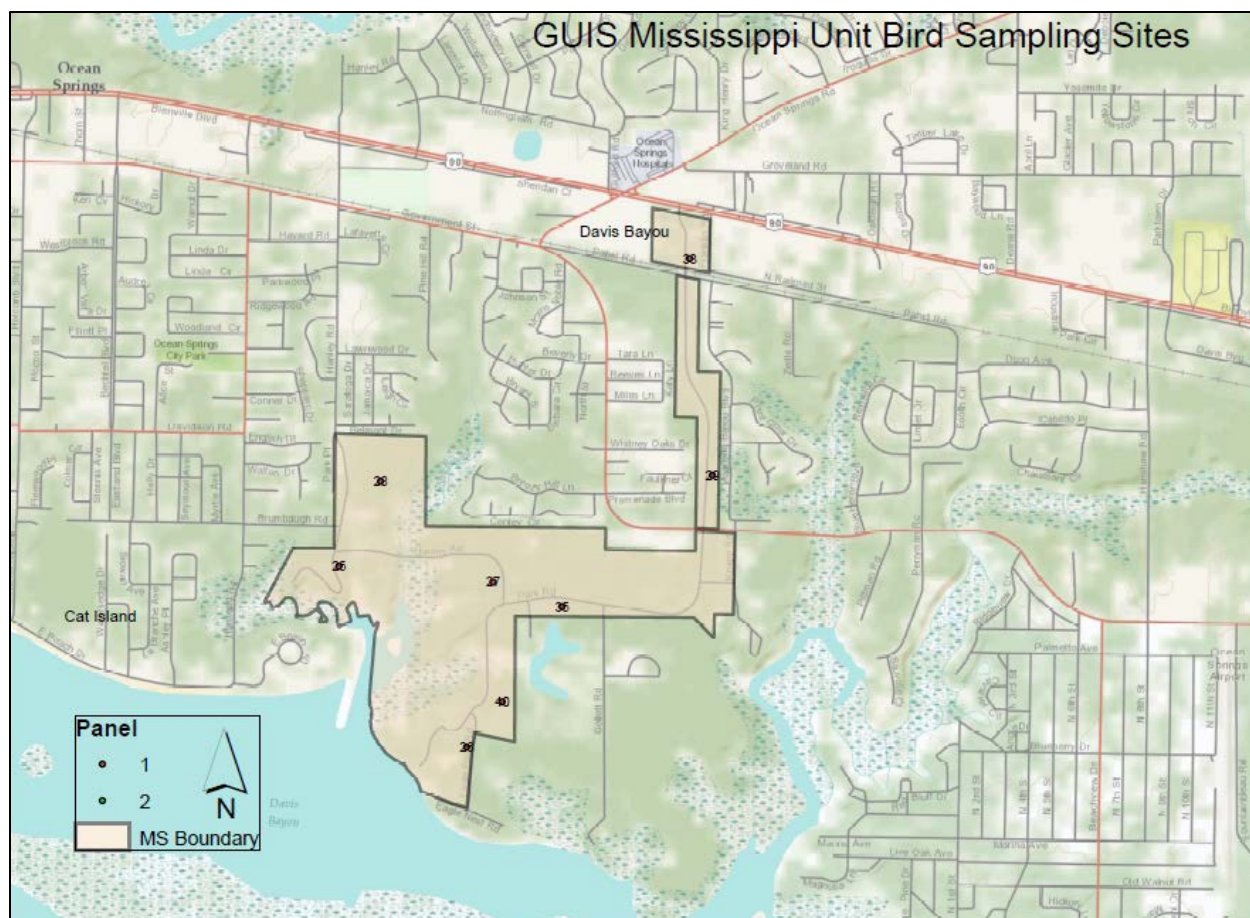


Figure 2. Sampling sites at Davis Bayou, MS district.

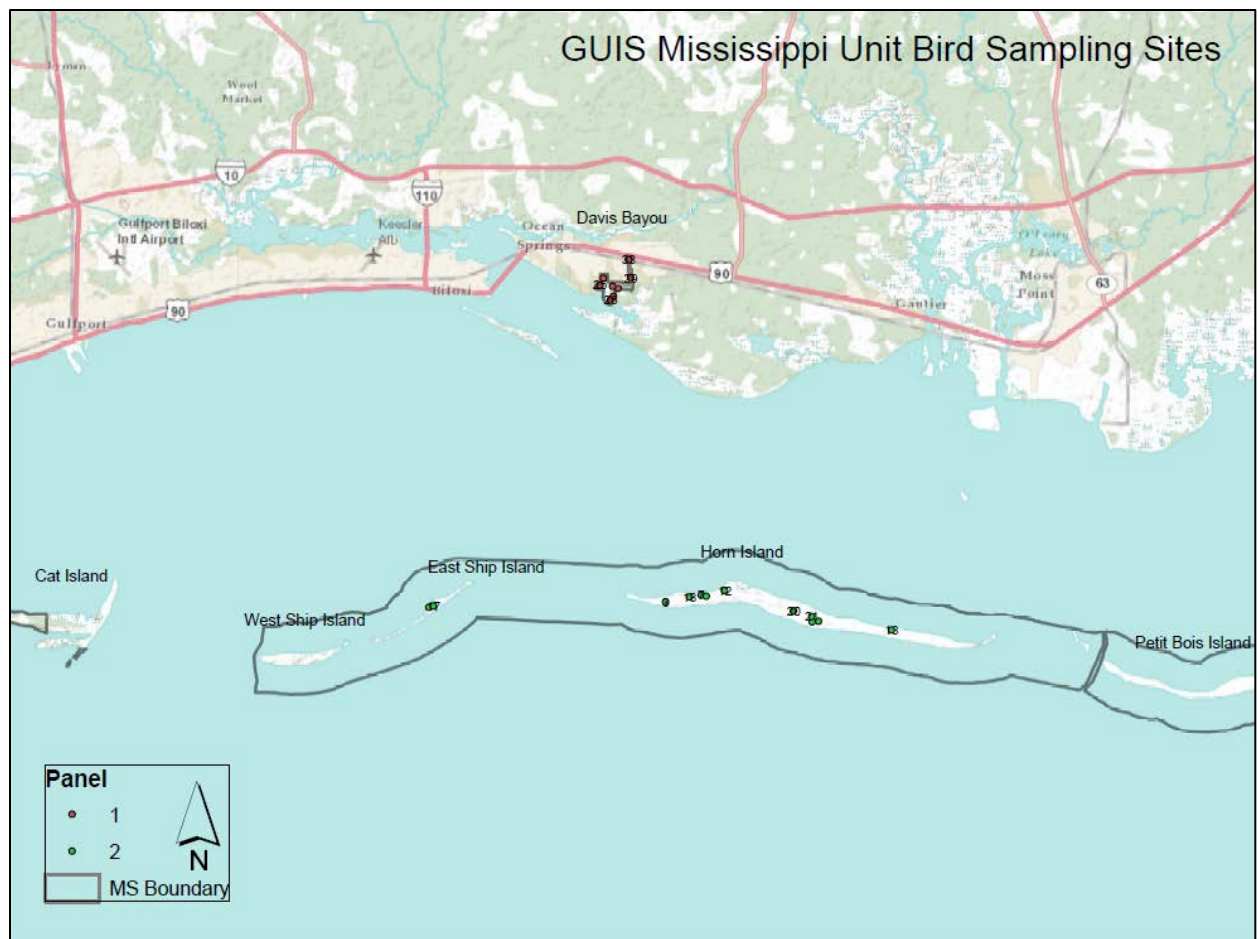


Figure 3. Barrier island sampling sites, MS district.

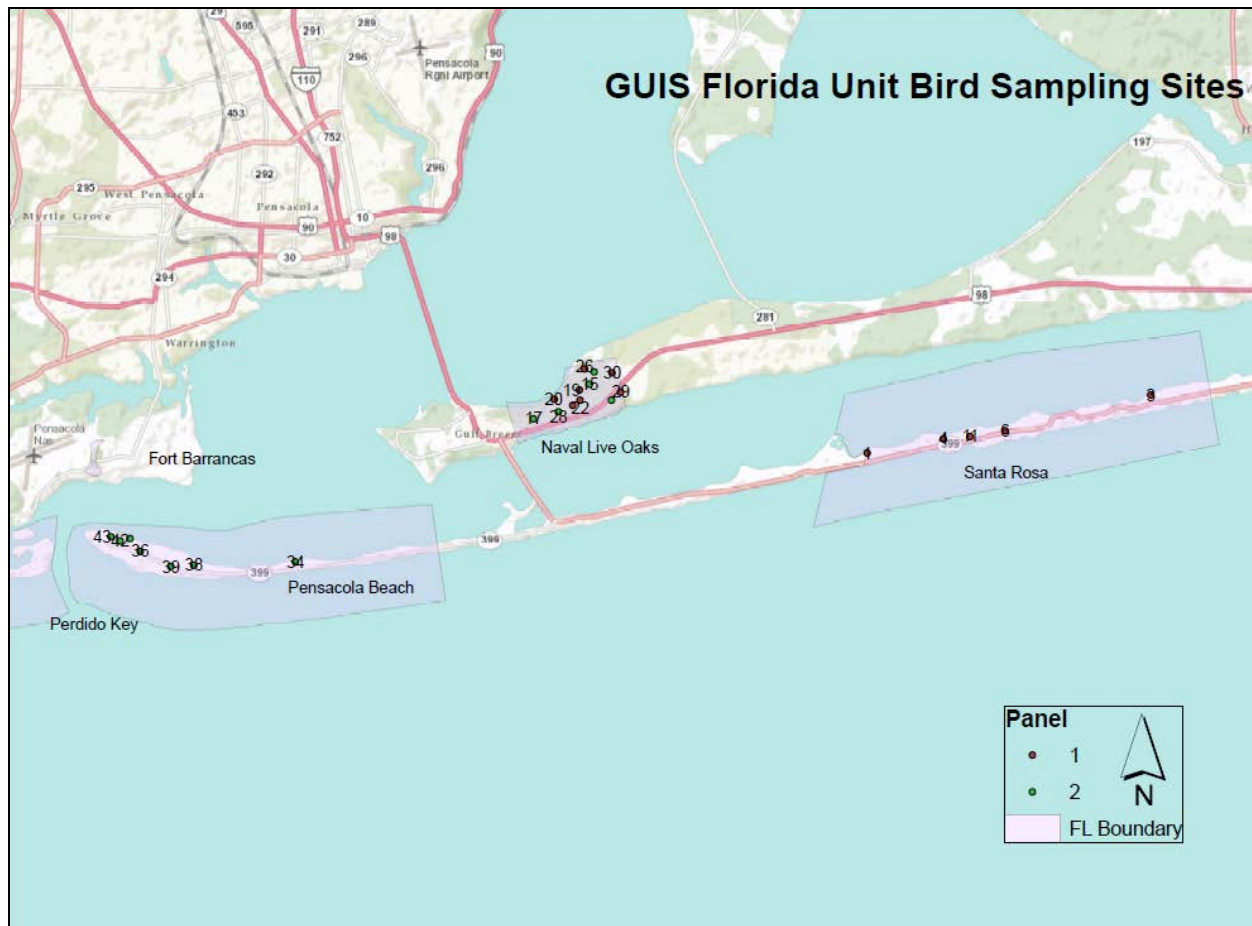


Figure 4. Florida district sampling sites.

Data Reporting

All data tables were created using MS Excel 2010. The standard data summary reports include: number of species detected at each sampling site, number of bird detections for the sampling event, and a species inventory.

Data Handling

Data were recorded on standardized GULN 10 minute point count data sheets (Appendix A). After the data were verified and validated by Dr. Woodrey, data sheets were scanned at 400 dpi, saved as pdf files, and emailed to the GULN data manager. Data sheets were checked again by the GULN data manager for consistency and correctness, resolving any questionable hand written data. Original data sheets were mailed to the GULN data manager after all scanned files were received via email. All data were then entered into the Eastern Avian Data Center (EADC 2014), a product of the Avian Knowledge Network and hosted by Point Blue Data Solutions (<http://data.prbo.org/partners/eadc/>) by GULN data management staff. Data were exported to MS Excel where pivot tables were used to summarize the data and to allow for export to other data formats. Data for this report are also made available by going to the GULN Landbird Project record in the NPS Integrated Resource Management Applications (IRMA) portal at: <https://irma.nps.gov/App/Reference/Profile/2190870>.

Results

Florida Unit

Twenty-four of the 48 permanent survey points were sampled at GUIS-FL district covering Naval Live Oaks, Santa Rosa, and Pensacola Beach units (Figure 3). A total of 32 species were documented for the FL district. The top ten most abundant birds include: least tern, mourning dove, northern mockingbird, eastern towhee, brown pelican, common grackle, red-winged blackbird, Carolina wren, osprey, and northern cardinal (Table 1). The survey resulted in 401 bird detections. Data include birds detected within all distance bands of 0–25 m, 25–50 m, 50–100 m, and >100 m.

Mississippi Unit

Twenty of the 40 permanent survey points were sampled at GUIS-MS district covering Davis Bayou, East Ship Island, and Horn Island units (Figures 1 and 2). A total of 43 species were documented for the MS district with the following being the top ten most abundant: red-winged blackbird, osprey, Carolina wren, blue jay, northern cardinal, fish crow, laughing gull, great crested flycatcher, eastern towhee, and willet. The survey resulted in 496 detections. Table 2 summarizes species detections and counts for the MS district. Data include birds detected within all distance bands of 0–25 m, 25–50 m, 50–100 m, and >100 m.

All project data have been exported from the Eastern Avian Data Center of the Avian Knowledge Network and is located in Appendix B of this report.

Table 1. Summary bird counts and species list for FL district.

Species	Total Individuals	Distinct Points	Total Flyovers
Least Tern	46	7	12
Mourning Dove	46	17	1
Northern Mockingbird	39	17	0
Eastern Towhee	36	12	0
Brown Pelican	26	6	12
Common Grackle	25	3	0
Red-winged Blackbird	24	8	0
Carolina Wren	22	12	0
Osprey	21	8	5
Northern Cardinal	19	11	0
Blue Jay	12	8	0
Fish Crow	11	8	0
Tufted Titmouse	9	5	0
Carolina Chickadee	8	3	0
Common Nighthawk	8	4	1
Purple Martin	7	3	0
Chimney Swift	5	3	1
Great Blue Heron	5	4	1
Laughing Gull	5	3	5
Red-bellied Woodpecker	5	3	3
Barn Swallow	4	2	0
Brown Thrasher	3	3	0
House Finch	3	1	0
Northern Rough-winged Swallow	2	1	0
Rusty Blackbird	2	1	1
Yellow-breasted Chat	2	2	0
Blue Grosbeak	1	1	0
Brown-headed Cowbird	1	1	0
Clapper Rail	1	1	0
Common Yellowthroat	1	1	0
Great Crested Flycatcher	1	1	0
White-eyed Vireo	1	1	0

Table 2. Summary bird counts and species list for MS district.

Species	Total Individuals	Total Flyovers	Distinct Points
Red-winged Blackbird	65	10	1
Osprey	38	9	11
Carolina Wren	34	13	0
Blue Jay	29	7	0
Northern Cardinal	27	11	0
Fish Crow	25	12	12
Laughing Gull	21	8	15
Great Crested Flycatcher	20	8	0
Eastern Towhee	17	8	0
Willet	17	5	7
Northern Mockingbird	16	9	1
Mourning Dove	14	10	2
Boat-tailed Grackle	13	4	3
Brown Pelican	13	3	3
Common Nighthawk	12	2	3
Eastern Kingbird	12	9	3
Tufted Titmouse	11	6	0
Clapper Rail	10	4	0
Red-bellied Woodpecker	10	5	0
Brown Thrasher	9	5	0
Least Tern	9	3	5
Purple Martin	9	3	8
Royal Tern	9	4	8
Chimney Swift	7	3	5
Carolina Chickadee	6	3	0
Sandwich Tern	6	2	5
Brown-headed Cowbird	4	2	2
Green Heron	4	3	1
Gull-billed Tern	4	2	2
Brown-headed Nuthatch	3	2	0
Pine Warbler	3	2	0
Black Skimmer	2	2	2
Black-crowned Night-Heron	2	2	0
Black-necked Stilt	2	1	0
Caspian Tern	2	0	2
Downy Woodpecker	2	2	0
Eastern Bluebird	2	2	0
Killdeer	2	2	0
Eurasian Collared-Dove	1	1	0
Gray Catbird	1	1	0
Northern Parula	1	1	0
Summer Tanager	1	1	0
Tricolored Heron	1	1	1

Literature Cited

- Homer, C., J. Dewitz, J. Fry, M. Coan, N. Hossain, C. Larson, N. Herold, A. McKerrow, J. N. VanDriel, and J. Wickham. 2007. Completion of the 2001 National Land Cover Database for the conterminous United States. *Photogrammetric Engineering and Remote Sensing* 73:337-341.
- Segura, M., R. Woodman, J. Meiman, W. Granger, and J. Bracewell. 2007. Gulf Coast Network vital signs monitoring plan. Natural Resource Report NPS/GULN/NRR—2007/015. National Park Service, Fort Collins, Colorado.
- Twedt, D. J. 2010. Avian Inventory and Monitoring National Parks of the Gulf Coast Network, Gulf Coast Network Avian Monitoring Plan. Unpublished Report. USGS Patuxent Wildlife Research Center, 2524 South Frontage Road, Vicksburg, Mississippi.
- Eastern Avian Data Center (EADC). 2014. Eastern Avian Knowledge Network website. Available at: <http://data.prbo.org/partners/eadc/> (accessed 31 October 2014).

Example original field sheet

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Appendix B

Table of all breeding bird data collected during the 2014 season

Appendix B. Table of all breeding bird data collected during the 2014 season.

	Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
16	GUISFL47	6/14/14	8:39	8:49	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	<25	0
	GUISFL47	6/14/14	8:39	8:49	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	25 to 50	0
	GUISFL47	6/14/14	8:39	8:49	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	5
	GUISFL47	6/14/14	8:39	8:49	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	25 to 50	0
	GUISFL47	6/14/14	8:39	8:49	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	0
	GUISFL47	6/14/14	8:39	8:49	1	CACH	Carolina Chickadee	<i>Poecile carolinensis</i>	NR	25 to 50	1
	GUISFL47	6/14/14	8:39	8:49	2	CACH	Carolina Chickadee	<i>Poecile carolinensis</i>	NR	25 to 50	2
	GUISFL47	6/14/14	8:39	8:49	1	CACH	Carolina Chickadee	<i>Poecile carolinensis</i>	NR	25 to 50	4
	GUISFL47	6/14/14	8:39	8:49	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	50 to 100	2
	GUISFL47	6/14/14	8:39	8:49	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	25 to 50	4
	GUISFL47	6/14/14	8:39	8:49	3	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	3
	GUISFL47	6/14/14	8:39	8:49	1	PUMA	Purple Martin	<i>Progne subis</i>	NR	<1,000	8
	GUISFL47	6/14/14	8:39	8:49	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	8
	GUISFL26	6/14/14	7:46	7:56	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	25 to 50	0
	GUISFL26	6/14/14	7:46	7:56	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	50 to 100	0
	GUISFL26	6/14/14	7:46	7:56	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	>100	0
	GUISFL26	6/14/14	7:46	7:56	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	25 to 50	0
	GUISFL26	6/14/14	7:46	7:56	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	1
	GUISFL26	6/14/14	7:46	7:56	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	1
	GUISFL26	6/14/14	7:46	7:56	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	1
	GUISFL26	6/14/14	7:46	7:56	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	2
	GUISFL26	6/14/14	7:46	7:56	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	50 to 100	5
	GUISFL26	6/14/14	7:46	7:56	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	7
	GUISFL26	6/14/14	7:46	7:56	2	PUMA	Purple Martin	<i>Progne subis</i>	NR	<1,000	8
	GUISFL30	6/14/14	8:18	8:28	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	>100	0
	GUISFL30	6/14/14	8:18	8:28	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	0

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISFL30	6/14/14	8:18	8:28	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	1
GUISFL30	6/14/14	8:18	8:28	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	0
GUISFL30	6/14/14	8:18	8:28	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	6
GUISFL30	6/14/14	8:18	8:28	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	50 to 100	0
GUISFL30	6/14/14	8:18	8:28	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	1
GUISFL30	6/14/14	8:18	8:28	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	5
GUISFL30	6/14/14	8:18	8:28	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	>100	6
GUISFL43	6/15/14	5:48	5:58	2	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	<25	0
GUISFL43	6/15/14	5:48	5:58	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	2
GUISFL43	6/15/14	5:48	5:58	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	25 to 50	0
GUISFL43	6/15/14	5:48	5:58	2	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	0
GUISFL43	6/15/14	5:48	5:58	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	0
GUISFL43	6/15/14	5:48	5:58	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	25 to 50	4
GUISFL43	6/15/14	5:48	5:58	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	0
GUISFL43	6/15/14	5:48	5:58	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	2
GUISFL43	6/15/14	5:48	5:58	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	3
GUISFL43	6/15/14	5:48	5:58	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	5
GUISFL43	6/15/14	5:48	5:58	1	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	50 to 100	0
GUISFL43	6/15/14	5:48	5:58	1	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	>100	1
GUISFL43	6/15/14	5:48	5:58	2	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	>100	1
GUISFL43	6/15/14	5:48	5:58	1	GBHE	Great Blue Heron	<i>Ardea herodias</i>	NR	<1,000	0
GUISFL43	6/15/14	5:48	5:58	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	0
GUISFL43	6/15/14	5:48	5:58	1	CHSW	Chimney Swift	<i>Chaetura pelagica</i>	NR	50 to 100	5
GUISFL43	6/15/14	5:48	5:58	2	CHSW	Chimney Swift	<i>Chaetura pelagica</i>	NR	25 to 50	8
GUISFL37	6/15/14	8:33	8:43	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	25 to 50	0
GUISFL37	6/15/14	8:33	8:43	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	25 to 50	1
GUISFL37	6/15/14	8:33	8:43	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	50 to 100	4

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISFL37	6/15/14	8:33	8:43	1	GBHE	Great Blue Heron	<i>Ardea herodias</i>	NR	25 to 50	0
GUISFL37	6/15/14	8:33	8:43	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	<25	1
GUISFL37	6/15/14	8:33	8:43	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	3
GUISFL37	6/15/14	8:33	8:43	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	4
GUISFL37	6/15/14	8:33	8:43	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	1
GUISFL37	6/15/14	8:33	8:43	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	>100	1
GUISFL37	6/15/14	8:33	8:43	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	25 to 50	2
GUISFL37	6/15/14	8:33	8:43	2	CACH	Carolina Chickadee	<i>Poecile carolinensis</i>	NR	50 to 100	7
GUISFL37	6/15/14	8:33	8:43	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	7
GUISFL42	6/15/14	8:52	9:02	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	<25	5
GUISFL42	6/15/14	8:52	9:02	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	25 to 50	6
GUISFL42	6/15/14	8:52	9:02	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	0
GUISFL42	6/15/14	8:52	9:02	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	2
GUISFL42	6/15/14	8:52	9:02	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	3
GUISFL42	6/15/14	8:52	9:02	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	9
GUISFL42	6/15/14	8:52	9:02	4	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	0
GUISFL42	6/15/14	8:52	9:02	2	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	<1,000	0
GUISFL42	6/15/14	8:52	9:02	1	BARS	Barn Swallow	<i>Hirundo rustica</i>	NR	25 to 50	1
GUISFL42	6/15/14	8:52	9:02	2	BARS	Barn Swallow	<i>Hirundo rustica</i>	NR	50 to 100	2
GUISFL42	6/15/14	8:52	9:02	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	50 to 100	2
GUISFL42	6/15/14	8:52	9:02	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	>100	3
GUISFL42	6/15/14	8:52	9:02	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	3
GUISFL42	6/15/14	8:52	9:02	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	4
GUISFL42	6/15/14	8:52	9:02	1	CHSW	Chimney Swift	<i>Chaetura pelagica</i>	NR	25 to 50	3
GUISFL42	6/15/14	8:52	9:02	1	NRWS	Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	NR	50 to 100	2
GUISFL42	6/15/14	8:52	9:02	1	NRWS	Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	NR	50 to 100	4

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISFL42	6/15/14	8:52	9:02	2	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	7
GUISFL42	6/15/14	8:52	9:02	3	HOFI	House Finch	<i>Carpodacus mexicanus</i>	NR	50 to 100	8
GUISFL36	6/15/14	6:11	6:21	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	<25	0
GUISFL36	6/15/14	6:11	6:21	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	2
GUISFL36	6/15/14	6:11	6:21	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	3
GUISFL36	6/15/14	6:11	6:21	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	0
GUISFL36	6/15/14	6:11	6:21	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	>100	7
GUISFL36	6/15/14	6:11	6:21	2	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	>100	0
GUISFL36	6/15/14	6:11	6:21	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	0
GUISFL36	6/15/14	6:11	6:21	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	25 to 50	1
GUISFL36	6/15/14	6:11	6:21	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	<25	4
GUISFL36	6/15/14	6:11	6:21	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	6
GUISFL36	6/15/14	6:11	6:21	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	1
GUISFL36	6/15/14	6:11	6:21	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	2
GUISFL36	6/15/14	6:11	6:21	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	50 to 100	4
GUISFL36	6/15/14	6:11	6:21	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	4
GUISFL36	6/15/14	6:11	6:21	1	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	25 to 50	6
GUISFL39	6/15/14	6:36	6:46	2	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	25 to 50	0
GUISFL39	6/15/14	6:36	6:46	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	>100	2
GUISFL39	6/15/14	6:36	6:46	1	COGR	Common Grackle	<i>Quiscalus quiscula</i>	NR	25 to 50	0
GUISFL39	6/15/14	6:36	6:46	1	COGR	Common Grackle	<i>Quiscalus quiscula</i>	NR	50 to 100	2
GUISFL39	6/15/14	6:36	6:46	3	COGR	Common Grackle	<i>Quiscalus quiscula</i>	NR	50 to 100	4
GUISFL39	6/15/14	6:36	6:46	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	0
GUISFL39	6/15/14	6:36	6:46	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	5
GUISFL39	6/15/14	6:36	6:46	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	0
GUISFL39	6/15/14	6:36	6:46	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	5

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISFL39	6/15/14	6:36	6:46	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	1
GUISFL39	6/15/14	6:36	6:46	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	>100	8
GUISFL39	6/15/14	6:36	6:46	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	3
GUISFL39	6/15/14	6:36	6:46	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	3
GUISFL39	6/15/14	6:36	6:46	3	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	>100	4
GUISFL39	6/15/14	6:36	6:46	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	5
GUISFL38	6/15/14	6:58	7:08	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<25	0
GUISFL38	6/15/14	6:58	7:08	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	50 to 100	0
GUISFL38	6/15/14	6:58	7:08	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	50 to 100	4
GUISFL38	6/15/14	6:58	7:08	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	<25	0
GUISFL38	6/15/14	6:58	7:08	2	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	25 to 50	0
GUISFL38	6/15/14	6:58	7:08	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	8
GUISFL38	6/15/14	6:58	7:08	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	0
GUISFL38	6/15/14	6:58	7:08	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	2
GUISFL38	6/15/14	6:58	7:08	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	<1,000	2
GUISFL38	6/15/14	6:58	7:08	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	1
GUISFL38	6/15/14	6:58	7:08	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	5
GUISFL38	6/15/14	6:58	7:08	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	1
GUISFL38	6/15/14	6:58	7:08	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	<25	3
GUISFL38	6/15/14	6:58	7:08	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	6
GUISFL38	6/15/14	6:58	7:08	2	COGR	Common Grackle	<i>Quiscalus quiscula</i>	NR	>100	7
GUISFL34	6/15/14	7:41	7:51	3	COGR	Common Grackle	<i>Quiscalus quiscula</i>	NR	25 to 50	0
GUISFL34	6/15/14	7:41	7:51	3	COGR	Common Grackle	<i>Quiscalus quiscula</i>	NR	25 to 50	2
GUISFL34	6/15/14	7:41	7:51	2	COGR	Common Grackle	<i>Quiscalus quiscula</i>	NR	50 to 100	1
GUISFL34	6/15/14	7:41	7:51	3	COGR	Common Grackle	<i>Quiscalus quiscula</i>	NR	50 to 100	4
GUISFL34	6/15/14	7:41	7:51	1	COGR	Common Grackle	<i>Quiscalus quiscula</i>	NR	>100	1

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISFL34	6/15/14	7:41	7:51	6	COGR	Common Grackle	<i>Quiscalus quiscula</i>	NR	>100	1
GUISFL34	6/15/14	7:41	7:51	1	RUBL	Rusty Blackbird	<i>Euphagus carolinus</i>	NR	50 to 100	0
GUISFL34	6/15/14	7:41	7:51	1	RUBL	Rusty Blackbird	<i>Euphagus carolinus</i>	NR	50 to 100	3
GUISFL34	6/15/14	7:41	7:51	1	GBHE	Great Blue Heron	<i>Ardea herodias</i>	NR	>100	0
GUISFL34	6/15/14	7:41	7:51	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	>100	0
GUISFL34	6/15/14	7:41	7:51	4	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	>100	0
GUISFL34	6/15/14	7:41	7:51	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	6
GUISFL34	6/15/14	7:41	7:51	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	2
GUISFL34	6/15/14	7:41	7:51	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	5
GUISFL34	6/15/14	7:41	7:51	2	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	2
GUISFL34	6/15/14	7:41	7:51	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	3
GUISFL34	6/15/14	7:41	7:51	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	50 to 100	5
GUISFL34	6/15/14	7:41	7:51	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	3
GUISFL34	6/15/14	7:41	7:51	2	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	6
GUISFL3	6/12/14	6:53	7:03	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	0
GUISFL3	6/12/14	6:53	7:03	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	3
GUISFL3	6/12/14	6:53	7:03	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	4
GUISFL3	6/12/14	6:53	7:03	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	6
GUISFL3	6/12/14	6:53	7:03	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	<25	0
GUISFL3	6/12/14	6:53	7:03	1	CLRA	Clapper Rail	<i>Rallus longirostris</i>	NR	>100	0
GUISFL3	6/12/14	6:53	7:03	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	25 to 50	2
GUISFL3	6/12/14	6:53	7:03	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	2
GUISFL3	6/12/14	6:53	7:03	3	LETE	Least Tern	<i>Sternula antillarum</i>	NR	>100	6
GUISFL3	6/12/14	6:53	7:03	2	LETE	Least Tern	<i>Sternula antillarum</i>	NR	>100	7
GUISFL3	6/12/14	6:53	7:03	2	LETE	Least Tern	<i>Sternula antillarum</i>	NR	>100	8
GUISFL3	6/12/14	6:53	7:03	1	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	3
GUISFL3	6/12/14	6:53	7:03	6	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	5

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISFL3	6/12/14	6:53	7:03	6	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	7
GUISFL3	6/12/14	6:53	7:03	2	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	9
GUISFL3	6/12/14	6:53	7:03	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	<25	4
GUISFL3	6/12/14	6:53	7:03	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	25 to 50	4
GUISFL3	6/12/14	6:53	7:03	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	4
GUISFL3	6/12/14	6:53	7:03	5	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	3
GUISFL6	6/12/14	7:27	7:37	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	0
GUISFL6	6/12/14	7:27	7:37	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	0
GUISFL6	6/12/14	7:27	7:37	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	6
GUISFL6	6/12/14	7:27	7:37	3	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	0
GUISFL6	6/12/14	7:27	7:37	2	LETE	Least Tern	<i>Sternula antillarum</i>	NR	50 to 100	2
GUISFL6	6/12/14	7:27	7:37	2	LETE	Least Tern	<i>Sternula antillarum</i>	NR	50 to 100	5
GUISFL6	6/12/14	7:27	7:37	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	>100	5
GUISFL6	6/12/14	7:27	7:37	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	25 to 50	6
GUISFL6	6/12/14	7:27	7:37	2	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	8
GUISFL6	6/12/14	7:27	7:37	2	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	1
GUISFL6	6/12/14	7:27	7:37	3	PUMA	Purple Martin	<i>Progne subis</i>	NR	<1,000	2
GUISFL6	6/12/14	7:27	7:37	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	2
GUISFL6	6/12/14	7:27	7:37	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	3
GUISFL11	6/12/14	8:03	8:13	2	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	>100	0
GUISFL11	6/12/14	8:03	8:13	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	0
GUISFL11	6/12/14	8:03	8:13	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	1
GUISFL11	6/12/14	8:03	8:13	2	LETE	Least Tern	<i>Sternula antillarum</i>	NR	>100	1
GUISFL11	6/12/14	8:03	8:13	2	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	2
GUISFL11	6/12/14	8:03	8:13	1	GBHE	Great Blue Heron	<i>Ardea herodias</i>	NR	>100	4
GUISFL11	6/12/14	8:03	8:13	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	6
GUISFL11	6/12/14	8:03	8:13	1	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	8

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISFL11	6/12/14	8:03	8:13	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	9
GUISFL4	6/12/14	8:27	8:37	3	LETE	Least Tern	<i>Sternula antillarum</i>	NR	>100	0
GUISFL4	6/12/14	8:27	8:37	4	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	0
GUISFL4	6/12/14	8:27	8:37	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	25 to 50	2
GUISFL4	6/12/14	8:27	8:37	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	50 to 100	2
GUISFL4	6/12/14	8:27	8:37	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	50 to 100	5
GUISFL4	6/12/14	8:27	8:37	2	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	8
GUISFL4	6/12/14	8:27	8:37	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	0
GUISFL4	6/12/14	8:27	8:37	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	6
GUISFL4	6/12/14	8:27	8:37	1	BARS	Barn Swallow	<i>Hirundo rustica</i>	NR	25 to 50	1
GUISFL4	6/12/14	8:27	8:37	1	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	>100	2
GUISFL4	6/12/14	8:27	8:37	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	2
GUISFL4	6/12/14	8:27	8:37	1	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	3
GUISFL4	6/12/14	8:27	8:37	1	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	4
GUISFL4	6/12/14	8:27	8:37	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	4
GUISFL1	6/12/14	8:56	9:06	1	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	<25	0
GUISFL1	6/12/14	8:56	9:06	1	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	>100	1
GUISFL1	6/12/14	8:56	9:06	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	<25	0
GUISFL1	6/12/14	8:56	9:06	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	0
GUISFL1	6/12/14	8:56	9:06	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	1
GUISFL1	6/12/14	8:56	9:06	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	6
GUISFL1	6/12/14	8:56	9:06	2	LETE	Least Tern	<i>Sternula antillarum</i>	NR	>100	4
GUISFL1	6/12/14	8:56	9:06	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	0
GUISFL1	6/12/14	8:56	9:06	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	7
GUISFL1	6/12/14	8:56	9:06	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	<25	0
GUISFL1	6/12/14	8:56	9:06	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	1
GUISFL1	6/12/14	8:56	9:06	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	5

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISFL1	6/12/14	8:56	9:06	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	>100	1
GUISFL1	6/12/14	8:56	9:06	2	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	1
GUISFL1	6/12/14	8:56	9:06	1	PUMA	Purple Martin	<i>Progne subis</i>	NR	>100	3
GUISFL1	6/12/14	8:56	9:06	1	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	3
GUISFL1	6/12/14	8:56	9:06	1	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	4
GUISFL1	6/12/14	8:56	9:06	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	4
GUISFL1	6/12/14	8:56	9:06	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	7
GUISFL1	6/12/14	8:56	9:06	1	GBHE	Great Blue Heron	<i>Ardea herodias</i>	NR	>100	7
GUISFL13	6/14/14	6:00	6:10	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	0
GUISFL13	6/14/14	6:00	6:10	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	8
GUISFL13	6/14/14	6:00	6:10	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	<25	1
GUISFL13	6/14/14	6:00	6:10	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	6
GUISFL13	6/14/14	6:00	6:10	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	2
GUISFL13	6/14/14	6:00	6:10	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	<25	5
GUISFL13	6/14/14	6:00	6:10	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	4
GUISFL29	6/13/14	9:02	9:12	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	0
GUISFL29	6/13/14	9:02	9:12	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	7
GUISFL29	6/13/14	9:02	9:12	2	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	<25	0
GUISFL29	6/13/14	9:02	9:12	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	<25	0
GUISFL29	6/13/14	9:02	9:12	1	BHCO	Brown-headed Cowbird	<i>Molothrus ater</i>	NR	<25	0
GUISFL29	6/13/14	9:02	9:12	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	25 to 50	0
GUISFL29	6/13/14	9:02	9:12	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	25 to 50	1
GUISFL29	6/13/14	9:02	9:12	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	<25	2
GUISFL29	6/13/14	9:02	9:12	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	<25	4
GUISFL29	6/13/14	9:02	9:12	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	<1,000	3
GUISFL29	6/13/14	9:02	9:12	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	50 to 100	8

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISFL28	6/13/14	8:32	8:42	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	<25	0
GUISFL28	6/13/14	8:32	8:42	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	2
GUISFL28	6/13/14	8:32	8:42	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	>100	2
GUISFL28	6/13/14	8:32	8:42	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	0
GUISFL28	6/13/14	8:32	8:42	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	5
GUISFL28	6/13/14	8:32	8:42	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	0
GUISFL28	6/13/14	8:32	8:42	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	3
GUISFL28	6/13/14	8:32	8:42	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	>100	3
GUISFL28	6/13/14	8:32	8:42	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	4
GUISFL20	6/13/14	7:04	7:14	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	<25	0
GUISFL20	6/13/14	7:04	7:14	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	>100	7
GUISFL20	6/13/14	7:04	7:14	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	8
GUISFL20	6/13/14	7:04	7:14	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	1
GUISFL20	6/13/14	7:04	7:14	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	4
GUISFL20	6/13/14	7:04	7:14	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	>100	2
GUISFL20	6/13/14	7:04	7:14	1	WEVI	White-eyed Vireo	<i>Vireo griseus</i>	NR	>100	5
GUISFL20	6/13/14	7:04	7:14	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	5
GUISFL20	6/13/14	7:04	7:14	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	7
GUISFL17	6/13/14	6:36	6:46	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	0
GUISFL17	6/13/14	6:36	6:46	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	0
GUISFL17	6/13/14	6:36	6:46	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	>100	1
GUISFL17	6/13/14	6:36	6:46	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	2
GUISFL17	6/13/14	6:36	6:46	1	CARW	Carolina Wren	<i>Thryothorus</i>	NR	50 to 100	0

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
							<i>ludovicianus</i>			
GUISFL17	6/13/14	6:36	6:46	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	>100	0
GUISFL17	6/13/14	6:36	6:46	1	COYE	Common Yellowthroat	<i>Geothlypis trichas</i>	NR	50 to 100	0
GUISFL31	6/13/14	7:33	7:43	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	<25	0
GUISFL31	6/13/14	7:33	7:43	2	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	0
GUISFL31	6/13/14	7:33	7:43	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	5
GUISFL31	6/13/14	7:33	7:43	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	>100	8
GUISFL31	6/13/14	7:33	7:43	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	2
GUISFL31	6/13/14	7:33	7:43	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	0
GUISFL31	6/13/14	7:33	7:43	2	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	9
GUISFL31	6/13/14	7:33	7:43	1	BLGR	Blue Grosbeak	<i>Passerina caerulea</i>	NR	50 to 100	2
GUISFL31	6/13/14	7:33	7:43	1	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	50 to 100	3
GUISFL31	6/13/14	7:33	7:43	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	5
GUISFL31	6/13/14	7:33	7:43	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	6
GUISFL31	6/13/14	7:33	7:43	1	YBCH	Yellow-breasted Chat	<i>Icteria virens</i>	NR	50 to 100	9
GUISFL31	6/13/14	7:33	7:43	1	CHSW	Chimney Swift	<i>Chaetura pelagica</i>	NR	<1,000	9
GUISFL22	6/13/14	7:55	8:05	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	>100	0
GUISFL22	6/13/14	7:55	8:05	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	0
GUISFL22	6/13/14	7:55	8:05	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	1
GUISFL22	6/13/14	7:55	8:05	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	2
GUISFL22	6/13/14	7:55	8:05	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	>100	2
GUISFL22	6/13/14	7:55	8:05	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	<25	7
GUISFL22	6/13/14	7:55	8:05	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	7
GUISFL22	6/13/14	7:55	8:05	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	2
GUISFL22	6/13/14	7:55	8:05	2	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	3
GUISFL22	6/13/14	7:55	8:05	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	5

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISFL22	6/13/14	7:55	8:05	1	YBCH	Yellow-breasted Chat	<i>Icteria virens</i>	NR	50 to 100	6
GUISFL19	6/13/14	6:50	7:00	2	CACH	Carolina Chickadee	<i>Poecile carolinensis</i>	NR	25 to 50	0
GUISFL19	6/13/14	6:50	7:00	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	0
GUISFL19	6/13/14	6:50	7:00	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	0
GUISFL19	6/13/14	6:50	7:00	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	2
GUISFL19	6/13/14	6:50	7:00	2	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	0
GUISFL19	6/13/14	6:50	7:00	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	2
GUISFL19	6/13/14	6:50	7:00	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	1
GUISFL19	6/13/14	6:50	7:00	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	50 to 100	1
GUISFL19	6/13/14	6:50	7:00	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	6
GUISFL19	6/13/14	6:50	7:00	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	1
GUISFL19	6/13/14	6:50	7:00	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	8
GUISFL15	6/14/14	7:14	7:24	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	25 to 50	0
GUISFL15	6/14/14	7:14	7:24	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	0
GUISFL15	6/14/14	7:14	7:24	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	1
GUISFL15	6/14/14	7:14	7:24	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	25 to 50	0
GUISFL15	6/14/14	7:14	7:24	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	<25	8
GUISFL15	6/14/14	7:14	7:24	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	25 to 50	9
GUISFL15	6/14/14	7:14	7:24	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	>100	0
GUISFL15	6/14/14	7:14	7:24	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	>100	0
GUISFL15	6/14/14	7:14	7:24	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	>100	1
GUISFL15	6/14/14	7:14	7:24	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	<25	4
GUISFL15	6/14/14	7:14	7:24	2	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	>100	1
GUISFL15	6/14/14	7:14	7:24	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	2
GUISFL15	6/14/14	7:14	7:24	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	50 to 100	8

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS10	6/6/14	8:20	8:30	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	<25	0
GUISMS10	6/6/14	8:20	8:30	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	25 to 50	3
GUISMS10	6/6/14	8:20	8:30	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	25 to 50	6
GUISMS10	6/6/14	8:20	8:30	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	0
GUISMS10	6/6/14	8:20	8:30	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	50 to 100	2
GUISMS10	6/6/14	8:20	8:30	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	0
GUISMS10	6/6/14	8:20	8:30	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	0
GUISMS10	6/6/14	8:20	8:30	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	2
GUISMS10	6/6/14	8:20	8:30	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	0
GUISMS10	6/6/14	8:20	8:30	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	7
GUISMS10	6/6/14	8:20	8:30	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	25 to 50	5
GUISMS10	6/6/14	8:20	8:30	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	2
GUISMS10	6/6/14	8:20	8:30	3	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	1
GUISMS10	6/6/14	8:20	8:30	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	7
GUISMS10	6/6/14	8:20	8:30	1	ROYT	Royal Tern	<i>Thalasseus maximus</i>	NR	<1,000	7
GUISMS10	6/6/14	8:20	8:30	1	SATE	Sandwich Tern	<i>Thalasseus sandvicensis</i>	NR	<1,000	8
GUISMS10	6/6/14	8:20	8:30	1	CATE	Caspian Tern	<i>Hydroprogne caspia</i>	NR	<1,000	8
GUISMS10	6/6/14	8:20	8:30	1	CATE	Caspian Tern	<i>Hydroprogne caspia</i>	NR	<1,000	9
GUISMS17	6/6/14	8:44	8:54	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	<25	0
GUISMS17	6/6/14	8:44	8:54	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	2
GUISMS17	6/6/14	8:44	8:54	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	5
GUISMS17	6/6/14	8:44	8:54	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	6
GUISMS17	6/6/14	8:44	8:54	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	<1,000	2
GUISMS17	6/6/14	8:44	8:54	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	<1,000	3
GUISMS17	6/6/14	8:44	8:54	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<25	1
GUISMS17	6/6/14	8:44	8:54	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	50 to 100	0

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS17	6/6/14	8:44	8:54	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	>100	0
GUISMS17	6/6/14	8:44	8:54	4	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	0
GUISMS17	6/6/14	8:44	8:54	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	25 to 50	0
GUISMS17	6/6/14	8:44	8:54	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	0
GUISMS17	6/6/14	8:44	8:54	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	1
GUISMS17	6/6/14	8:44	8:54	1	GRHE	Green Heron	<i>Butorides virescens</i>	NR	>100	1
GUISMS17	6/6/14	8:44	8:54	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	>100	2
GUISMS17	6/6/14	8:44	8:54	1	BLSK	Black Skimmer	<i>Rynchops niger</i>	NR	<1,000	5
GUISMS17	6/6/14	8:44	8:54	1	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	6
GUISMS3	6/6/14	7:33	7:43	1	BCNH	Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	NR	50 to 100	0
GUISMS3	6/6/14	7:33	7:43	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	0
GUISMS3	6/6/14	7:33	7:43	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	0
GUISMS3	6/6/14	7:33	7:43	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	1
GUISMS3	6/6/14	7:33	7:43	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	0
GUISMS3	6/6/14	7:33	7:43	1	CLRA	Clapper Rail	<i>Rallus longirostris</i>	NR	<25	0
GUISMS3	6/6/14	7:33	7:43	1	CLRA	Clapper Rail	<i>Rallus longirostris</i>	NR	<25	4
GUISMS3	6/6/14	7:33	7:43	1	CLRA	Clapper Rail	<i>Rallus longirostris</i>	NR	25 to 50	2
GUISMS3	6/6/14	7:33	7:43	1	KILL	Killdeer	<i>Charadrius vociferus</i>	NR	>100	3
GUISMS3	6/6/14	7:33	7:43	2	BTGR	Boat-tailed Grackle	<i>Quiscalus major</i>	NR	>100	3
GUISMS3	6/6/14	7:33	7:43	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	<1,000	4
GUISMS3	6/6/14	7:33	7:43	6	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	4
GUISMS3	6/6/14	7:33	7:43	2	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	7
GUISMS3	6/6/14	7:33	7:43	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	7
GUISMS3	6/6/14	7:33	7:43	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	>100	7
GUISMS3	6/6/14	7:33	7:43	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	>100	8
GUISMS3	6/6/14	7:33	7:43	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	<1,000	7
GUISMS18	6/6/14	7:33	7:43	1	BCNH	Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	NR	50 to 100	0

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS18	6/6/14	7:33	7:43	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	0
GUISMS18	6/6/14	7:33	7:43	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	0
GUISMS18	6/6/14	7:33	7:43	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	1
GUISMS18	6/6/14	7:33	7:43	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	0
GUISMS18	6/6/14	7:33	7:43	1	CLRA	Clapper Rail	<i>Rallus longirostris</i>	NR	<25	0
GUISMS18	6/6/14	7:33	7:43	1	CLRA	Clapper Rail	<i>Rallus longirostris</i>	NR	<25	4
GUISMS18	6/6/14	7:33	7:43	1	CLRA	Clapper Rail	<i>Rallus longirostris</i>	NR	25 to 50	2
GUISMS18	6/6/14	7:33	7:43	1	KILL	Killdeer	<i>Charadrius vociferus</i>	NR	>100	3
GUISMS18	6/6/14	7:33	7:43	2	BTGR	Boat-tailed Grackle	<i>Quiscalus major</i>	NR	>100	3
GUISMS18	6/6/14	7:33	7:43	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	<1,000	4
GUISMS18	6/6/14	7:33	7:43	6	BRPE	Brown Pelican	<i>Pelecanus occidentalis</i>	NR	<1,000	4
GUISMS18	6/6/14	7:33	7:43	2	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	7
GUISMS18	6/6/14	7:33	7:43	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	7
GUISMS18	6/6/14	7:33	7:43	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	>100	7
GUISMS18	6/6/14	7:33	7:43	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	<1,000	7
GUISMS18	6/6/14	7:33	7:43	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	>100	8
GUISMS7	6/6/14	6:43	6:53	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	<25	0
GUISMS7	6/6/14	6:43	6:53	5	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	0
GUISMS7	6/6/14	6:43	6:53	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	0
GUISMS7	6/6/14	6:43	6:53	3	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	2
GUISMS7	6/6/14	6:43	6:53	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	<1,000	1
GUISMS7	6/6/14	6:43	6:53	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	0
GUISMS7	6/6/14	6:43	6:53	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	2
GUISMS7	6/6/14	6:43	6:53	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	3
GUISMS7	6/6/14	6:43	6:53	3	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	4
GUISMS7	6/6/14	6:43	6:53	1	CLRA	Clapper Rail	<i>Rallus longirostris</i>	NR	25 to 50	4
GUISMS7	6/6/14	6:43	6:53	1	CLRA	Clapper Rail	<i>Rallus longirostris</i>	NR	50 to 100	1

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS7	6/6/14	6:43	6:53	1	CLRA	Clapper Rail	<i>Rallus longirostris</i>	NR	50 to 100	2
GUISMS7	6/6/14	6:43	6:53	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	50 to 100	4
GUISMS7	6/6/14	6:43	6:53	2	BNST	Black-necked Stilt	<i>Himantopus mexicanus</i>	NR	50 to 100	4
GUISMS7	6/6/14	6:43	6:53	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	4
GUISMS7	6/6/14	6:43	6:53	3	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	4
GUISMS7	6/6/14	6:43	6:53	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	6
GUISMS7	6/6/14	6:43	6:53	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	7
GUISMS7	6/6/14	6:43	6:53	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	9
GUISMS7	6/6/14	6:43	6:53	1	GRHE	Green Heron	<i>Butorides virescens</i>	NR	25 to 50	9
GUISMS7	6/6/14	6:43	6:53	1	GRHE	Green Heron	<i>Butorides virescens</i>	NR	50 to 100	9
GUISMS24	6/6/14	6:28	6:38	3	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	0
GUISMS24	6/6/14	6:28	6:38	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	<25	1
GUISMS24	6/6/14	6:28	6:38	3	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	0
GUISMS24	6/6/14	6:28	6:38	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	2
GUISMS24	6/6/14	6:28	6:38	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	3
GUISMS24	6/6/14	6:28	6:38	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	7
GUISMS24	6/6/14	6:28	6:38	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	8
GUISMS24	6/6/14	6:28	6:38	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	1
GUISMS24	6/6/14	6:28	6:38	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	0
GUISMS24	6/6/14	6:28	6:38	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	<1,000	0
GUISMS24	6/6/14	6:28	6:38	4	WILL	Willet	<i>Tringa semipalmata</i>	NR	<1,000	1
GUISMS24	6/6/14	6:28	6:38	2	GBTE	Gull-billed Tern	<i>Gelochelidon nilotica</i>	NR	<1,000	0
GUISMS24	6/6/14	6:28	6:38	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	>100	2
GUISMS24	6/6/14	6:28	6:38	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	2
GUISMS24	6/6/14	6:28	6:38	1	ROYT	Royal Tern	<i>Thalasseus maximus</i>	NR	>100	2
GUISMS24	6/6/14	6:28	6:38	1	ROYT	Royal Tern	<i>Thalasseus maximus</i>	NR	<1,000	3
GUISMS24	6/6/14	6:28	6:38	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	50 to 100	6

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS24	6/6/14	6:28	6:38	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	>100	7
GUISMS12	6/6/14	5:58	6:08	1	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	>100	0
GUISMS12	6/6/14	5:58	6:08	1	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	>100	2
GUISMS12	6/6/14	5:58	6:08	3	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	<1,000	0
GUISMS12	6/6/14	5:58	6:08	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	<25	4
GUISMS12	6/6/14	5:58	6:08	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	1
GUISMS12	6/6/14	5:58	6:08	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	3
GUISMS12	6/6/14	5:58	6:08	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	0
GUISMS12	6/6/14	5:58	6:08	2	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	25 to 50	0
GUISMS12	6/6/14	5:58	6:08	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	50 to 100	0
GUISMS12	6/6/14	5:58	6:08	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	>100	4
GUISMS12	6/6/14	5:58	6:08	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	0
GUISMS12	6/6/14	5:58	6:08	1	CHSW	Chimney Swift	<i>Chaetura pelagica</i>	NR	<1,000	0
GUISMS12	6/6/14	5:58	6:08	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	0
GUISMS12	6/6/14	5:58	6:08	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	4
GUISMS12	6/6/14	5:58	6:08	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	8
GUISMS12	6/6/14	5:58	6:08	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	0
GUISMS12	6/6/14	5:58	6:08	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	50 to 100	2
GUISMS12	6/6/14	5:58	6:08	1	BTGR	Boat-tailed Grackle	<i>Quiscalus major</i>	NR	<1,000	4
GUISMS12	6/6/14	5:58	6:08	5	BTGR	Boat-tailed Grackle	<i>Quiscalus major</i>	NR	<1,000	8
GUISMS12	6/6/14	5:58	6:08	1	BTGR	Boat-tailed Grackle	<i>Quiscalus major</i>	NR	<1,000	9
GUISMS12	6/6/14	5:58	6:08	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	50 to 100	6
GUISMS12	6/6/14	5:58	6:08	1	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	50 to 100	7
GUISMS12	6/6/14	5:58	6:08	2	GBTE	Gull-billed Tern	<i>Gelochelidon nilotica</i>	NR	<1,000	8

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS13	6/5/14	6:17	6:27	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	<25	0
GUISMS13	6/5/14	6:17	6:27	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	0
GUISMS13	6/5/14	6:17	6:27	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	4
GUISMS13	6/5/14	6:17	6:27	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	8
GUISMS13	6/5/14	6:17	6:27	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	25 to 50	9
GUISMS13	6/5/14	6:17	6:27	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	0
GUISMS13	6/5/14	6:17	6:27	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	0
GUISMS13	6/5/14	6:17	6:27	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	1
GUISMS13	6/5/14	6:17	6:27	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	3
GUISMS13	6/5/14	6:17	6:27	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	>100	2
GUISMS13	6/5/14	6:17	6:27	1	WILL	Willet	<i>Tringa semipalmata</i>	NR	<1,000	1
GUISMS13	6/5/14	6:17	6:27	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	0
GUISMS13	6/5/14	6:17	6:27	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	4
GUISMS13	6/5/14	6:17	6:27	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	7
GUISMS13	6/5/14	6:17	6:27	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	50 to 100	4
GUISMS13	6/5/14	6:17	6:27	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	>100	5
GUISMS13	6/5/14	6:17	6:27	8	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	>100	8
GUISMS13	6/5/14	6:17	6:27	1	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	<1,000	2
GUISMS13	6/5/14	6:17	6:27	6	CONI	Common Nighthawk	<i>Chordeiles minor</i>	NR	<1,000	6
GUISMS13	6/5/14	6:17	6:27	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	2
GUISMS13	6/5/14	6:17	6:27	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	8
GUISMS13	6/5/14	6:17	6:27	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	1
GUISMS13	6/5/14	6:17	6:27	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	6
GUISMS13	6/5/14	6:17	6:27	1	BLSK	Black Skimmer	<i>Rynchops niger</i>	NR	<1,000	7
GUISMS13	6/5/14	6:17	6:27	1	GRHE	Green Heron	<i>Butorides virescens</i>	NR	<1,000	3
GUISMS14	6/5/14	6:59	7:09	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	0

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS14	6/5/14	6:59	7:09	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	1
GUISMS14	6/5/14	6:59	7:09	2	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	>100	0
GUISMS14	6/5/14	6:59	7:09	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	>100	0
GUISMS14	6/5/14	6:59	7:09	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	6
GUISMS14	6/5/14	6:59	7:09	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	7
GUISMS14	6/5/14	6:59	7:09	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	>100	1
GUISMS14	6/5/14	6:59	7:09	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	25 to 50	1
GUISMS14	6/5/14	6:59	7:09	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	7
GUISMS14	6/5/14	6:59	7:09	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	3
GUISMS14	6/5/14	6:59	7:09	1	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	25 to 50	4
GUISMS14	6/5/14	6:59	7:09	1	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	50 to 100	2
GUISMS14	6/5/14	6:59	7:09	1	BTGR	Boat-tailed Grackle	<i>Quiscalus major</i>	NR	50 to 100	3
GUISMS14	6/5/14	6:59	7:09	1	BTGR	Boat-tailed Grackle	<i>Quiscalus major</i>	NR	50 to 100	8
GUISMS14	6/5/14	6:59	7:09	1	ROYT	Royal Tern	<i>Thalasseus maximus</i>	NR	<1,000	3
GUISMS14	6/5/14	6:59	7:09	1	ROYT	Royal Tern	<i>Thalasseus maximus</i>	NR	<1,000	4
GUISMS14	6/5/14	6:59	7:09	1	ROYT	Royal Tern	<i>Thalasseus maximus</i>	NR	<1,000	5
GUISMS14	6/5/14	6:59	7:09	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	25 to 50	4
GUISMS14	6/5/14	6:59	7:09	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	>100	5
GUISMS14	6/5/14	6:59	7:09	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	6
GUISMS23	6/5/14	7:22	7:32	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	0
GUISMS23	6/5/14	7:22	7:32	3	LETE	Least Tern	<i>Sternula antillarum</i>	NR	<1,000	1
GUISMS23	6/5/14	7:22	7:32	2	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	>100	0
GUISMS23	6/5/14	7:22	7:32	2	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	50 to 100	0
GUISMS23	6/5/14	7:22	7:32	1	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	>100	0
GUISMS23	6/5/14	7:22	7:32	1	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	>100	1
GUISMS23	6/5/14	7:22	7:32	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	25 to 50	1

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS23	6/5/14	7:22	7:32	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	50 to 100	0
GUISMS23	6/5/14	7:22	7:32	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	<25	1
GUISMS23	6/5/14	7:22	7:32	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	2
GUISMS23	6/5/14	7:22	7:32	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	2
GUISMS23	6/5/14	7:22	7:32	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	<1,000	2
GUISMS23	6/5/14	7:22	7:32	1	TRHE	Tricolored Heron	<i>Egretta tricolor</i>	NR	<1,000	3
GUISMS23	6/5/14	7:22	7:32	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	3
GUISMS23	6/5/14	7:22	7:32	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	4
GUISMS23	6/5/14	7:22	7:32	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	4
GUISMS23	6/5/14	7:22	7:32	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	4
GUISMS23	6/5/14	7:22	7:32	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	>100	5
GUISMS23	6/5/14	7:22	7:32	1	ROYT	Royal Tern	<i>Thalasseus maximus</i>	NR	<1,000	7
GUISMS23	6/5/14	7:22	7:32	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	50 to 100	8
GUISMS23	6/5/14	7:22	7:32	1	LAGU	Laughing Gull	<i>Leucophaeus atricilla</i>	NR	<1,000	8
GUISMS23	6/5/14	7:22	7:32	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	25 to 50	8
GUISMS23	6/5/14	7:22	7:32	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	25 to 50	9
GUISMS23	6/5/14	7:22	7:32	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	9
GUISMS21	6/5/14	7:51	8:01	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	0
GUISMS21	6/5/14	7:51	8:01	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	>100	1
GUISMS21	6/5/14	7:51	8:01	1	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	50 to 100	0
GUISMS21	6/5/14	7:51	8:01	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	25 to 50	0
GUISMS21	6/5/14	7:51	8:01	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	50 to 100	1
GUISMS21	6/5/14	7:51	8:01	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	2
GUISMS21	6/5/14	7:51	8:01	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	8
GUISMS21	6/5/14	7:51	8:01	1	BHCO	Brown-headed Cowbird	<i>Molothrus ater</i>	NR	<1,000	3

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS21	6/5/14	7:51	8:01	1	BHCO	Brown-headed Cowbird	<i>Molothrus ater</i>	NR	<1,000	5
GUISMS21	6/5/14	7:51	8:01	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	4
GUISMS21	6/5/14	7:51	8:01	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	50 to 100	0
GUISMS21	6/5/14	7:51	8:01	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	<1,000	1
GUISMS21	6/5/14	7:51	8:01	1	SATE	Sandwich Tern	<i>Thalasseus sandvicensis</i>	NR	<1,000	5
GUISMS21	6/5/14	7:51	8:01	1	ROYT	Royal Tern	<i>Thalasseus maximus</i>	NR	<1,000	6
GUISMS21	6/5/14	7:51	8:01	1	ROYT	Royal Tern	<i>Thalasseus maximus</i>	NR	<1,000	7
GUISMS20	6/5/14	8:54	9:04	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	0
GUISMS20	6/5/14	8:54	9:04	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	0
GUISMS20	6/5/14	8:54	9:04	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	>100	1
GUISMS20	6/5/14	8:54	9:04	2	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	>100	0
GUISMS20	6/5/14	8:54	9:04	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	4
GUISMS20	6/5/14	8:54	9:04	1	PIWA	Pine Warbler	<i>Setophaga pinus</i>	NR	50 to 100	0
GUISMS20	6/5/14	8:54	9:04	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	2
GUISMS20	6/5/14	8:54	9:04	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	0
GUISMS20	6/5/14	8:54	9:04	2	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	1
GUISMS20	6/5/14	8:54	9:04	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	2
GUISMS20	6/5/14	8:54	9:04	1	EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	NR	>100	3
GUISMS20	6/5/14	8:54	9:04	2	SATE	Sandwich Tern	<i>Thalasseus sandvicensis</i>	NR	<1,000	4
GUISMS20	6/5/14	8:54	9:04	1	SATE	Sandwich Tern	<i>Thalasseus sandvicensis</i>	NR	<1,000	5
GUISMS20	6/5/14	8:54	9:04	1	SATE	Sandwich Tern	<i>Thalasseus sandvicensis</i>	NR	<1,000	6
GUISMS20	6/5/14	8:54	9:04	1	CLRA	Clapper Rail	<i>Rallus longirostris</i>	NR	>100	6

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS20	6/5/14	8:54	9:04	8	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	50 to 100	8
GUISMS35	6/1/14	6:38	6:48	1	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	50 to 100	0
GUISMS35	6/1/14	6:38	6:48	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	>100	1
GUISMS35	6/1/14	6:38	6:48	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	25 to 50	0
GUISMS35	6/1/14	6:38	6:48	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	25 to 50	2
GUISMS35	6/1/14	6:38	6:48	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	6
GUISMS35	6/1/14	6:38	6:48	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	7
GUISMS35	6/1/14	6:38	6:48	2	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	0
GUISMS35	6/1/14	6:38	6:48	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	9
GUISMS35	6/1/14	6:38	6:48	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	<25	4
GUISMS35	6/1/14	6:38	6:48	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	7
GUISMS35	6/1/14	6:38	6:48	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	>100	0
GUISMS35	6/1/14	6:38	6:48	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	0
GUISMS35	6/1/14	6:38	6:48	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	2
GUISMS35	6/1/14	6:38	6:48	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	4
GUISMS35	6/1/14	6:38	6:48	1	OSPR	Osprey	<i>Pandion haliaetus</i>	NR	<1,000	1
GUISMS35	6/1/14	6:38	6:48	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	25 to 50	5
GUISMS35	6/1/14	6:38	6:48	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	50 to 100	9
GUISMS35	6/1/14	6:38	6:48	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	>100	8
GUISMS35	6/1/14	6:38	6:48	1	CACH	Carolina Chickadee	<i>Poecile carolinensis</i>	NR	<25	8
GUISMS35	6/1/14	6:38	6:48	1	CACH	Carolina Chickadee	<i>Poecile carolinensis</i>	NR	<25	6
GUISMS35	6/1/14	6:38	6:48	1	CACH	Carolina Chickadee	<i>Poecile carolinensis</i>	NR	50 to 100	1
GUISMS35	6/1/14	6:38	6:48	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	<25	6
GUISMS35	6/1/14	6:38	6:48	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	<25	4
GUISMS35	6/1/14	6:38	6:48	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	<25	5
GUISMS35	6/1/14	6:38	6:48	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	50 to 100	7

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS35	6/1/14	6:38	6:48	1	EABL	Eastern Bluebird	<i>Sialia sialis</i>	NR	50 to 100	6
GUISMS35	6/1/14	6:38	6:48	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	8
GUISMS35	6/1/14	6:38	6:48	1	BHNU	Brown-headed Nuthatch	<i>Sitta pusilla</i>	NR	>100	9
GUISMS27	6/1/14	7:11	7:21	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	<25	0
GUISMS27	6/1/14	7:11	7:21	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	25 to 50	0
GUISMS27	6/1/14	7:11	7:21	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	25 to 50	2
GUISMS27	6/1/14	7:11	7:21	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	6
GUISMS27	6/1/14	7:11	7:21	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	7
GUISMS27	6/1/14	7:11	7:21	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	0
GUISMS27	6/1/14	7:11	7:21	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	4
GUISMS27	6/1/14	7:11	7:21	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	<25	0
GUISMS27	6/1/14	7:11	7:21	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	25 to 50	1
GUISMS27	6/1/14	7:11	7:21	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	<25	6
GUISMS27	6/1/14	7:11	7:21	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	3
GUISMS27	6/1/14	7:11	7:21	2	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	0
GUISMS27	6/1/14	7:11	7:21	2	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	0
GUISMS27	6/1/14	7:11	7:21	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	1
GUISMS27	6/1/14	7:11	7:21	1	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	25 to 50	2
GUISMS27	6/1/14	7:11	7:21	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	6
GUISMS27	6/1/14	7:11	7:21	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	25 to 50	1
GUISMS27	6/1/14	7:11	7:21	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	50 to 100	3
GUISMS27	6/1/14	7:11	7:21	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	50 to 100	9
GUISMS28	6/1/14	7:35	7:45	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	25 to 50	3
GUISMS28	6/1/14	7:35	7:45	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	0
GUISMS28	6/1/14	7:35	7:45	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	2
GUISMS28	6/1/14	7:35	7:45	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	6

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS28	6/1/14	7:35	7:45	1	CACH	Carolina Chickadee	<i>Poecile carolinensis</i>	NR	<25	0
GUISMS28	6/1/14	7:35	7:45	1	CACH	Carolina Chickadee	<i>Poecile carolinensis</i>	NR	<25	1
GUISMS28	6/1/14	7:35	7:45	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	0
GUISMS28	6/1/14	7:35	7:45	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	3
GUISMS28	6/1/14	7:35	7:45	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	<25	0
GUISMS28	6/1/14	7:35	7:45	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	0
GUISMS28	6/1/14	7:35	7:45	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	4
GUISMS28	6/1/14	7:35	7:45	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	5
GUISMS28	6/1/14	7:35	7:45	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	>100	6
GUISMS28	6/1/14	7:35	7:45	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	<25	1
GUISMS28	6/1/14	7:35	7:45	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	2
GUISMS28	6/1/14	7:35	7:45	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	4
GUISMS28	6/1/14	7:35	7:45	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	0
GUISMS28	6/1/14	7:35	7:45	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	50 to 100	5
GUISMS28	6/1/14	7:35	7:45	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	50 to 100	6
GUISMS28	6/1/14	7:35	7:45	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	<25	0
GUISMS28	6/1/14	7:35	7:45	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	25 to 50	0
GUISMS28	6/1/14	7:35	7:45	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	<1,000	5
GUISMS28	6/1/14	7:35	7:45	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	50 to 100	6
GUISMS28	6/1/14	7:35	7:45	1	RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NR	>100	4
GUISMS28	6/1/14	7:35	7:45	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	<1,000	7
GUISMS28	6/1/14	7:35	7:45	1	DOWO	Downy Woodpecker	<i>Picoides pubescens</i>	NR	50 to 100	9
GUISMS28	6/1/14	7:35	7:45	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	<25	4
GUISMS28	6/1/14	7:35	7:45	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	25 to 50	2

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS25	6/1/14	7:57	8:07	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	3
GUISMS25	6/1/14	7:57	8:07	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	0
GUISMS25	6/1/14	7:57	8:07	1	BHCO	Brown-headed Cowbird	<i>Molothrus ater</i>	NR	>100	0
GUISMS25	6/1/14	7:57	8:07	1	BHCO	Brown-headed Cowbird	<i>Molothrus ater</i>	NR	>100	6
GUISMS25	6/1/14	7:57	8:07	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	0
GUISMS25	6/1/14	7:57	8:07	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	<25	0
GUISMS25	6/1/14	7:57	8:07	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	1
GUISMS25	6/1/14	7:57	8:07	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	25 to 50	0
GUISMS25	6/1/14	7:57	8:07	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	4
GUISMS25	6/1/14	7:57	8:07	1	EABL	Eastern Bluebird	<i>Sialia sialis</i>	NR	25 to 50	2
GUISMS25	6/1/14	7:57	8:07	2	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	2
GUISMS25	6/1/14	7:57	8:07	2	PUMA	Purple Martin	<i>Progne subis</i>	NR	<1,000	6
GUISMS25	6/1/14	7:57	8:07	1	PUMA	Purple Martin	<i>Progne subis</i>	NR	<1,000	7
GUISMS25	6/1/14	7:57	8:07	1	PUMA	Purple Martin	<i>Progne subis</i>	NR	<1,000	9
GUISMS25	6/1/14	7:57	8:07	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	2
GUISMS25	6/1/14	7:57	8:07	1	CHSW	Chimney Swift	<i>Chaetura pelagica</i>	NR	25 to 50	4
GUISMS25	6/1/14	7:57	8:07	1	CHSW	Chimney Swift	<i>Chaetura pelagica</i>	NR	25 to 50	5
GUISMS25	6/1/14	7:57	8:07	1	CHSW	Chimney Swift	<i>Chaetura pelagica</i>	NR	<1,000	3
GUISMS40	6/1/14	8:47	8:57	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	<25	0
GUISMS40	6/1/14	8:47	8:57	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	2
GUISMS40	6/1/14	8:47	8:57	1	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	50 to 100	0
GUISMS40	6/1/14	8:47	8:57	1	GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	NR	50 to 100	7
GUISMS40	6/1/14	8:47	8:57	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	>100	0
GUISMS40	6/1/14	8:47	8:57	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	25 to 50	1
GUISMS40	6/1/14	8:47	8:57	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	>100	3

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS40	6/1/14	8:47	8:57	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	0
GUISMS40	6/1/14	8:47	8:57	1	BHNU	Brown-headed Nuthatch	<i>Sitta pusilla</i>	NR	<25	6
GUISMS40	6/1/14	8:47	8:57	1	BHNU	Brown-headed Nuthatch	<i>Sitta pusilla</i>	NR	25 to 50	8
GUISMS40	6/1/14	8:47	8:57	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	25 to 50	4
GUISMS40	6/1/14	8:47	8:57	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	5
GUISMS40	6/1/14	8:47	8:57	1	CACH	Carolina Chickadee	<i>Poecile carolinensis</i>	NR	<25	5
GUISMS40	6/1/14	8:47	8:57	1	PUMA	Purple Martin	<i>Progne subis</i>	NR	<1,000	6
GUISMS40	6/1/14	8:47	8:57	1	PUMA	Purple Martin	<i>Progne subis</i>	NR	<1,000	8
GUISMS26	6/1/14	8:19	8:29	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	<25	0
GUISMS26	6/1/14	8:19	8:29	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	3
GUISMS26	6/1/14	8:19	8:29	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	1
GUISMS26	6/1/14	8:19	8:29	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	25 to 50	0
GUISMS26	6/1/14	8:19	8:29	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	5
GUISMS26	6/1/14	8:19	8:29	1	DOWO	Downy Woodpecker	<i>Picoides pubescens</i>	NR	50 to 100	1
GUISMS26	6/1/14	8:19	8:29	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	<25	1
GUISMS26	6/1/14	8:19	8:29	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	4
GUISMS26	6/1/14	8:19	8:29	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	1
GUISMS26	6/1/14	8:19	8:29	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	2
GUISMS26	6/1/14	8:19	8:29	1	PUMA	Purple Martin	<i>Progne subis</i>	NR	<1,000	3
GUISMS26	6/1/14	8:19	8:29	1	PUMA	Purple Martin	<i>Progne subis</i>	NR	<1,000	5
GUISMS26	6/1/14	8:19	8:29	1	PUMA	Purple Martin	<i>Progne subis</i>	NR	<1,000	6
GUISMS26	6/1/14	8:19	8:29	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	50 to 100	4
GUISMS26	6/1/14	8:19	8:29	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	4
GUISMS26	6/1/14	8:19	8:29	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	>100	2
GUISMS26	6/1/14	8:19	8:29	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	>100	6
GUISMS26	6/1/14	8:19	8:29	1	LETE	Least Tern	<i>Sternula antillarum</i>	NR	>100	9

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS26	6/1/14	8:19	8:29	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	50 to 100	7
GUISMS26	6/1/14	8:19	8:29	1	NOPA	Northern Parula	<i>Setophaga americana</i>	NR	50 to 100	9
GUISMS26	6/1/14	8:19	8:29	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	>100	8
GUISMS29	6/1/14	6:08	6:18	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	50 to 100	2
GUISMS29	6/1/14	6:08	6:18	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	>100	0
GUISMS29	6/1/14	6:08	6:18	1	RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	NR	>100	6
GUISMS29	6/1/14	6:08	6:18	1	EUCD	Eurasian Collared-Dove	<i>Streptopelia decaocto</i>	NR	>100	1
GUISMS29	6/1/14	6:08	6:18	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	25 to 50	1
GUISMS29	6/1/14	6:08	6:18	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	5
GUISMS29	6/1/14	6:08	6:18	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	6
GUISMS29	6/1/14	6:08	6:18	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	7
GUISMS29	6/1/14	6:08	6:18	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	0
GUISMS29	6/1/14	6:08	6:18	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	0
GUISMS29	6/1/14	6:08	6:18	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	1
GUISMS29	6/1/14	6:08	6:18	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	>100	3
GUISMS29	6/1/14	6:08	6:18	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	>100	5
GUISMS29	6/1/14	6:08	6:18	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	>100	7
GUISMS29	6/1/14	6:08	6:18	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	<25	3
GUISMS29	6/1/14	6:08	6:18	1	BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	NR	50 to 100	9
GUISMS29	6/1/14	6:08	6:18	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	<25	1
GUISMS29	6/1/14	6:08	6:18	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	2
GUISMS29	6/1/14	6:08	6:18	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	25 to 50	4
GUISMS29	6/1/14	6:08	6:18	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	50 to 100	2
GUISMS29	6/1/14	6:08	6:18	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	50 to 100	5

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS29	6/1/14	6:08	6:18	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	4
GUISMS29	6/1/14	6:08	6:18	1	SUTA	Summer Tanager	<i>Piranga rubra</i>	NR	25 to 50	2
GUISMS29	6/1/14	6:08	6:18	1	CHSW	Chimney Swift	<i>Chaetura pelagica</i>	NR	<1,000	5
GUISMS29	6/1/14	6:08	6:18	1	CHSW	Chimney Swift	<i>Chaetura pelagica</i>	NR	<1,000	6
GUISMS29	6/1/14	6:08	6:18	1	CHSW	Chimney Swift	<i>Chaetura pelagica</i>	NR	<1,000	7
GUISMS33	6/1/14	5:47	5:57	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	25 to 50	1
GUISMS33	6/1/14	5:47	5:57	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	0
GUISMS33	6/1/14	5:47	5:57	1	EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	NR	50 to 100	4
GUISMS33	6/1/14	5:47	5:57	1	PIWA	Pine Warbler	<i>Setophaga pinus</i>	NR	50 to 100	0
GUISMS33	6/1/14	5:47	5:57	1	PIWA	Pine Warbler	<i>Setophaga pinus</i>	NR	50 to 100	2
GUISMS33	6/1/14	5:47	5:57	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	0
GUISMS33	6/1/14	5:47	5:57	1	NOMO	Northern Mockingbird	<i>Mimus polyglottos</i>	NR	>100	1
GUISMS33	6/1/14	5:47	5:57	1	GRCA	Gray Catbird	<i>Dumetella carolinensis</i>	NR	50 to 100	0
GUISMS33	6/1/14	5:47	5:57	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	25 to 50	6
GUISMS33	6/1/14	5:47	5:57	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	0
GUISMS33	6/1/14	5:47	5:57	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	3
GUISMS33	6/1/14	5:47	5:57	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	50 to 100	5
GUISMS33	6/1/14	5:47	5:57	1	BLJA	Blue Jay	<i>Cyanocitta cristata</i>	NR	>100	8
GUISMS33	6/1/14	5:47	5:57	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	0
GUISMS33	6/1/14	5:47	5:57	1	NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	NR	50 to 100	3
GUISMS33	6/1/14	5:47	5:57	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	25 to 50	8
GUISMS33	6/1/14	5:47	5:57	1	CARW	Carolina Wren	<i>Thryothorus ludovicianus</i>	NR	50 to 100	1
GUISMS33	6/1/14	5:47	5:57	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	50 to 100	2
GUISMS33	6/1/14	5:47	5:57	1	MODO	Mourning Dove	<i>Zenaida macroura</i>	NR	>100	3
GUISMS33	6/1/14	5:47	5:57	1	TUTI	Tufted Titmouse	<i>Baeolophus bicolor</i>	NR	>100	4
GUISMS33	6/1/14	5:47	5:57	1	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	5

Appendix B. Continued.

Point	Date	Start Time	End Time	Count	Alpha Code	Common Name	Scientific Name	Detection Cue	Distance Bin	Time Bin
GUISMS33	6/1/14	5:47	5:57	2	FICR	Fish Crow	<i>Corvus ossifragus</i>	NR	<1,000	9

The Department of the Interior protects and manages the nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its special responsibilities to American Indians, Alaska Natives, and affiliated Island Communities.

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