

# PROJECT WILDBIRD®

Food and Feeder Preferences of Wild Birds in the United States and Canada



## Appendix

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**95% CONFIDENCE INTERVALS OF THE NUMBER OF BIRD VISITS PER 45-MINUTE  
OBSERVATION SESSION FOR 17 BIRD SPECIES AT 10 FOOD TYPES**

**American Goldfinch**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.42	0.02	0.49	0.51	0.64	0.02	0.05	0.11	0.01	0.05
LCL	0.41	0.01	0.46	0.48	0.60	0.01	0.05	0.10	0.01	0.05

**Black-capped Chickadee**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.24	0.02	0.10	0.15	0.03	0.02	0.09	0.09	0.07	0.02
LCL	0.22	0.01	0.09	0.13	0.03	0.01	0.08	0.08	0.06	0.02

**Blue Jay**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.03	0.06	0.02	0.03	0.00	0.02	0.01	0.06	0.11	0.01
LCL	0.03	0.05	0.02	0.03	0.00	0.02	0.01	0.05	0.10	0.01

**Brown-headed Cowbird**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.02	0.02	0.02	0.02	0.01	0.02	0.01	0.01	0.01	0.15
LCL	0.02	0.02	0.01	0.02	0.01	0.02	0.01	0.01	0.00	0.14

**Carolina Chickadee**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.04	0.00	0.02	0.03	0.00	0.00	0.02	0.02	0.01	0.00
LCL	0.04	0.00	0.02	0.03	0.00	0.00	0.02	0.02	0.01	0.00

**Chipping Sparrow**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.05
LCL	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.05

**Common Grackle**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.05	0.07	0.04	0.05	0.01	0.03	0.02	0.04	0.04	0.03
LCL	0.05	0.06	0.04	0.04	0.01	0.02	0.02	0.04	0.04	0.03

### Dark-eyed Junco

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.03	0.03	0.03	0.04	0.04	0.02	0.02	0.02	0.01	0.06
LCL	0.03	0.02	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.06

### House Finch

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.51	0.03	0.36	0.38	0.32	0.05	0.27	0.20	0.03	0.14
LCL	0.49	0.03	0.34	0.35	0.30	0.04	0.25	0.19	0.02	0.14

### House Sparrow

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.26	0.27	0.25	0.24	0.08	0.23	0.08	0.13	0.07	0.92
LCL	0.25	0.25	0.23	0.22	0.07	0.20	0.07	0.11	0.06	0.89

### Mourning Dove

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.07	0.06	0.07	0.07	0.07	0.06	0.08	0.05	0.02	0.12
LCL	0.07	0.06	0.06	0.06	0.07	0.05	0.08	0.04	0.01	0.12

### Northern Cardinal

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.14	0.02	0.06	0.07	0.01	0.03	0.08	0.10	0.04	0.03
LCL	0.14	0.02	0.05	0.06	0.01	0.02	0.07	0.09	0.04	0.03

### Pine Siskin

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.06	0.00	0.10	0.10	0.10	0.00	0.01	0.02	0.00	0.01
LCL	0.06	0.00	0.08	0.09	0.09	0.00	0.01	0.02	0.00	0.01

### Purple Finch

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.07	0.00	0.04	0.05	0.06	0.01	0.04	0.03	0.00	0.02
LCL	0.07	0.00	0.04	0.04	0.05	0.00	0.04	0.03	0.00	0.02

### **Red-winged Blackbird**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.05
LCL	0.03	0.02	0.02	0.02	0.00	0.01	0.01	0.01	0.01	0.04

### **Tufted Titmouse**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.05	0.00	0.03	0.04	0.00	0.00	0.03	0.04	0.05	0.01
LCL	0.04	0.00	0.02	0.03	0.00	0.00	0.03	0.04	0.05	0.00

### **White-breasted Nuthatch**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
UCL	0.039	0.009	0.03	0.034	0.005	0.005	0.017	0.035	0.041	0.005
LCL	0.037	0.008	0.026	0.03	0.004	0.004	0.014	0.031	0.037	0.004

**95% CONFIDENCE INTERVALS OF THE NUMBER OF BIRD VISITS PER 45-MINUTE  
OBSERVATION SESSION FOR 17 BIRD SPECIES DURING 4 SEASONS**

**American Goldfinch**

	Winter	Spring	Summer	Fall
UCL	0.30	0.24	0.19	0.22
LCL	0.28	0.23	0.18	0.21

**Black-capped Chickadee**

	Winter	Spring	Summer	Fall
UCL	0.16	0.06	0.05	0.14
LCL	0.15	0.05	0.05	0.13

**Blue Jay**

	Winter	Spring	Summer	Fall
UCL	0.02	0.02	0.03	0.04
LCL	0.02	0.02	0.03	0.04

**Brown-headed Cowbird**

	Winter	Spring	Summer	Fall
UCL	0.04	0.08	0.06	0.02
LCL	0.03	0.07	0.06	0.01

**Carolina Chickadee**

	Winter	Spring	Summer	Fall
UCL	0.02	0.01	0.01	0.03
LCL	0.02	0.01	0.01	0.03

**Chipping Sparrow**

	Winter	Spring	Summer	Fall
UCL	0.01	0.03	0.02	0.01
LCL	0.01	0.03	0.02	0.00

**Common Grackle**

	Winter	Spring	Summer	Fall
UCL	0.01	0.07	0.06	0.01
LCL	0.00	0.06	0.06	0.01

### **Dark-eyed Junco**

	Winter	Spring	Summer	Fall
UCL	0.09	0.03	0.01	0.03
LCL	0.08	0.02	0.00	0.03

### **House Finch**

	Winter	Spring	Summer	Fall
UCL	0.25	0.20	0.37	0.23
LCL	0.24	0.19	0.36	0.22

### **House Sparrow**

	Winter	Spring	Summer	Fall
UCL	0.37	0.26	0.42	0.48
LCL	0.34	0.24	0.40	0.46

### **Mourning Dove**

	Winter	Spring	Summer	Fall
UCL	0.06	0.06	0.11	0.08
LCL	0.06	0.05	0.11	0.08

### **Northern Cardinal**

	Winter	Spring	Summer	Fall
UCL	0.08	0.05	0.07	0.07
LCL	0.07	0.05	0.07	0.07

### **Pine Siskin**

	Winter	Spring	Summer	Fall
UCL	0.02	0.06	0.05	0.02
LCL	0.02	0.05	0.04	0.02

### **Purple Finch**

	Winter	Spring	Summer	Fall
UCL	0.02	0.03	0.05	0.04
LCL	0.02	0.03	0.04	0.04

### **Red-winged Blackbird**

	Winter	Spring	Summer	Fall
UCL	0.01	0.05	0.03	0.01
LCL	0.01	0.05	0.03	0.01

### **Tufted Titmouse**

	Winter	Spring	Summer	Fall
UCL	0.03	0.02	0.02	0.04
LCL	0.02	0.01	0.02	0.04

### **White-breasted Nuthatch**

	Winter	Spring	Summer	Fall
UCL	0.02	0.01	0.02	0.03
LCL	0.02	0.01	0.02	0.03



**95% CONFIDENCE INTERVALS OF THE NUMBER OF BIRD VISITS PER 45-MINUTE  
OBSERVATION SESSION FOR 17 BIRD SPECIES IN 4 REGIONS**

**American Goldfinch**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.27	0.11	0.28	0.24
LCL	0.26	0.10	0.27	0.23

**Black-capped Chickadee**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.11	0.01	0.15	0.10
LCL	0.10	0.01	0.14	0.09

**Blue Jay**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.03	0.00	0.08	0.02
LCL	0.03	0.00	0.08	0.02

**Brown-headed Cowbird**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.08	0.01	0.01	0.05
LCL	0.08	0.01	0.01	0.04

**Carolina Chickadee**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.05	0.00	0.00	0.01
LCL	0.05	0.00	0.00	0.01

**Chipping Sparrow**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.03	0.00	0.01	0.02
LCL	0.03	0.00	0.00	0.01

**Common Grackle**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.03	0.00	0.05	0.05
LCL	0.03	0.00	0.05	0.05

### **Dark-eyed Junco**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.02	0.04	0.03	0.04
LCL	0.02	0.04	0.03	0.04

### **House Finch**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.25	0.46	0.05	0.23
LCL	0.24	0.44	0.04	0.22

### **House Sparrow**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.24	0.23	0.05	0.64
LCL	0.23	0.21	0.05	0.62

### **Mourning Dove**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.10	0.07	0.09	0.07
LCL	0.10	0.06	0.09	0.07

### **Northern Cardinal**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.09	0.00	0.02	0.09
LCL	0.09	0.00	0.01	0.08

### **Pine Siskin**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.00	0.20	0.02	0.00
LCL	0.00	0.18	0.01	0.00

### **Purple Finch**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.03	0.02	0.09	0.04
LCL	0.02	0.02	0.08	0.04

### **Red-winged Blackbird**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.02	0.02	0.02	0.04
LCL	0.02	0.01	0.02	0.04

### **Tufted Titmouse**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.05	0.00	0.01	0.02
LCL	0.05	0.00	0.01	0.02

### **White-breasted Nuthatch**

	Eastern	Intermountain West	Northern Forest	Prairie
UCL	0.02	0.00	0.03	0.03
LCL	0.01	0.00	0.02	0.03

**95% CONFIDENCE INTERVALS OF THE NUMBER OF BIRD VISITS PER 45-MINUTE  
OBSERVATION SESSION FOR 17 BIRD SPECIES AT 3 FEEDER TYPES**

**American Goldfinch**

	Platform	Hopper	Tube
UCL	0.14	0.14	0.43
LCL	0.13	0.14	0.42

**Black-capped Chickadee**

	Platform	Hopper	Tube
UCL	0.09	0.13	0.07
LCL	0.09	0.12	0.07

**Blue Jay**

	Platform	Hopper	Tube
UCL	0.05	0.03	0.01
LCL	0.05	0.03	0.01

**Brown-headed Cowbird**

	Platform	Hopper	Tube
UCL	0.09	0.04	0.02
LCL	0.09	0.04	0.02

**Carolina Chickadee**

	Platform	Hopper	Tube
UCL	0.02	0.02	0.02
LCL	0.01	0.02	0.02

**Chipping Sparrow**

	Platform	Hopper	Tube
UCL	0.01	0.02	0.02
LCL	0.01	0.02	0.02

**Common Grackle**

	Platform	Hopper	Tube
UCL	0.07	0.03	0.02
LCL	0.07	0.03	0.02

### **Dark-eyed Junco**

	Platform	Hopper	Tube
UCL	0.04	0.04	0.02
LCL	0.04	0.04	0.02

### **House Finch**

	Platform	Hopper	Tube
UCL	0.27	0.19	0.34
LCL	0.26	0.18	0.33

### **House Sparrow**

	Platform	Hopper	Tube
UCL	0.41	0.21	0.54
LCL	0.39	0.21	0.51

### **Mourning Dove**

	Platform	Hopper	Tube
UCL	0.20	0.03	0.00
LCL	0.20	0.03	0.00

### **Northern Cardinal**

	Platform	Hopper	Tube
UCL	0.09	0.09	0.02
LCL	0.09	0.08	0.02

### **Pine Siskin**

	Platform	Hopper	Tube
UCL	0.05	0.05	0.05
LCL	0.04	0.02	0.05

### **Purple Finch**

	Platform	Hopper	Tube
UCL	0.03	0.05	0.03
LCL	0.03	0.05	0.03

### **Red-winged Blackbird**

	Platform	Hopper	Tube
UCL	0.04	0.02	0.02
LCL	0.04	0.02	0.02

### **Tufted Titmouse**

	Platform	Hopper	Tube
UCL	0.03	0.02	0.03
LCL	0.03	0.02	0.02

### **White-breasted Nuthatch**

	Platform	Hopper	Tube
UCL	0.03	0.02	0.02
LCL	0.02	0.02	0.02

**MEANS AND STANDARD ERRORS OF THE NUMBER OF BIRD VISITS PER 45-MINUTE  
OBSERVATION SESSION FOR 17 BIRD SPECIES AT 10 FOOD AND 4 SEASON  
COMBINATIONS**

\*Upper and lower confidence intervals can be calculated by multiplying the SE by 1.96 and adding or subtracting the total from the mean.

**American Goldfinch**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Winter	0.57	0.02	0.68	0.62	0.70	0.02	0.06	0.17	0.01	0.05
Spring	0.43	0.02	0.48	0.56	0.66	0.02	0.06	0.12	0.01	0.05
Summer	0.33	0.01	0.41	0.42	0.55	0.02	0.05	0.07	0.01	0.04
Fall	0.40	0.02	0.45	0.48	0.64	0.02	0.05	0.10	0.01	0.05
Winter (SE)	0.02	0.00	0.05	0.05	0.05	0.00	0.01	0.02	0.00	0.00
Spring (SE)	0.01	0.00	0.03	0.03	0.04	0.00	0.01	0.01	0.00	0.00
Summer (SE)	0.01	0.00	0.02	0.02	0.03	0.01	0.01	0.01	0.00	0.00
Fall (SE)	0.01	0.00	0.03	0.03	0.04	0.00	0.01	0.01	0.00	0.00

**Black-capped Chickadee**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Winter	0.40	0.02	0.16	0.24	0.03	0.02	0.18	0.16	0.11	0.02
Spring	0.14	0.01	0.06	0.08	0.02	0.01	0.05	0.04	0.05	0.01
Summer	0.10	0.01	0.06	0.09	0.02	0.01	0.05	0.05	0.05	0.02
Fall	0.34	0.03	0.15	0.21	0.05	0.02	0.12	0.14	0.09	0.03
Winter (SE)	0.02	0.01	0.02	0.03	0.00	0.01	0.02	0.02	0.01	0.00
Spring (SE)	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.00
Summer (SE)	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.00
Fall (SE)	0.02	0.01	0.02	0.02	0.01	0.00	0.01	0.02	0.01	0.00

**Blue Jay**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Winter	0.02	0.04	0.02	0.03	0.00	0.01	0.01	0.03	0.07	0.01
Spring	0.02	0.04	0.02	0.02	0.00	0.01	0.01	0.05	0.08	0.01
Summer	0.03	0.08	0.02	0.03	0.00	0.03	0.01	0.07	0.13	0.01
Fall	0.05	0.08	0.03	0.04	0.01	0.04	0.02	0.08	0.15	0.02
Winter (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Spring (SE)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00
Summer (SE)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00
Fall (SE)	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00





### Common Grackle

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Winter	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.00
Spring	0.01	0.13	0.06	0.08	0.01	0.05	0.03	0.06	0.08	0.05
Summer	0.08	0.09	0.08	0.08	0.01	0.04	0.04	0.07	0.08	0.05
Fall	0.01	0.02	0.01	0.01	0.00	0.00	0.01	0.02	0.01	0.01
Winter (SE)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spring (SE)	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.00
Summer (SE)	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.00
Fall (SE)	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00

### Dark-eyed Junco

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Winter	0.08	0.07	0.09	0.09	0.08	0.05	0.05	0.05	0.03	0.15
Spring	0.02	0.02	0.02	0.03	0.04	0.03	0.01	0.01	0.01	0.04
Summer	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
Fall	0.02	0.02	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.05
Winter (SE)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
Spring (SE)	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Summer (SE)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Fall (SE)	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00

### House Finch

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Winter	0.52	0.02	0.31	0.30	0.25	0.04	0.24	0.24	0.03	0.12
Spring	0.39	0.02	0.26	0.30	0.25	0.03	0.22	0.15	0.01	0.10
Summer	0.67	0.05	0.55	0.56	0.51	0.08	0.37	0.25	0.04	0.22
Fall	0.45	0.02	0.30	0.32	0.26	0.03	0.23	0.19	0.02	0.13
Winter (SE)	0.02	0.00	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01
Spring (SE)	0.01	0.00	0.02	0.02	0.02	0.00	0.02	0.01	0.00	0.01
Summer (SE)	0.02	0.01	0.03	0.03	0.03	0.01	0.03	0.02	0.00	0.01
Fall (SE)	0.01	0.00	0.02	0.02	0.02	0.00	0.02	0.02	0.00	0.01

## House Sparrow

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Winter	0.29	0.18	0.29	0.24	0.07	0.20	0.09	0.12	0.05	0.87
Spring	0.12	0.18	0.13	0.13	0.04	0.11	0.04	0.06	0.04	0.73
Summer	0.25	0.37	0.24	0.27	0.09	0.27	0.09	0.13	0.09	1.03
Fall	0.40	0.34	0.35	0.33	0.12	0.32	0.10	0.19	0.10	1.04
Winter (SE)	0.02	0.02	0.03	0.03	0.01	0.03	0.02	0.02	0.01	0.04
Spring (SE)	0.01	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.03
Summer (SE)	0.01	0.03	0.02	0.02	0.01	0.02	0.01	0.02	0.01	0.03
Fall (SE)	0.02	0.03	0.03	0.02	0.01	0.03	0.02	0.02	0.01	0.03

## Mourning Dove

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Winter	0.06	0.06	0.06	0.05	0.04	0.05	0.07	0.05	0.01	0.09
Spring	0.05	0.04	0.05	0.05	0.06	0.04	0.06	0.03	0.01	0.09
Summer	0.11	0.08	0.11	0.09	0.13	0.08	0.12	0.06	0.02	0.16
Fall	0.07	0.07	0.06	0.06	0.05	0.06	0.07	0.05	0.02	0.14
Winter (SE)	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
Spring (SE)	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00
Summer (SE)	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
Fall (SE)	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01

## Northern Cardinal

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Winter	0.14	0.04	0.07	0.09	0.02	0.04	0.09	0.11	0.05	0.04
Spring	0.11	0.02	0.04	0.05	0.01	0.02	0.07	0.08	0.03	0.02
Summer	0.15	0.02	0.05	0.07	0.01	0.02	0.08	0.11	0.04	0.03
Fall	0.15	0.02	0.07	0.07	0.02	0.03	0.08	0.10	0.04	0.03
Winter (SE)	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.00
Spring (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00
Summer (SE)	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00
Fall (SE)	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00



### Tufted Titmouse

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Winter	0.05	0.01	0.03	0.05	0.00	0.01	0.04	0.04	0.06	0.00
Spring	0.03	0.00	0.02	0.02	0.00	0.00	0.02	0.02	0.03	0.00
Summer	0.04	0.00	0.02	0.03	0.00	0.00	0.02	0.03	0.03	0.00
Fall	0.07	0.01	0.03	0.06	0.01	0.00	0.05	0.07	0.09	0.01
Winter (SE)	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.00
Spring (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Summer (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fall (SE)	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.00

### White-breasted Nuthatch

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Winter	0.03	0.01	0.04	0.04	0.01	0.00	0.02	0.04	0.06	0.01
Spring	0.02	0.00	0.02	0.02	0.00	0.00	0.01	0.02	0.02	0.00
Summer	0.03	0.01	0.02	0.02	0.01	0.01	0.01	0.03	0.03	0.00
Fall	0.06	0.01	0.05	0.05	0.01	0.01	0.03	0.05	0.06	0.01
Winter (SE)	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00
Spring (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Summer (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fall (SE)	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00

**MEANS AND STANDARD ERRORS OF THE NUMBER OF BIRD VISITS PER 45-MINUTE  
OBSERVATION SESSION FOR 17 BIRD SPECIES AT 10 FOOD AND 4 REGION  
COMBINATIONS**

\*Upper and lower confidence intervals can be calculated by multiplying the SE by 1.96 and adding or subtracting the total from the mean.

**American Goldfinch**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Eastern	0.48	0.03	0.52	0.63	0.72	0.04	0.08	0.14	0.01	0.05
Intermountain West	0.20	0.01	0.24	0.24	0.22	0.01	0.02	0.04	0.01	0.03
Northern Forest	0.47	0.02	0.67	0.59	0.72	0.01	0.09	0.19	0.01	0.08
Prairie	0.45	0.01	0.49	0.48	0.68	0.02	0.04	0.13	0.01	0.05
Eastern (SE)	0.01	0.00	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00
Intermountain West (SE)	0.01	0.00	0.03	0.03	0.03	0.00	0.01	0.01	0.00	0.00
Northern Forest (SE)	0.02	0.01	0.05	0.04	0.05	0.00	0.01	0.14	0.00	0.01
Prairie (SE)	0.01	0.00	0.03	0.03	0.03	0.00	0.01	0.03	0.00	0.00

**Black-capped Chickadee**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Eastern	0.28	0.02	0.12	0.16	0.03	0.01	0.08	0.12	0.06	0.02
Intermountain West	0.03	0.01	0.01	0.02	0.01	0.00	0.01	0.01	0.01	0.01
Northern Forest	0.33	0.03	0.18	0.25	0.09	0.03	0.15	0.15	0.11	0.03
Prairie	0.24	0.01	0.10	0.15	0.03	0.01	0.12	0.09	0.08	0.02
Eastern (SE)	0.02	0.01	0.02	0.02	0.01	0.00	0.01	0.02	0.01	0.00
Intermountain West (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Forest (SE)	0.01	0.00	0.01	0.02	0.01	0.00	0.01	0.01	0.01	0.00
Prairie (SE)	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.00

**Blue Jay**

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Eastern	0.03	0.08	0.02	0.04	0.00	0.03	0.02	0.06	0.12	0.01
Intermountain West	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Forest	0.09	0.14	0.07	0.07	0.02	0.06	0.03	0.17	0.24	0.04
Prairie	0.03	0.05	0.02	0.02	0.00	0.01	0.01	0.05	0.11	0.01
Eastern (SE)	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00
Intermountain West (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Forest (SE)	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.02	0.02	0.00
Prairie (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00



### Common Grackle

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Eastern	0.03	0.07	0.04	0.04	0.01	0.02	0.02	0.03	0.03	0.03
Intermountain West	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Forest	0.07	0.06	0.08	0.06	0.01	0.03	0.03	0.08	0.05	0.04
Prairie	0.07	0.09	0.05	0.07	0.01	0.04	0.02	0.05	0.07	0.04
Eastern (SE)	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00
Intermountain West (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Forest (SE)	0.01	0.01	0.02	0.01	0.00	0.01	0.01	0.02	0.01	0.01
Prairie (SE)	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.00

### Dark-eyed Junco

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Eastern	0.01	0.02	0.03	0.02	0.03	0.02	0.01	0.01	0.01	0.04
Intermountain West	0.05	0.03	0.04	0.03	0.06	0.02	0.01	0.01	0.01	0.07
Northern Forest	0.03	0.03	0.02	0.03	0.04	0.03	0.02	0.02	0.01	0.06
Prairie	0.04	0.02	0.04	0.04	0.04	0.02	0.02	0.03	0.01	0.07
Eastern (SE)	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Intermountain West (SE)	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01
Northern Forest (SE)	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01
Prairie (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### House Finch

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Eastern	0.49	0.03	0.34	0.35	0.28	0.04	0.29	0.18	0.03	0.13
Intermountain West	0.87	0.06	0.69	0.70	0.66	0.09	0.46	0.47	0.05	0.17
Northern Forest	0.06	0.00	0.09	0.09	0.03	0.00	0.02	0.06	0.00	0.06
Prairie	0.42	0.02	0.31	0.30	0.28	0.05	0.24	0.16	0.02	0.13
Eastern (SE)	0.01	0.00	0.02	0.02	0.02	0.00	0.02	0.01	0.00	0.01
Intermountain West (SE)	0.03	0.01	0.05	0.05	0.05	0.01	0.04	0.04	0.01	0.01
Northern Forest (SE)	0.01	0.00	0.02	0.02	0.01	0.00	0.01	0.02	0.00	0.01
Prairie (SE)	0.01	0.00	0.02	0.02	0.02	0.01	0.02	0.01	0.00	0.01

## House Sparrow

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Eastern	0.16	0.19	0.12	0.16	0.06	0.14	0.05	0.07	0.04	0.58
Intermountain West	0.16	0.14	0.18	0.19	0.08	0.10	0.07	0.08	0.03	0.53
Northern Forest	0.07	0.03	0.10	0.09	0.03	0.00	0.01	0.07	0.00	0.07
Prairie	0.43	0.45	0.43	0.38	0.11	0.41	0.13	0.20	0.13	1.58
Eastern (SE)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
Intermountain West (SE)	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.03
Northern Forest (SE)	0.01	0.02	0.03	0.02	0.01	0.00	0.00	0.02	0.00	0.01
Prairie (SE)	0.02	0.03	0.03	0.02	0.01	0.03	0.01	0.02	0.01	0.04

## Mourning Dove

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Eastern	0.09	0.10	0.09	0.09	0.07	0.07	0.11	0.05	0.02	0.17
Intermountain West	0.07	0.03	0.08	0.06	0.08	0.04	0.07	0.06	0.01	0.08
Northern Forest	0.07	0.08	0.07	0.07	0.11	0.08	0.08	0.06	0.03	0.16
Prairie	0.07	0.05	0.06	0.06	0.07	0.06	0.07	0.04	0.02	0.10
Eastern (SE)	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01
Intermountain West (SE)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
Northern Forest (SE)	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01
Prairie (SE)	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00

## Northern Cardinal

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Eastern	0.18	0.04	0.08	0.09	0.02	0.04	0.11	0.14	0.06	0.05
Intermountain West	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Forest	0.04	0.00	0.01	0.02	0.00	0.00	0.02	0.02	0.00	0.00
Prairie	0.19	0.03	0.07	0.10	0.02	0.04	0.10	0.13	0.04	0.03
Eastern (SE)	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00
Intermountain West (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Forest (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prairie (SE)	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00





## Tufted Titmouse

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Eastern	0.10	0.01	0.06	0.08	0.01	0.01	0.07	0.09	0.12	0.01
Intermountain West	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Forest	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01
Prairie	0.03	0.01	0.02	0.03	0.00	0.00	0.02	0.03	0.03	0.00
Eastern (SE)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
Intermountain West (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern Forest (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prairie (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## White-breasted Nuthatch

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Eastern	0.03	0.00	0.02	0.02	0.00	0.00	0.01	0.02	0.02	0.01
Intermountain West	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Northern Forest	0.04	0.01	0.03	0.04	0.01	0.00	0.02	0.05	0.06	0.01
Prairie	0.06	0.01	0.05	0.05	0.01	0.01	0.03	0.05	0.06	0.01
Eastern (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Intermountain West (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Northern Forest (SE)	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.00
Prairie (SE)	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00



### Carolina Chickadee

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Platform	0.04	0.00	0.02	0.03	0.00	0.00	0.02	0.01	0.01	0.00
Hopper	0.04	0.00	0.03	0.04	0.00	0.00	0.01	0.02	0.01	0.00
Tube	0.05	0.00	0.03	0.03	0.01	0.00	0.03	0.03	0.02	0.00
Platform (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hopper (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tube (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### Chipping Sparrow

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Platform	0.01	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.03
Hopper	0.01	0.01	0.02	0.02	0.00	0.01	0.01	0.00	0.00	0.07
Tube	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.06
Platform (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hopper (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tube (SE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### Common Grackle

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Platform	0.09	0.11	0.08	0.09	0.02	0.04	0.04	0.08	0.08	0.05
Hopper	0.03	0.07	0.03	0.04	0.00	0.03	0.02	0.02	0.02	0.02
Tube	0.02	0.03	0.02	0.02	0.00	0.02	0.01	0.02	0.03	0.01
Platform (SE)	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.00
Hopper (SE)	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
Tube (SE)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00

### Dark-eyed Junco

	BOS	CC	FSC	MSC	N	RM	S	SS	WP	WPM
Platform	0.04	0.04	0.05	0.06	0.05	0.03	0.03	0.03	0.02	0.06
Hopper	0.03	0.03	0.04	0.03	0.04	0.02	0.02	0.02	0.01	0.07
Tube	0.02	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.04
Platform (SE)	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Hopper (SE)	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Tube (SE)	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00





