Birds of the East Texas Baptist University Campus with birds observed off-campus during BIOL3400 Field course



Photo Credit: Talton Cooper



Photo Credit: Kenneth Anding

Species Descriptions and Photos by students of BIOL3400

Edited by Troy A. Ladine

Figure 1. Location of Environmental Studies Area

Table. 1. Number of species and number of days observing birds during the field course from 2005 to 2016 and annual statistics.

Table 2. Compilation of species observed during May 2005 - 2016 on campus and off-campus.

Table 3. Number of days, by year, species have been observed on the campus of ETBU.

Table 4. Number of days, by year, species have been observed during the off-campus trips.

Table 5. Number of days, by year, species have been observed during a winter count of birds on the Environmental Studies Area of ETBU.

Table 6. Species observed from 1 September to 1 October 2009 on the Environmental Studies Area of ETBU.

Alphabetical Listing of Birds with authors of accounts and photographers.

Α	Acadian Flycatcher	B	Anhinga	B	Belted Kingfisher
	Alder Flycatcher		Bald Eagle		Travis W. Sammons
	American Bittern		Shane Kelehan		Bewick's Wren
	Lynlea Hansen		Rusty Collier		Black Phoebe
	American Coot		Leslie Fletcher		Black-throated Blue Warbler
	Jordan Bartlett		Jovana Nieto		Jacob Stone
	American Crow		Baltimore Oriole		Black Vulture
	Zane Gruznina		Pete Fitzsimmons		Jeremy Alexander
	Darius Roberts		George Plumlee		Blair Brown
	Rachel Hastie		Janae Wineland		Brent Lewis
	American Goldfinch		Barn Swallow		Keely Schlabs
	Kathleen Santanello		Katy Gifford		Black-and-white Warbler
	Matthew Armendarez		Jordan Brewer		Sheridan A. Beeman
	American Redstart		Kwame Spikes		Genea Shoulders
	Pete Fitzsimmons		Barred Owl		Black-billed Cuckoo
	American Robin		Nathan Ledkins		Abby Tunnell
	Cameron Burrell		Stacy M.Purser		Blackburnian Warbler
	Jessica Harrison		Bay-Breasted Warbler		Jacob Stone
	Devin Phillips		Reece McConnell		Black-crested Titmouse
	Jordan Bartlett		Bell's Vireo		Blackpoll Warbler
	Jordan Brewer		Christy Lopez		Hannah Word

B Blue Grosbeak **Courtney Brinker** Holly R Potter Anhre Gray **Blue Jav** Austin Dicks Zane Gruznina Steven Ramage Lindsey Vasquez Janae Wineland **Blue-gray Gnatcatcher** Kristopher Carroll **Blue-winged Teal** Graydon Cass Leslie Fletcher John Jones Travis Jones **Blue-winged Warbler Bobolink Kristopher Carroll Brewer's Blackbird** Kristopher Carroll **Broad-Winged Hawk Brown Thrasher** John Jones Taylor Weaver **Brown-headed Cowbird Rachel Hastie** Katie R. Hood Talton Cooper Steven Ramage **Brown-headed Nuthatch** Zane Gruznina Matthew Armendarez Jordan Brewer C Canada Goose **Cindy Jones** Josh Kemery **Canada Warbler** Merideth Runion

C Carolina Chickadee Brittany McCloskey Grant Murray Janae Wineland **Carolina Wren** Talton Cooper **Cattle Egret** Wayne Cooley James R. Walker Ashley Ayers Darius Williams **Cedar Waxing** Taylor Weaver **Cerulean Warbler** Weston Godsev **Chestnut-sided Warbler** Stacy M.Purser **Chimney Swift** Michelle B. Backus **Darius Roberts Chipping Sparrow** Travis Jones Nicholas Hanson **Clay-colored Sparrow** Kolby Sharp **Cliff Swallow** Jordan Bartlett **Common Grackle** Alyssa Edwards **Christopher Powell Common Nighthawk Cameron Burrell** Hannah Word **Common Yellowthroat Connecticut Warbler Cooper's Hawk Rusty Collier** Wes Dorough Andrew Garay **D** Dark-eved Junco

D Dickcissel **Kyle Nicholson Double-crested Cormorant** James R.Walker Shekinah Webb Hannah Word Downy Woodpecker Jessica Harrison Savannah Higginbotham E Eastern Bluebird Travis W. Sammons Jordan Bartlett Lacey Liles **Eastern Kingbird Rusty Collier** Talton Cooper Lacev Liles Eastern Meadowlark Clav Nail **Eastern Phoebe** Joshua L. Davis Eastern Screech-owl Reece McConnell Abby Tunnell **E** Eastern Towhee Grant Massev **Eastern Wood Pewee** Weston Godsev **Eurasian Collared Dove** Mcentry Dunbar Dylan Bethea **European Starling** Sulam Peña **Rileigh Welch F** Field Sparrow **Fish Crow G** Gray Catbird **Courtney Brinker Great Blue Heron**

G Great Egret Katy Gifford Jeff A. Savoie Kimberly Ledbetter **Great-crested Flycatcher Great-horned Owl** Thad Fortune Brittany McCloskey **Greater Roadrunner Great-Tailed Grackle Green Heron** Taylor Weaver Mitchell Penny Skylar Williams H Hairy Woodpecker **Reggie Patrick** Hermit Thrush Lvnlea Hansen **Hooded Warbler House Finch Reggie Patrick** Kathleen Santanello **House Sparrow** Kathleen Santanello Kenneth Anding Lacey Liles I Inca Dove **Indigo Bunting** Kathleen Santanello Anhre Grav K Killdeer Mcentry Dunbar Shane Kelehan Spencer C. Nelson Kenneth Anding Skylar Williams L Lark Sparrow Chelsea Parrott

L Least Flycatcher **Least Sandpiper** Little Blue Heron Abby Tunnell M Magnolia Warbler Luke Phillips Mallard Nathan Hicks George Plumlee Jordan Bartlett Marsh Wren **Mississippi Kite** Joshua L. Davis Clay Nail Aron Reynolds **Mourning Dove** Jeremy Alexander Andrew Garay Shekinah Webb Lindsey Vasquez **Mourning Warbler** N Nashville Warbler Northern Bobwhite Savannah Higginbotham Northern Cardinal Jeremy Alexander Marissa Dawkins **Devin Phillips** Sulam Peña Kenneth Anding Dylan Benge Northern Flicker Michelle B. Backus

N Northern Mockingbird Lisa Ebarb **George Plumlee** Darius Roberts Lacey Liles Shana Midgely Kenneth Anding (Cover Page) Northern Parula **Talton Cooper O** Olive-Sided Flycatcher **Orchard Oriole** John Jones Osprey **Ovenbird P** Painted Bunting Luke Phillips **Pileated Woodpecker** Luke Phillips **Pine Grosbeak** Reece McConnell **Pine Warbler** Genea Shoulders **Prothonotary Warbler** Katy Little **Purple Finch Purple Martin** Holly R.Potter Merideth Runion Matt Tarver **R** Red-bellied Woodpecker Thad Fortune Kyle Nicholson Justin Velesquez **Reddish Egret Red-eyed Vireo** Christy Lopez

R Red-headed Woodpecker Michelle B. Backus **Kimberly Ledbetter** Matthew Armendarez Jordan Brewer **Red-shouldered Hawk** Grant Massey **Red-tailed hawk** Blair Brown Nathan Hicks **Red-winged Blackbird Rock Pigeon** Stacy M. Purser **Rose-breasted Grosbeak Ruby-crowned Kinglet** Lynlea Hansen **Ruby-throated Hummingbird** Thad Fortune Katy Little Holly R. Potter Dylan Benge **Rusty Blackbird S** Savannah Sparrow **Scarlet Tanager** Alyssa Edwards **Scissor-tailed Flycatcher** Marissa Dawkins **Rachel Hastie** Shekinah Webb Jordan Bartlett Talton Cooper(Cover Page) Lacey Liles Smith's Longspur **Snowy Egret** Graydon Cass Steven Rilev

S Song Sparrow Samuel Buzzard Leslie Fletcher **Reggie Patrick Summer Tanager Courtney Brinker** Skylar Williams Swainson's Thrush Swainson's Warbler T Tennessee Warbler **Townsend's Solitaire Townsend's Warbler** T Tree Swallow **Tufted Titmouse** Weston Godsey Matthew Armendarez Steven Ramage **Turkey Vulture** Josh Kemerv Aron Reynolds **Rileigh Welch** V Veery **Vermillion Flycatcher Vesper Sparrow** W Warbling Vireo Western Kingbird **Cindy Jones** Western Tanager Kolby Sharp Whip-poor-will Matt Tarver Bryan Whitmire White-breasted Nuthatch Katie R. Hood Lindsey Vasquez

W White-crowned Sparrow White-eved Vireo Christy Lopez Skylar Williams White-rumped Sandpiper White-throated Sparrow Ashley Ayers White-winged Dove **Cameron Burrell** Willow Flycatcher Wilson's Warbler Wood Duck Alyssa Edwards Pete Fitzsimmons Wood Stork Wood Thrush Katie R. Hood **Worm-eating Warbler** Y Yellow Warbler Shane Kelehan Travis W. Sammons **Yellow-bellied Flycatcher Yellow-bellied Sapsucker** Jessica Harrison Yellow-billed Cuckoo Brvan Whitmire **Yellow-breasted Chat** Yellow-crowned Night Heron Yellow-rumped Warbler Mcentry Dunbar Yellow-throated Vireo Yellow-throated Warbler Kolby Sharp

Introduction

The accompanying guide to the birds of East Texas Baptist University is a compilation of the species accounts written by the students of my Field Course and pictures taken by some of the students in the course in lieu of the written assignment. As such, it is a continuing work in progress. Students are given the choice of doing an account for a species in which one does not exist in the guide. They can choose to do an account of and existing species with the knowledge that their written account may not be included in the guide unless it adds substantial material to what exists.

The written assignment to be completed consists of a written description of the bird, the geographical region in which the bird can be found, and a description of the habitat of the bird. Additionally, selected components of the life history of the species are to be included. These include the breeding season, number of eggs laid by the female per brood, number of broods per year, time for the young to hatch, fledge, and become independent, the age at maturity for both sexes, mating system, life span of the species in the wild, and the food habits of the species. The time the species spends in Texas is also required of the students.

A special thank you to the students for making the course possible and the work they have done in writing the accounts and taking pictures.

Studies ETBU by lane during southe year in edge of The locatio early 25 located

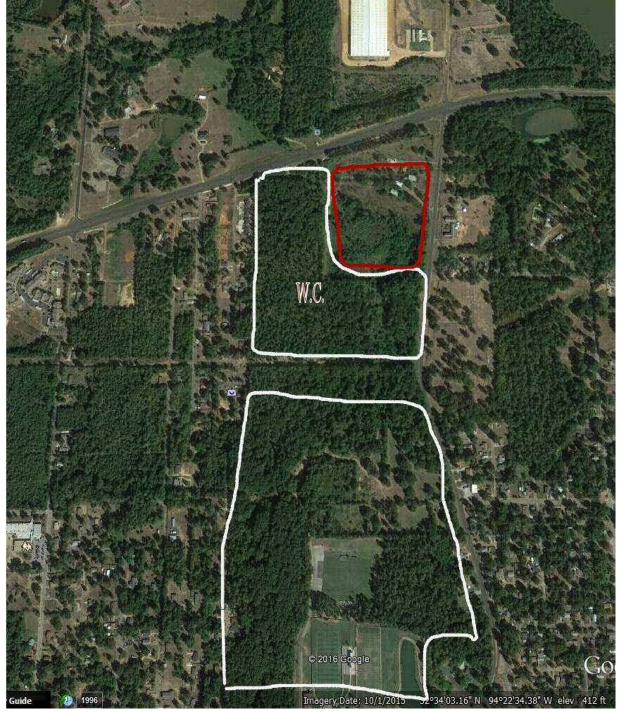


Figure 1. Location on the Environmental Area (ESA). The area is located north of the campus and is surrounded on the east and west houses. It is bordered on the north by a fivehighway. Most of the observations taken the Field Course occur in the boxed area on the rn portion of the ESA. There is one day each which the observations occur from the southern the ESA to the loop at the north end of the ESA. boxed region on the north labeled W.C. is the n of the winter bird counts from January to March. The area marked in red was clear cut on January 2015. The ETBU football field in in the bottom center for scale. Table 1. Number of species (Spp) and number of days (Day) observing birds during the field course from 2005 to 2016. Campus refers to days observing either directly on the main part of the East Texas Baptist University campus or the Environmental Studies Area. Generally, only 2 days were spent observing on the main part of campus. Caddo refers to the area immediately around the Starr Ranch of the Caddo National Wildlife Management Area. Observations at Lake of the Pines were in the area adjacent to the spillway. Other sites visited are the Texas Birding trail along Hut Horton Road in Harrison County south of Hallsville. A indicates trips were not taken to this location.

	20	005	20	06	20	07	20	008	20	09	20	10		2011	20)12	20	13	20)14	20	15	20	016
	No.	No.																						
	Sited	Days																						
Totals ETBU	37	7	44	6	48	9	70	9	66	9	61	8	53	9	52	9	56	10	51	8	78	8	63	9
Totals Caddo	31	1	40	2	40	2	33	1	36	1	35	1	36	1	28	1	37	1	40	1	44	1	38	1
Totals Lake of the							34	1	30	1	27	1			22	1	23	1	22	1	26	1	30	1
Pines Totals Other Off											38	2											18	1
Campus																								
Totals Course	45	8	63	8	65	11	83	11	82	11	80	12	62	10	61	11	75	12	74	10	97	10	84	12
Birds per Day on Campu	IS 16		23		22		27		25		27		26		24		20		24	-	31		24	

Notes pertinent to each year. If no note, conditions were average.

2007 -- 30 students in course that semester. Interfered with observations.

2010 -- all days were very windy (>15 mph)

2011 -- All days were at least 5 degrees C above average. Start of extreme drought

2013 -- overcast days and rain interfered with observations.

2015 -- very wet and cool spring. all days were overcast and cool during counts.

2016-- 10 days overcast with average temperatures

Total Number of Species observed at ETBU for May-Term Course	139	Daily Maximum
Total Number of Species for May-Term Course	157	Number Year
Average Number of Species in One Year for the Course	72	97 2015
Average Number of Species per Year at ETBU	57	78 2015
Average Number of Species per Day at ETBU	24	38 2015
Average Number of Species for loop hike	30	34 2011
Average Number of Species per Year Off Campus	46	
Average Number of Species per Day Off Campus	32	
Average Number of Species at Caddo	37	44 2015
Day 1 Average Campus Walk	22	26 2011
Total Number of Years for Course	12	
Average Number of Days Observed	11	

Table 2. Species observed during May 2005 - 2016 in BIOL3400. Total number of days observing were 102 on campus (ETBU) and 25 at the off-campus sites. Total number of species observed -157 for the course, 139 on ETBU, and 123 off-campus. Average number sited per year -73 for 12 years, 2005 -45, 2006 -53, 2007 -65, 2008 -83, 2009 82, 2010 -80, 2011 -62, 2012 -61, 2013 -75, 2014 -74, 2015 -97, and 2016 84. Days refers to the total number of days the species was observed, % days refers to the percentage of the total days the species was observed.

Species		TBU		ampus	Species	El	BU	Off-C	ampus
	Days	% days	Days	% days		Days	% days	Days	% days
Acadian Flycatcher			1	4.0	Brown-headed Cowbird	35	34.3	16	64.0
Alder flycatcher	3	2.9	1	4.0	Canada Goose	2	2.0	1	4.0
American Coot			1	4.0	Canada Warbler			2	8.0
American Crow	95	93.1	23	92.0	Carolina Chickadee	63	61.8	19	76.0
American Redstart	4	3.9	4	16.0	Carolina Wren	17	16.7	6	24.0
American Robin	85	83.3	8	32.0	Cattle Egret	4	3.9	14	56.0
Anhinga			3	12.0	Cedar Waxing	10	9.8	2	8.0
Bald Eagle			2	8.0	Cerulean Warbler	2	2.0	4	16.0
Baltimore Oriole	5	4.9	2	8.0	Chestnut-sided Warbler	2	2.0		
Barn Swallow	42	41.2	17	68.0	Chimney Swift	59	57.8	8	32.0
Barred Owl	1	1.0	4	16.0	Chipping Sparrow	30	29.4	2	8.0
Bay-breasted Warbler	1	1.0	1	4.0	Clay-colored Sparrow	3	2.9		
Bell's Vireo	1	1.0	2	8.0	Cliff Swallow	6	5.9	4	16.0
Belted Kingfisher	2	2.0	1	4.0	Common Grackle	74	72.5	12	48.0
Bewick's Wren			1	4.0	Common Nighthawk	1	1.0	1	4.0
Black Phoebe	3	2.9			Common Yellowthroat	6	5.9		
Black throated-blue Warbler			1	4.0	Connecticut Warbler	1	1.0		
Black Vulture	57	55.9	16	64.0	Cooper's Hawk	6	5.9	1	4.0
Black-and-white Warbler	7	6.9	3	12.0	Dark-eyed Junco	2	2.0		
Black-billed Cuckoo	2	2.0	2	8.0	Dickcissel	1	1.0	6	24.0
Blackburnian Warbler	7	6.9	7	28.0	Double-crested Cormorant			2	8.0
Black-crested Titmouse	1	1.0			Downy Woodpecker	10	9.8	1	4.0
Blackpoll Warbler	2	2.0	1	4.0	Eastern Bluebird	93	91.2	16	64.0
Blue Grosbeak	8	7.8	10	40.0	Eastern Kingbird	86	84.3	14	56.0
Blue Jay	100	98.0	22	88.0	Eastern Meadowlark			8	32.0
Blue-gray Gnatcatcher	5	4.9	9	36.0	Eastern Phoebe	29	28.4	10	40.0
Blue-winged Teal	1	1.0	3	12.0	Eastern Wood Pewee	28	27.5	4	16.0
Blue-winged Warbler	1	1.0			Eurasian Collared Dove	5	4.9	1	4.0
Bobolink	1	1.0			European Starling	103	101.0	8	32.0
Brewer's Blackbird	15	14.7	2	8.0	Field Sparrow	3	2.9	4	16.0
Broad-winged Hawk	3	2.9	1	4.0	Fish Crow	13	12.7	11	44.0
Brown Thrasher	48	47.1	4	16.0	Gray Catbird	15	14.7	2	8.0

Species	E	ГВИ	Off-C	ampus	Species	ET	BU	Off-C	ampus
	Days	% days	Days	% days		Days	% days	Days	% days
Great Blue Heron	4	3.9	17	68.0	Pine Grosbeak	1	1.0		
Great Egret	10	9.8	17	68.0	Pine Warbler	7	6.9	3	12.0
Great-crested Flycatcher	10	9.8	4	16.0	Prothonotary Warbler	28	27.5	11	44.0
Greater Roadrunner			1	4.0	Purple Finch	1	1.0		
Great-tailed Grackle	4	3.9			Purple Martin	9	8.8	7	28.0
Green Heron	37	36.3	6	24.0	Red-bellied Woodpecker	90	88.2	16	64.0
Hermit Thrush	6	5.9	2	8.0	Reddish Egret	6	5.9		
Hooded Warbler	1	1.0			Red-eyed Vireo	15	14.7	7	28.0
House Finch	27	26.5	2	8.0	Red-headed Woodpecker	8	7.8	9	36.0
House Sparrow	101	99.0	6	24.0	Red-shouldered Hawk	13	12.7	5	20.0
Inca Dove	4	3.9			Red-tailed hawk	12	11.8	9	36.0
Indigo Bunting	33	32.4	15	60.0	Red-winged Blackbird	7	6.9	10	40.0
Killdeer	64	62.7	3	12.0	Rock Pigeon	14	13.7		
Lark Sparrow			1	4.0	Rose-breasted Grosbeak	6	5.9	2	8.0
Least Flycatcher	5	4.9	1	4.0	Ruby-throated Hummingbird	10	9.8	7	28.0
Least Sandpiper	1	1.0	1	4.0	Rusty Blackbird			1	4.0
Little Blue Heron	1	1.0	1	4.0	Savannah Sparrow	1	1.0		
Mallard	1	1.0	6	24.0	Scarlet Tanager			1	4.0
Marsh Wren	1	1.0	1	4.0	Scissor-tailed Flycatcher	90	88.2	14	56.0
Mississippi Kite	37	36.3	6	24.0	Smith's Longspur	1	1.0		
Mourning Dove	92	90.2	24	96.0	Snowy Egret	6	5.9	6	24.0
Mourning Warbler	1	1.0	1	4.0	Song Sparrow	4	3.9	2	8.0
Nashville Warbler	1	1.0			Summer Tanager	46	45.1	13	52.0
Northern Bobwhite	1	1.0	7	28.0	Swainson's Thrush	1	1.0		
Northern Cardinal	100	98.0	25	100.0	Swainson's Warbler	2	2.0		
Northern Flicker	42	41.2	10	40.0	Tennessee Warbler	1	1.0		
Northern Mockingbird	100	98.0	21	84.0	Towsend's Solitaire	1	1.0		
Northern Parula	6	5.9	10	40.0	Towsend's Warbler	1	1.0		
Olive-sided Flycatcher	2	2.0	1	4.0	Tree Swallow			2	8.0
Orchard Oriole	14	13.7	10	40.0	Tufted Titmouse	63	61.8	16	64.0
Osprey	-	-	2	8.0	Turkey Vulture	56	54.9	22	88.0
Ovenbird	1	1.0	1	4.0	Veery	10	9.8	2	8.0
Painted Bunting	4	3.9	5	20.0	Vermillion Flycatcher	1	1.0		
Pileated Woodpecker	22	21.6	15	60.0	Vesper Sparrow	1	1.0		

Table 2. (cont.)									
Species	E	ГВИ	Off-C	ampus	Species	EI	BU	Off-C	ampus
	Days	% days	Days	% days		Days	% days	Days	% days
Warbling Vireo	1	1.0			Wood Stork			1	4.0
Western Kingbird	1	1.0	1	4.0	Wood Thrush	7	6.9		
Western Tanager			1	4.0	Worm-eating Warbler	4	3.9	1	4.0
Whip-poor-will	1	1.0			Yellow Warbler	1	1.0	1	4.0
White-Breasted Nuthatch	4	3.9			Yellow-bellied Flycatcher	1	1.0	2	8.0
White-crowned Sparrow	6	5.9	3	12.0	Yellow-bellied Sapsucker	3	2.9		
White-eyed Vireo	12	11.8	2	8.0	Yellow-billed Cuckoo	11	10.8	7	28.0
White-rumped Sandpiper	2	2.0			Yellow-breasted Chat	2	2.0	2	8.0
White-throated Sparrow	1	1.0	1	4.0	Yellow-crowned Night Heron			1	4.0
White-winged Dove	3	2.9	1	4.0	Yellow-rumped Warbler	1	1.0		
Willow Flycatcher	4	3.9	2	8.0	Yellow-throated Vireo	2	2.0	1	4.0
Wilson's Warbler	1	1.0			Yellow-throated Warbler			3	12.0
Wood Duck	3	2.9	8	32.0					

Year sited / Days observing each year / Total Species for Year **Species** Total Davs % Davs 200520062007200820092010 2011 2012 2013 2014 2015 2016 Observed Sighted Alder flycatcher 2.9% American Crow 93.1% American Redstart 3.9% American Robin 83.3% Anhinga **Baltimore Oriole** 4.9% Barn Swallow 41.2% Barred Owl 1.0% **Bav-Breasted Warbler** 1.0% Bell's Vireo 1.0% **Belted Kingfisher** 2.0% **Black Phoebe** 2.9% **Black Vulture** 55.9% Black-and-White Warbler 6.9% **Black-Billed Cuckoo** 2.0% Blackburnian Warbler 6.9% **Black-Crested Titmouse** 1.0% 2.0% **Blackpoll Warbler** Blue Grosbeak 7.8% Blue Jav 98.0% **Blue-gray Gnatcatcher** 4.9% **Blue-Winged Teal** 1.0% Bobolink 1.0% Bobwhite 1.0% Brewer's Blackbird 14.7% **Broad-Winged Hawk** 2.9% Brown Thrasher 47.1% Brown-Headed Cowbird 34.3% Canada Goose 2.0%

Table 3. Number of days, by year, species have been observed on the campus of ETBU. Days refers to total number of days the species was observed, % days refers to the percentage of the total number of days the species was observed during the 12 years.

Species	Total Days	% Days			-	-		-	-	-	'otal S	-		
Species	Sighted	Observed			-		-				2013			
		0,0001,000	7	6	8	9	9	8	9	9	10	9	10	9
			37	44	48	70	66	61	53	52	56	51	78	63
Carolina Chickadee	63	61.8%	2	5	6	4	8	7	5	5	5	4	6	6
Carolina Wren	17	16.7%	1			6		2	4		3			1
Cattle Egret	4	3.9%		1			1							2
Cedar Waxing	10	9.8%		1	1			2	3		1		2	
Cerulean Warbler	2	2.0%								1				1
Chestnut-Sided Warbler	2	2.0%				1					1			
Chimney Swift	59	57.8%	3	3	6	6	7	3	7	8	1	8	6	1
Chipping Sparrow	30	29.4%	3	2	4	3	3				1	2	9	3
Clay-Colored Sparrow	3	2.9%					1						2	
Cliff Swallow	6	5.9%		1		2			1		1	1		
Common Grackle	74	72.5%		4	5	5	6	7	7	9	7	7	10	7
Common Nighthawk	1	1.0%		•		1				-				
Common Yellowthroat	6	5.9%		1		1		1			2			1
Cooper's Hawk	6	5.9%	1								1	3	1	
Dark-Eyed Junco	2	2.0%							1		1	0		
Dickcissel	1	1.0%												1
Downy Woodpecker	10	9.8%	1			1	1	1	2	1	1		2	
Eastern Bluebird	93	91.2%	6	6	8	9	9	7	9	7	6	8	10	8
Eastern Kingbird	86		7	6	8	7	8	8	9	6	6	5	9	7
Eastern Phoebe	29	28.4%	,		1	2	3	1	5	1	4	4	6	2
Eastern Wood Pewee	28	27.5%	2	1	3	2	1	3	5	2	1	2	4	2
Eurasian Collared Dove	5	4.9%			2		1	0	U		2		•	
European Starling	103	101.0%	7	6	8	9	9	8	9	9	10	9	10	9
Field Sparrow	3	2.9%	/	Ū	Ū))	U)	1	10	1	10	1
Fish Crow	13	12.7%			1	3		2		1		3	3	-
Gray Catbird	15	14.7%	1	1	-	3	1	1		2	1	0	2	3
Great Blue Heron	4	3.9%	•	•		J	-	1		2	1		-	J
Great Egret	4 10	3.9% 9.8%	1		1	2	1	1		-	2	1	1	1
Great-Crested Flycatcher	10	9.8% 9.8%	T	2	T	2	1	1		1	2	1	2	T
Great-Tailed Grackle		9.8% 3.9%		2	1	2	T	T		1	1	T	2	
Green Heron	4 37	3.9% 36.3%	2	1	6	4	6	2	3	4	T		5	4

Species	Total Days	% Days			-	-		-	-	-		-	s for Y	
-period	Sighted	Observed											2015	
	0		7	6	8	9	9	8	9	9	10	9	10	9
			37	44	48	70	66	61	53	52	56	51	78	63
Hermit Thrush	6	5.9%				2	1	1			1		1	
Hooded Warbler	1	1.0%											1	
House Finch	27	26.5%	4	5		1	1	3	4	2	1	1	4	1
House Sparrow	101	99.0%	7	6	8	9	9	7	9	9	10	9	9	9
Inca Dove	4	3.9%	1		1	1	1							
Indigo Bunting	33	32.4%		2	2	4	4	2	4	2	3	5	5	
Killdeer	64	62.7%	5	5	6	7	8	7	2	3	5	6	8	2
Least Flycatcher	6	5.9%		1	1	1				1	2			
Least Sandpiper	1	1.0%				1								
Magnolia Warbler	2	2.0%							2					
Mallard	1	1.0%								1				
Marsh Wren	1	1.0%							1					
Mississippi Kite	37	36.3%				3		1	6	6	3	3	9	6
Mourning Dove	98	96.1%	6	6	8	8	9	8	9	9	10	9	9	7
Mourning Warbler	1	1.0%						1						
Nashville Warbler	1	1.0%					1							
Northern Cardinal	100	98.0%	5	6	8	8	9	8	9	9	10	9	10	9
Northern Flicker	40	39.2%	•	4	4	6	3	3	1	3	3	3	7	3
Northern Mockingbird	102	100.0%	6	6	4 8	9	9	3 8	9	9	10	9	10	9
Northern Parula	6	5.9%				1	,	1	1	-		-	2	1
Olive-Sided Flycatcher	2	2.0%				1	1							
Orchard Oriole	9	8.8%		1	1	1		1			1	1	1	2
Ovenbird	1	1.0%											1	
Painted Bunting	4	3.9%										1	2	1
Pileated Woodpecker	21	20.6%	1				3	1	1	6		2	4	3
Pine Grosbeak	1	1.0%				1	U						•	U
Pine Warbler	7	6.9%				1	1	2					2	1
Prothonotary Warbler	28	27.5%				1	6	4	5	1	5	1	1	4
Purple Finch	_ 0 1	1.0%				-	-	т	0	-	0	-	1	т
Purple Martin	10	9.8%	1	1	1		1	1					5	
Red-Bellied Woodpecker	95	93.1%	4	6	7	9	9	8	7	9	8	9	10	9

Species	Total Days	% Days			-	-		-	-	-	'otal S	-		
Species	Sighted	Observed									2013			(i
			7	6	8	9	9	8	9	9	10	9	10	9
			37	44	48	70	66	61	53	52	56	51	78	63
Red-Eyed Vireo	15	14.7%			1	2	1	2	2		2		2	3
Red-Headed Woodpecker	9	8.8%	1	1			1	1	1	1		1		2
Red-Shouldered Hawk	12	11.8%	1		1	2	1	2			1		2	2
Red-Tailed hawk	12	11.8%			1	3			2		1	2	1	2
Red-Winged Blackbird	7	6.9%				-					2		1	4
Rock Pigeon	14	13.7%			1	2	3		4	1	1		1	1
Rose-breasted Grosbeak	6	5.9%	1		1			1			1		2	
Ruby-throated Hummingbird	10	9.8%			1	2	1	2	3		1			
Savannah Sparrow	1	1.0%								1				
Scissor-tailed Flycatcher	95	93.1%	6	5	8	9	9	8	9	7	10	9	10	5
Smith's Longspur	1	1.0%											1	
Snowy Egret	1	1.0%					1							
Song Sparrow	4	3.9%				1				1	1	1		
Summer Tanager	50	49.0%		4	2	6	1	6	6	3	5	8	5	4
Swainson's Thrush	1	1.0%					1							
Swainson's Warbler	2	2.0%											2	
Tennessee Warbler	1	1.0%				1								
Townsend's Solitaire	1	1.0%							1					
Townsend's Warbler	1	1.0%					1							
Tufted Titmouse	62	60.8%	1	3	1	5	1	6	9	6	6	8	9	7
Turkey Vulture	59	57.8%	4	6	4	4	4	4	7	5	4	7	6	4
Veery	10	9.8%				1	5		1	1		1		1
Vermillion Flycatcher	1	1.0%							1					
Vesper Sparrow	1	1.0%											1	
Warbling Vireo	1	1.0%											1	
Western Kingbird	1	1.0%						1						
Whip-poor-will	1	1.0%											1	
White-Breasted Nuthatch	4	3.9%				1	1					1	1	
White-Crowned Sparrow	1	1.0%		1										
White-Eyed Vireo	12	11.8%				2	1	1		3			1	4
White-Rumped Sandpiper	2	2.0%					2			-				-

Table 3. (cont.)														
			Ye	ar site	ed / D	ays o	bserv	ing ea	ach ye	ar / T	'otal S	pecie	s for Y	Year
Species	Total Days	% Days	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	Sighted	Observed	7	6	8	9	9	8	9	9	10	9	10	9
			37	44	48	70	66	61	53	52	56	51	78	63
White-Throated Sparrow	1	1.0%								1				
White-Winged Dove	3	2.9%			1	1	1							
Willow Flycatcher	4	3.9%					1						1	2
Wilson's Warbler	1	1.0%											1	
Wood Duck	2	2.0%								2				
Wood Thrush	7	6.9%					1				1	1	3	1
Worm-Eating Warbler	5	4.9%		1		1		1					1	1
Yellow Warbler	1	1.0%		1										
Yellow-Bellied Flycatcher	1	1.0%								1				
Yellow-Bellied Sapsucker	3	2.9%								1	1	1		
Yellow-Billed Cuckoo	10	9.8%					2	1		1	4		1	1
Yellow-Breasted Chat	2	2.0%						1						1
Yellow-Rumped Warbler	1	1.0%									1			
Yellow-Throated Vireo	2	2.0%											1	1

		<u>1 01 days of</u>		Ye	ar site	d / Da								
	Total Days	% Days	2005			2008		2010	2011					2016
Species	Sighted	Observed	1	2	2	2	2	4	1	2	2	2	2	3
			31	_40	_40	44	_50	60	33	36	48	52	56	60
American Crow	8	32.0%									2	1	2	3
American Redstart	4	16.0%				1		1				1		1
American Robin	8	32.0%				2	1	2		1		2		
Anhinga	3	12.0%								1				2
Bald Eagle	2	8.0%				1								1
Baltimore Oriole	2	8.0%											1	1
Barn Swallow	17	68.0%	1	2	2	2	2	2	1	1	1		2	1
Barred Owl	4	16.0%			2	1							1	
Bay-Breasted Warbler	1	4.0%									1			
Bell's Vireo	2	8.0%					1				1			
Belted Kingfisher	1	4.0%				1								
Bewick's Wren	1	4.0%									1			
Black Throated Blue Warbler	1	4.0%											1	
Black Vulture	16	64.0%	1		2	1	2	3	1	1	1	1	1	2
Black-and-White Warbler	3	12.0%						1				1		1
Black-Billed Cuckoo	2	8.0%					1							1
Blackburnian Warbler	7	28.0%	1					2			1	1	1	1
Blackpoll Warbler	1	4.0%						1						
Blue Grosbeak	10	40.0%		1	1	1	1	1		1		1	2	1
Blue Jay	22	88.0%	1	2	2	2	2	4	1	2	1	1	1	3
Blue-gray Gnatcatcher	9	36.0%		1		2	1	2	1		1	1		
Blue-winged Teal	3	12.0%		1									1	1
Bobwhite	7	28.0%					1	1	1			1	2	1
Brewer's Blackbird	2	8.0%								1			1	
Brown-Headed Cowbird	16	64.0%	1		1		2	3	1	2	1	2	2	1
Broad-winged Hawk	1	4.0%												1
Brown Thrasher	4	16.0%	1	1			1			1				
Canada Goose	1	4.0%												1
Canada Warbler	2	8.0%						1						1
Carolina Chickadee	19	76.0%	1	2	2	2	2	4		2	1	1	1	1
Carolina Wren	6	24.0%		1	1	2		-			1			1
Cattle Egret	14	56.0%			1	1	2	2		2		1	2	3
Cedar Waxing	2	8.0%										1	1	2

Table 4. Number of days, by year, species have been observed during the off-campus trips. Days refers to total number of days the species was observed, % days refers to the percentage of the total number of days the species was observed during the 12 years. Number in parentheses below each year is the number of days observing for that year.

							-	erving			-	_		
	Total Days	% Days	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Species	Total Days	% Days	1	2	2	2	2	4	1	2	2	2	2	3
Species	Sighted	Observed	31	40	40	44	50	60	33	36	48	52	56	60
Cerulean Warbler	4	16.0%				1					1	1		1
Chimney Swift	8	32.0%	1			2	1	2			1		1	
Chipping Sparrow	2	8.0%					1	1						
Clay-Colored Sparrow														
Cliff Swallow	4	16.0%				2		1				1		
Common Grackle	12	48.0%			1	2	1	3	1	1		2		1
Common Nighthawk	1	4.0%									1			
Cooper's Hawk	1	4.0%				1								
Dickcissel	6	24.0%						1		1	1	1	1	1
Double-crested Cormorant	2	8.0%						1	1					
Downy Woodpecker	1	4.0%									1			
Eastern Bluebird	16	64.0%	1	2		2	1	2	1	2	1	1		3
Eastern Kingbird	14	56.0%	1	2	1	1	2	1	1	1	1	1	2	0
Eastern Meadowlark	8	32.0%				1	1	1		2	1	1		1
Eastern Phoebe	10	40.0%			1			1	1	1		2	2	2
Eastern Wood Pewee	4	16.0%	1		1		1				1			
Eurasian Collared Dove	1	4.0%												1
European Starling	8	32.0%	1			2	1	2				2		
Field Sparrow	4	16.0%					1	1			1	1		
Fish Crow	11	44.0%	1	1		2	2	1			1	1	1	1
Gray Catbird	2	8.0%							1					1
Great Blue Heron	17	68.0%	1	2	2	2	2	2	1	1	1	1	1	1
Great Egret	17	68.0%	1	2	2	2	1	1	1	1	1	1	2	2
Great-Crested Flycatcher	4	16.0%		2				1					1	
Greater Roadrunner	1	4.0%			1									
Green Heron	6	24.0%	1	1				1		1	1		1	
Hermit Thrush	2	8.0%						1						1
House Finch	2	8.0%	1						1					
House Sparrow	6	24.0%	1			1	1	1	1		1			
Indigo Bunting	15	60.0%		1	2	1	1	2		1	2	1	2	2
Killdeer	-5	12.0%	1					1					1	
Lark Sparrow	1	4.0%	_					-					-	1
Least Flycatcher	1	4.0%			1									
Least Sandpiper	- 1	4.0%			-									1

Table 4. (cont.)

				Ye	ar site	d / Da	ys obs	erving	each y	year / .	r / Average per Year				
	Total Days	% Days	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Species	Total Days	70 Days	1	2	2	2	2	4	1	2	2	2	2	3	
opeeles	Sighted	Observed	31	40	40	44	50	60	33	36	48	52	56	60	
Little Blue Heron	6	24.0%		1	2		1	1		1					
Mallard	6	24.0%				2	1	1						2	
Marsh Wren	1	4.0%									1				
Mississippi Kite	6	24.0%			1		1		1	1	1		1		
Mourning Dove	25	100.0%	1	2	2	2	2	4	1	2	2	2	2	3	
Mourning Warbler	1	4.0%			1										
Northern Cardinal	25	100.0%	1	2	2	2	2	4	1	2	2	2	2	3	
Northern Flicker	9	36.0%	1	1	1		1	2	1		1			1	
Northern Mockingbird	22	88.0%	1	2	2	2	2	3	1	2	1	2	1	3	
Northern Parula	10	40.0%			2	2		1		1	1	1	1	1	
Olive-Sided Flycatcher	1	4.0%											1		
Orchard Oriole	10	40.0%		2	1		1	3	1			1	1		
Osprey	2	8.0%						0			1			1	
Ovenbird	1	4.0%											1		
Painted Bunting	5	20.0%						1			1	1	1	1	
Pileated Woodpecker	14	56.0%	1	1	2	2	1	2	1	1	1	1		1	
Pine Warbler	3	12.0%	1	1										1	
Prothonotary Warbler	12	48.0%		2	2	1		2	1	1	1		1	1	
Purple Martin	7	28.0%		2			1	1			1	1	1		
Red-Bellied Woodpecker	14	56.0%	1		1	1	2	3	1		1	1	1	2	
Reddish Egret	1	4.0%		1				0							
Red-Eyed Vireo	8	32.0%		2		1		2				2		1	
Red-Headed Woodpecker	8	32.0%		1	1	1	1	1		1			1	1	
Red-Shouldered Hawk	5	20.0%	1	1									2	1	
Red-Tailed hawk	9	36.0%			1	1		1			2	1	1	2	
Red-Winged Blackbird	11	44.0%	1	2				1	1	1	2	1	1	1	
Ruby-throated Hummingbird	7	28.0%			1			1	1		2	1	1		
Rusty Blackbird	1	4.0%											1		
Scarlet Tanager	2	8.0%		1								1			
Scissor-tailed Flycatcher	14	56.0%	1	1		1	2	3		1	1	1	1	2	
Smith's Longspur	- 1	0	-	-		-	-	0		-	-	_	-	_	
Snowy Egret	7	28.0%		2			1	1	1		1	1			
Song Sparrow	2	8.0%		-			1	-	_		-	-	1		
Summer Tanager	- 13	52.0%	1	2	2		1	3	1		1	1	1		

Table 4. (cont.)				Vo	ar cita	d / Da	ve obe	orvina	each t		Averag	o nor	Voor	
			2005			-	-			-	2013	-		2016
a .	Total Days	% Days	1	2	2	2	2	4	1	2	2	2	2	3
Species	Sighted	Observed	31	40	40	44	50	60	33	36	48	52	56	60
Tree Swallow	2	8.0%											1	1
Tufted Titmouse	14	56.0%			2	2	1	2	1	1	1	1	1	2
Turkey Vulture	24	96.0%	1	2	2	2	2	3	1	2	2	2	2	3
Veery	2	8.0%			1				1					
Western Kingbird	1	4.0%								1				
Western Tanager	1	4.0%					1							
White-Crowned Sparrow	1	4.0%										1		
White-Eyed Vireo	2	8.0%				1								1
White-Throated Sparrow	1	4.0%												1
White-Winged Dove	1	4.0%								1				
Willow Flycatcher	2	8.0%			1								1	
Wood Duck	9	36.0%		1	2	1	1		1		1	1		1
Wood Stork	1	4.0%							1					
Yellow Warbler	1	4.0%											1	
Yellow-Bellied Flycatcher	2	8.0%								1			1	
Yellow-Billed Cuckoo	8	32.0%		1			1	2	1		1	1	1	
Yellow-Breasted Chat	2	8.0%						1				1		
Yellow-Crowned Night Heron	1	4.0%						1						
Yellow-Throated Vireo	1	4.0%					1							
Yellow-Throated Warbler	3	12.0%						1				1	1	

Table 5. Number of days, by year, species have been observed during a winter count of birds on the Environmental Studies Area of ETBU. Days refers to total number of days the species was observed, % days refers to the percentage of the total number of days the species was observed during the 7 years. Number in parentheses below each year is the number of days observing for that year. Pre-clear cut and post-clear cut indicate the timing of an adjacent tract of land that was clear cut on 26 January 2015.

Species		lear cut	Post-c	lear cut		Pre-clear cut						-clear Cut
	Days Sighted	% Days Observe d	Days Sighted	% Days Observe d	2010 (8)	2011 (10)	2012 (10)	2013 (10)	2014 (5)	2015 (2)	2015 (3)	2016 (5)
American Bittern	1	2.2%					1					
American Crow	14	31.1%	4	50.0%	3	4	. 5	5		2		4
American Goldfinch	6	13.3%	2	25.0%		1	1	L 2	2 2			2
American Robin	27	60.0%	1	12.5%	4	5	7	7 6	5			1
Bell's Vireo	1	2.2%	1	12.5%			1					1
Black-and-White Warbler	2	4.4%			1	1						
Black-Crowned Night Heron	1	2.2%				1						
Blue Jay	34	75.6%	5	62.5%	8	7	7 7	7 9) 3			5
Brown Creeper	10	22.2%	2	25.0%	1	4	. 2	2 2	2 1		1	1
Brown Thrasher	3	6.7%						3				
Canada Goose	1	2.2%						1				
Carolina Chickadee	20	44.4%	5	62.5%	7	3	1	L 4	4	. 1	. 2	2 3
Carolina Wren	17	37.8%	4	50.0%	3	4	. 3	3 3	2	2	: 3	1
Cedar Waxwing	3	6.7%			1	1		1				
Chipping Sparrow	6	13.3%	2	25.0%		1	1	L	4			2
Common Grackle	2	4.4%						1	1			
Dark-Eyed Junco	6	13.3%	3	37.5%		2		1	3		1	2
Downy Woodpecker	8	17.8%	1	12.5%	2	1		1	3	1	. 1	L
Eastern Phoebe	5	11.1%	1	12.5%	2		1	1		1	1	L
Eastern Screech Owl	1	2.2%				1						
Eastern Towhee	1	2.2%						1				
Field Sparrow	2	4.4%					1	1	L			
Golden-Crowned Kinglet	4	8.9%				3	1	L				
Great Blue Heron	5	11.1%	1	12.5%		2	2	2 1			1	
Great Horned Owl			2	25.0%								2
Hairy Woodpecker	4	8.9%					3	1				
Hermit Thrush	3	6.7%				1	1	1				
House Finch	1	2.2%	1	12.5%		1						1
Mallard	1	2.2%								1		

Species	Pre-c	lear cut	Post-c	lear cut			Pre-cl	ear cut			Post-clear Cut			
	Days Sighted	% Days Observe d	Days Sighted	% Days Observe d	2010 (8)	2011 (10)	2012 (10)	2013 (10)	2014 (5)	2015 (2)	2015 (3)	2016 (5)		
Marsh Wren	1	2.2%		-						1				
Mourning Dove	8	17.8%	1	12.5%			1	2	4	1		1		
Northern Bobwhite	1	2.2%				1								
Northern Cardinal	33	73.3%	7	87.5%	4	9	10	7	1	2	3	4		
Northern Flicker	25	55.6%	5	62.5%	5	7	2	8	1	2		5		
Northern Mockingbird	3	6.7%				2		1						
Northern Pintail	2	4.4%				1	1							
Pileated Woodpecker	17	37.8%	6	75.0%	1	1	6	5	2	2	2	4		
Pine Warbler	1	2.2%				1								
Red-Bellied Woodpecker	28	62.2%	6	75.0%	3	7	3	10	4	1	3	3		
Red-Breasted Nuthatch	1	2.2%						1						
Red-Headed Woodpecker	3	6.7%	2	25.0%	1	1	1					2		
Red-Tailed Hawk	2	4.4%				1			1					
Red-Winged Blackbird	2	4.4%			2									
Ruby-Crowned Kinglet	2	4.4%	1	12.5%		2						1		
Song Sparrow	9	20.0%	1	12.5%	1		2	4	2			1		
Tufted Titmouse	22	48.9%	8	100.0%		3	7	8	2	2	3	5		
Turkey Vulture	2	4.4%	1	12.5%		1			1			1		
Vesper Sparrow	2	4.4%						1	1					
White-Breasted Nuthatch	12	26.7%	2	25.0%		2	2	7		1		2		
White-Crowned Sparrow	8	17.8%	2	25.0%		3	1	1	2	1		2		
White-eyed Vireo	4	8.9%			4									
White-Throated Sparrow	8	17.8%	4	50.0%			3	5			2	2		
Wilson's Snipe	1	2.2%							1					
Winter Wren	1	2.2%					1							
Wood Duck	15	33.3%	4	50.0%		2	6	6		1	2	2		
Woodcock	1	2.2%				1								
Yellow-Bellied Sapsucker	4	8.9%				2	1	1						
Yellow-Rumped Warbler	20	44.4%	6	75.0%	5	1	3	5	5	1	2	4		

Species	Days	Species	Days	Species	Days
American Crow	8	Eastern Bluebird	5	Ovenbird	1
American Redstart	1	Eastern Kingbird	1	Pileated Woodpecker	1
American Robin	6	Eastern Phoebe	6	Red-bellied Woodpecker	3
Black Vulture	3	Eastern Towhee*	1	Red-headed Woodpecker	1
Black-throated Warbler*	1	Eastern Wood Pewee	3	Red-shouldered Hawk	2
Blue Jay	8	Golden-crowned Kinglet	1	Red-tailed Hawk	1
Blue-gray Gnatcatcher	4	Gray Catbird	2	Ruby-throated Hummingbird	4
Brown Thrasher	2	Great Egret	1	Scissor-tailed Flycatcher	4
Carolina Chickadee	5	Indigo Bunting	1	Summer Tanager	4
Carolina Wren	4	Killdeer	1	Tufted Titmouse	4
Chestnut-sided Warbler	1	Mourning Dove	2	Turkey Vulture	5
Chimney Swift	1	Northern Bobwhite	1	White-eyed Vireo	5
Chipping Sparrow	3	Northern Cardinal	9	Willow Flycatcher*	1
Common Grackle	1	Northern Flicker	5	Yellow Warbler*	1
Downy Woodpecker	1	Northern Mockingbird	8	Yellow-rumped Warbler	2

Table 6. Species observed from 1 September to 1 October 2009. Days refers to number of days the species was observed. Total days observing 9. A * indicates the species has been observed on the campus of ETBU only during these 9 days.

Order Anseriformes

Family Anatidae

Blue-winged Teal Anas discors

Author: Graydon Cass, John Jones, Leslie Fletcher, Travis Jones

Description: Length of both sexes: 14.2–16.1 in Wingspan of both sexes: 22–24.4 in Weight of both sexes: 8.1–19.2 oz. Male with large white crescent on front of face and white patch on rear flank; female dull gray-brown. Female Gray-brown overall, with small white area at base of bill. Bill dark. Light blue upper wing patch with narrow white border. Back of wing mostly brown, with little green.

Geographical Range: North America, mainly in prairie region, from British Columbia east to Newfoundland, south to California, New Mexico, Texas, Tennessee, and North Carolina in the summer months but move down south during the winter

Haibtat: Shallow ponds and seasonal and permanent wetlands. They often use both temporary and permanent ponds. During breeding season, blue-winged teal remain near the water's edge in ponds and wetlands, preferring to breed in areas of calm, sluggish water

Life History Data Time of Breeding: Spring Number of eggs:6 - 14 Broods per year: 1 Time of hatching: 19 - 29 days Time to independence: 40 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: Monogamous Life span: 17 years, most do not survive first few years Food habits: aquatic insects but also eat vegetation and grains. In the winter, grains and seeds are their main foods Time in Texas:Summer in northeast Texas. Winter in Southeast Texas. Migration period in Mid to West Texas and Year round in Mid East Texas

Canada Goose Branta canadensis

Author: Cindy Jones, Josh Kemery

Description:

Mass:4741 g

Length: 55 – 114 cm;

Phenotypically they are distinguished by having a white chin with a black head and neck with a gray and brown color on the backside and a light gray breast on the front. Large wings are used as weapons by these geese

Geographical Range: can be found throughout North America. There are four subspecies which are the western, southern, northern, and Aleutian-Canadian populations. The populations are located based on their subspecies name. Most of the populations migrate south during the winter

Haibtat: wooded lakes, ponds, bays, marshes, and urban areas and located in the biomes of grasslands, chaparral regions, and arctic tundra

Life History Data

Time of Breeding: winter or during migration Number of eggs: 4 - 7 Broods per year: 1 Time of hatching: 23 - 30 days Time to independence: 38 - 78 days Age to reproductive maturity: Males: 2 - 3 years Females: 2 - 3 years Mating System: monogamous Life span: 24 years Food habits: herbivore, feed on grasses, barely, wheat, rice, corn, and beans, occasionally berries Time in Towas: most migratory, some permanent residents

Time in Texas: most migratory, some permanent residents

Mallard Anas platyrhynchos

Author: Nathan Hicks, George Plumlee, Benjamin SethParker

Description:

Length: 50-65 cm; Wingspan: 82-95 cm; Mass: 1000-1300 g

The male Mallard has an iridescent green head, white collard neck, pale gray body, chestnut colored chest, yellow bill, reddish legs, black rump and under tail, and a white tail with black middle feathers. The female Mallard is a brown in color with a mixture of white and dark brown, a dark line through the eye, an orange bill with a dark center, dark streak on the crown, and reddish-orange legs. Juvenile mallards look much like the female mallard.

Geographical Range: Their permanent residence is form the East to the West coast of the U.S. from the border with Mexico to the border with Canada. However, when they migrate they can travel as far South as Cuba and as far North as the northern part of Alaska

Habitat: They prefer wetlands, where highly productive waters produce large amounts of floating, emergent and submerged vegetation. Wetlands also produce a lot of aquatic invertebrates on which mallards feed.

Life History Data

Time of Breeding: October - March Number of eggs: 8 - 14 Broods per year: 1 Time of hatching: 27 - 38 days Time to independence: 52 - 70 days Age to reproductive maturity: Males: same date as fledging Females:100 days Mating System: seasonally monogamous Life span: 5 - 10 years Food habits: Seeds, acorns, grain, insects, larvae, aquatic invertebrates, and aquatic vegetation Time in Texas: year round



Photo: Jordan Bartlett

Northern Pintail Anas acuta

Wood Duck Aix sponsa

Author: Alyssa Edwards

Life History Data

Description

Average length: M 20", F 19" Average mass: M 1.5 lbs., F 1.4 lbs

Males have a crested head that is iridescent green and purple with a white stripe leading from the eye to the end of the crest. The throat is white and chest is burgundy with white flecks. The bill is brightly patterned black, white, and red. The female wood duck has a graybrown head and neck with a brownish-green glossy crest. The throat is white and breast is gray-brown stripped with white, fading into the white belly. The back is olive brown with a shimmer of iridescent green, and the bill is blue-gray.

Geographic Range

Woods ducks are only found in North America.

Habitat

Wooded swamps, marshes, streams, beaver ponds, and small lakes. They stick to wet areas with trees or extensive cattails.



Photo: Troy A. Ladine

Time of breeding: Pair up in late winter and begin breeding in early spring Number of eggs: Average of 12 **Broods per year**: 1-2 Time to hatching: 28-37 days **Time to fledging**: 56-68 days Time to independence: 56-70 days Age at reproductive maturity Males: 1 year Females: 1 year Mating system: Monogamous Life span: Usually do not live past 4 in the wild. In captivity they have to potential to live well into their teens. Food Habits: The young duckling's diet consists of insects, small fish, aquatic invertebrates, and other high-protein animal material. After six weeks they switch to 90 percent vegetative material primarily aquatic plants such as algae and pondweed. Adult ducks feed on nuts and fruits, aquatic plants and seeds, and aquatic insects.

Order Galliformes

Family Odontophoridae

Northern Bobwhite Colinus virginianus

Author: Shekinah Webb

Description: Mass: 6-8 ounces, females heavier than males; Length: 9.75 in.;Medium-sized quail that runs on the ground, small round head with a slight crest and a round body with very short tail: reddish and brown in coloring, pale throat and eyestripe white in male, buff in female, females show little variation among the different forms, but the males can vary dramatically. Some bobwhite from Mexico have little banding across the chest, are uniformly rufous, and have all black heads.

Geographical Range: Distributed throughout the eastern United States and Mexico year round..In the summer, it is found in Nebraska, Wisconsin, southern Ontario and Massachusetts southward to Florida and southern Mexico.

Habitat: Preferences: agricultural lands, grasslands, herbaceous and wooded vegetation, lowland forests, prairie wetlands, domestic haylands, Eastern plains. Overgrown hedgerows and fencerows

Life History Data

Time of Breeding: Mid-April - September Number of eggs: 6 - 28 Broods per year: 1 - 3 Time of hatching: 23 - 24 days Time to independence: 14 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: ambisexual polygamy Life span: 6 years Food habits: seeds and less quantities of green plant matter, fruit, and insects

Time in Texas: year round



Photo: Troy A. Ladine

Order Pelecaniformes

Family Phalacrocoraciidae

Double-crested Cormorant Phalacrocorax aurtius

Author: James Walker Hannah Word

Description: Mass: 1200-2500 g; Length: 74–91 cm; Large, dark waterbird with a long, hooked bill and long tail, long, thin neck, gular area squared off and orange, extending straight down across throat, orange lores

Geographical Range: Found as far north as Alaska and as far south as Mexico and the Bahamas

Haibtat: Preferences: freshwater habitats on lakes, rivers, swamps, bays and coasts

Life History Data

Time of Breeding: April - early May Number of eggs: 3 - 4 Broods per year: 1 Time of hatching: 25 - 29 days Time to independence: 10 weeks Age to reproductive maturity: Males: at least 2 years Females: at least 2 years Mating System: monogamous Life span: 6 years Food habits: Fish, Occasional food sources amphibians and crustaceans Time in Texas: winter months

Order Pelecaniformes

Family Anhingidae

Anhinga Anhinga anhinga

Order Ciconiformes

Family Ardeidae

American Bittern Botaurus lentiginosus

Author: Lynlea Hansen

Description of Bird

Mass: 13.1 17.6 oz.

Length: 60 85 cm

Wingspan: 92 cm

A streaked brown heron. Outer wing appears blackish brown, while the inner wing and body are a lighter brown. Adults have a black stripe down the side of their throat, while younger have shorter necks and are stockier. The American bittern is known to be heard than seen.

Geographical Range

Breeds from southeastern Alaska, Manitoba, and Newfoundland south to California, New Mexico, Arkansas, and the Carolinas. The American bittern winters north to coastal British Columbia, Southwest, Illinois, and along the Atlantic Coast to southern New England.

Habitat

Found around freshwater and brackish marshes and marshy lakeshores. Regular in salt marshes during migration and winter. In winter they move to areas where water bodies don't freeze, especially near the coast, where they may occasionally use brackish marshes.

Life History Data

Time of Breeding: Summer Number of Eggs: 1 5 Broods per year: 1 Time of hatching: 24 28 days Time to independence: 7 14 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 8 years Food habits: Hunts for insects, such as dragonflies and grasshoppers, and small mammals, amphibians, and reptiles. Time in Texas: March - May, September -November

Cattle Egret Bulbulcus ibis

Author: Wayne Cooley, James R. Walker

Description of Bird

Mass: 340-388 g

Length: 47-57 cm

They are white with orange buff colored plumes on their head and back during the breeding season, relatively short yellow bill, pale yellow eyes and greenish-yellow legs.

Geographical Range

Breeds from California east to the Great Lakes and Maine and south to the Gulf Coast. It is also found in the tropics, South America, Europe, Asia, Australia and Africa. The cattle egret is a nonnative species in North America. It probably flew to South America from Africa and then moved up to the United States

Habitat

Found foraging in many habitats, terrestrial and aquatic, such as ponds, cattle pasture, roadsides, farmland, dumps, parks, sports fields, and lawns.



Photo: Ashley Ayers

Life History Data Time of Breeding: early April- late July Number of Eggs: 1-5 Broods per year: 1 Time of hatching: 22- 26 days Time to independence: 45 days Age to reproductive maturity: Males: spring of 3rd year Females: spring of 3rd year Mating System: monogamous Life span: 6-8 years Food habits: following animals like cows in North America and eating insects like grasshoppers, crickets, spiders, and flies that are disturbed by the livestock

Time in Texas: year round



Photo: Darius Williams

Great-blue Heron Dumetella carolinensis

Author: Katy Gifford, Jeff A. Savoie

Description of Bird

Length: 97-137 cm

Wingspan:

Mass: 2.1-2.5 kg

Large, gray birds with bluish gray bodies, wings and bellies. The reddish-gray neck is long and .S-shaped with white, black, and rusty brown streaks on thefront. The long legs are brownish or greenish with rust colored thighs and the bill is long, thick and yellowish. Additional markings include a white crown stripe, a black plume extending from behind the eye to off the back of the neck, a black patch at the bend of the wing, black on upper side of flight feathers, and a cinnamon colored patch on the front of the underside of the wing.

Geographical Range

Found year-round in southern half and along the coasts of the United States. Found in Central America during the winter and in the northern United States, Canada, and southern Alaska in the summer

Habitat

Forage on stream and pond edges, wet meadows and upland fields. They form nesting colonies in dead trees

Life History Data

Time of Breeding: March-May in north, November -April in south Number of Eggs: 2-6 Broods per year: 1 Time of hatching: 27-30 days Time to independence: 60-81 days Age to reproductive maturity: Males: 22 months Females: 22 months Females: 22 months Mating System: monogamous Life span: 15 years Food habits: Eats fish, invertebrates, amphibians, reptiles, birds, and small mammals. Preys by walking slowly, standing and quickly lunging to stab prey with bill

Time in Texas: year round



Photo: Troy A. Ladine

Great Egret Ardea albais

Author: Kimberly Ledbetter

Description of Bird

Length: 89-104 cm

Wingspan: 1.4m

Mass: 2.2 lbs.

This bird is large, all white heron with a yellow bill and black legs. In breeding plumage, has a long lacy plume on back. Much smaller Snowy Egret has black bill and legs and yellow feet.

Geographical Range

Breeds locally from Oregon south to western Mexico, and from Minnesota to Mississippi Valley and Southeast, and along Atlantic Coast north to southern New England. Winters regularly from Oregon south through Southwest, Texas, and Gulf Coast states to Mexico, and on Atlantic Coast north to New Jersey. Also in tropical America and warmer part of Old World

Habitat

Fresh and salt marshes, marshy ponds, and tidal flats. Forage on stream and pond edges, wet meadows and upland fields. They form nesting colonies in dead trees.

Life History Data

Time of Breeding: April Number of Eggs: 3-5 pale blue-green eggs Broods per year: 1 Time of hatching: 23 26 days Time to independence: 21 days Age to reproductive maturity: Males: 2 years Females: 2 years Mating System: monogamous Life span: 23 years Food Habits: Fish, invertebrates, amphibians, reptiles, birds, and small mammals. Time in Texas: Primarily found along the coast, northern Texas, panhandle, El Paso.

Green Heron Butorides virescens

Author: TaylorWeaver

Description of Bird

Length:

Wingspan: 64-68 cm

Mass: 240 g

Crown black, back and wings dark gray, green or grayblue the neck is chestnut colored. Bill is dark, legs bright orange. Immature green herons have streaks on neck, breast, and sides. Female adults tend to be smaller, with duller and lighter plumage than that seen in males, particularly in the breeding season.

Geographical Range

They occur as far north as southern Canada and as far south as northern South America. They are found throughout the eastern United States as far west as North Dakota and the Great Plains states. During the breeding season they are found primarily in the eastern United States, with some population s in the Pacific Northwest as well. Non-breeding individuals are found in Mexico and Central America, Texas, southern New Mexico and Arizona, and the Caribbean islands

Habitat

Favored habitats are mangrove-lined shores and estuaries, and dense, woody vegetation fringing ponds, rivers and lakes. They frequent both fresh and salt water

Life History Data

Time of Breeding: March -July Number of Eggs: 2-6 Broods per year: 2 Time of hatching: 19-21 days Time to independence: 30-35 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 11 years Food habits: Small fish, invertebrates, insects, frogs, and other small animals. Time in Texas:



Photo: Skylar Williams

Little Blue Heron Egretta caerulea

Author: Abby Tunnell

Description of Bird

Mass: 340 g Length: 60 cm Wingspan: 102 cm Tapered and thick blue bill, extended neck pointed downward, legs and feet are dark, solid bluish color all over body. Male and female are similar.

Geographical Range

Southern East coast of North America year round, includes Gulf of Mexico.

Habitat

Enjoys shallow marshy ponds, swamps, low thickets. Nests in trees with colonies of other Little Blue Herons. Prefers salt water to fresh water.

Life History Data Time of Breeding: Summer Number of Eggs: 3-4 Broods per year: 1 Time of hatching: 22-23 days Time to independence: 35-49 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: Breeds in colonies, monogamous. Life span: 167 months (approx.) Food habits: Foraging, fish, frogs, rodents, insects. Time in Texas: Year round

Snowy Egret Egretta thula

Author: Steven Riley, Graydon Cass

Description of Bird

Mass: 360 g

Length: 56-66 cm

Wingspan:

Males slightly larger than females and similar in appearance. Entirely white plumage, a long, slender black bill, yellow lores, and long, slender black legs with yellow feet.

Geographical Range

Found throughout North America, prefers coastal states. Migrates to Northern United States and Summers in the Southwest and Southwest

Habitat

Found in marshes, swamps, shorelines, mudflats and ponds

Life History Data

Time of Breeding: February-July Number of Eggs: 3-6 Broods per year: 1 Time of hatching: 22-26 days Time to independence: 40-55 days Age to reproductive maturity: Males: 2 years Females: 2 years Mating System: monogamous Life span: 17 years Food habits: Fish (Marine and Freshwater), crustaceans (crabs, crawfish, shrimp), earthworms, snakes and lizards Time in Texas: year round, southern populations migrate north

Reddish Egret Egretta rufescens

Yellow-crowned Night-heron Nyctanassa violacea

Order Ciconiformes

Family Ciconiidae

Wood Stork Mycteria americana

Order Falconiformes

Family Cathartidae

Black Vulture Coragyps atratys

Author: Brent Lewis, JeremyAlexander, Blair Brown

Description of Bird

Mass: 1.6-2.7 kg

Length: 60-70 cm

Wingspan: 1.5 m

Large, broad-winged, tail short and squared off, rather long, thick, gray legs, longish, hooked, dark bill, holds wings flat while soaring and gliding, unfeathered, gray head and throat, plumage entirely black except for whitish outer primaries

Geographical Range

Sountheastern United States, Mexico, Central America, and South America

Habitat

Prefers an open habitat and avoids dense forests as much as possible. Such habitats include lowlands with adjacent highlands, open fields, desert terrain, garbage dumps, and urban or rural centers



Photo: Keely Schlabs

Life History Data

Time of Breeding: Jan.-May
Number of Eggs: 2
Broods per year: 1
Time of hatching: 28-41days
Time to independence: 75-80 days
Age to reproductive maturity:

Males: 1 year
Females: 1 year

Mating System: monogamous
Life span: 14 years
Food habits: tend to gather around garbage dumps, sewers, and slaughterhouses in search of carrion and scavenge along roadsides for road kill. These vultures are known to kill baby herons on nesting colonies, and feed on domestic ducks, newborn calves, small mammals, small birds, eggs, skunks, opossums, ripe or rotten fruit or vegetables and young turtles.

Time in Texas: year round



Photo: Troy A. Ladine

Turkey Vulture Cathartes aura

Author: Josh Kemery, Aron Reynolds

Description of Bird

Mass: 848- 2000 g

Length: 64-81 cm

Wingspan: 170-183 cm

The turkey vulture is a brownish color with grey on the underwing that extends the full length of the wing. The sexes do not differ on color or appearance they both have a bare head that can be a light pink to a bright red.

Geographical Range

Turkey vultures can be found as far north as the southern border of Canada and as far South as Tierra del Fuego, Chile.

Habitat

Turkey vultures occupy a very diverse habitat. They can be found in wooded areas as well as in open areas. As long as the turkey vulture has a good source of food it can settle in almost any habitat

Life History Data

Time of Breeding: March-June Number of Eggs: 1-3 Broods per year: 1 Time of hatching: 30-40 days Time to independence: 150-170 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 17 years Food habits: scavenger that feeds primarily on carrion of other animals Time in Texas: year round



Photo: Rileigh Welch

Order Falconiformes

Family Pandionidae

Osprey Pandion haliaetus

Order Falconiformes

Family Accipitridae

Bald Eagle Haliaeetus leucocephalus

Author: Rusty Collier, Shane Kelehan, Leslie Fletcher, Jovana Nieto

Description of Bird

Length of both sexes: 71.96 cm

Wingspan of both sexes: 203 cm

Mass of both sexes: 3. 6.3 kg

Female Bald Eagles tend to be 25% larger than male Bald Eagles. On average weight females are 12 lbs and male eagles to 9 lbs. Based on both appearances blackish-brown back and breast a white head, neck, and tail and yellow feet and beak.

Geographical Range

Most of North America from Alaska and Canada to Northern Mexico

Habitat

Bald Eagles prefer areas with lots of fish or forest areas such as lakes, reservoirs, rivers, marshes, and coasts. During the winter season, Bald Eagles can be spotted near unfrozen lakes and hunting along coastlines, reservoirs and rivers.

Life History Data

Time of Breeding: South: Sept. to Nov. Great Plains and Mountain West: Jan.
Number of Eggs: 1- 3
Broods per year: 1
Time of hatching: 35 days
Time to independence: 10-13 weeks
Age to reproductive maturity: Males: 4-5 years
Females: 4- 5 years
Mating System: monogamous
Life span: 30-40 years
Food habits: primarily eat fish and other small animals such as snakes, ducks, and muskrats occasionally eat dead animals
Time in Texas: year round



Photo: Shane Kelehan

Broad-winged Hawk Buteo platypterus

Cooper's Hawk Accipter cooperi

Author: Andrew Garay, Rusty Collier, Wes Dorough

Description of Bird

Mass: Males - 220-410 g Females - 330-680 g Length: 41 cm Wingspan: 79 cm Broad round wings, long rounded tail, broad shoulders, large head, adults are steel blue gray, reddish bars on belly, dark bands on tail Juveniles are brown with brown streaks on their breast

Geographical Range

Breeds across southern Canada southward to southern United States and into central Mexico. In the winter you can find them throughout the United States and Mexico

Habitat

Preferences: breeds in deciduous, mixed, and coniferous forests, becoming more common in urban and suburban areas. The Cooper.s Hawk Captures birds from low, stealthy approach flight or after a short chase. Uses cover, including manmade structures, to conceal approach. In open areas may drop on prey from high flight. Life History Data

Time of Breeding: Summer Number of Eggs: 1-7 Broods per year: 1 Time of hatching: 32-36 days Time to independence: 60 days Age to reproductive maturity: Males: 1 year Females: 2 year Mating System: monogamous, some for life Life span: 12 years Food habits: European starling, mourning doves, and rock pigeons, American robins, jays, northern flicker, quail, pheasants, grouse, chickens, chipmunks, hares, mice, squirrels, and bats

Time in Texas: year round

Mississippi Kite Ictinia mississippensis

Author: Clay Nail, Joshua L. Davis, Aron Reynolds

Description of Bird

Mass: 213-340 g Length: 32 cm

Wing span: 91 cm

Males and Females similar in appearance: Pale grey head, the pale extending to the back of its neck and its secondary flight feathers, the secondaries being tipped with white. The mantle is dark grey, becoming black on the bend of the wing. The tail and primaries are black

Geographical Range

Spend the summer in the southern United States and migrate as far south as northern Argentina in the winter

Habitat

Woodlands, riparian zones, and tree clusters

Life History Data

Time of Breeding: late Spring-Summer Number of Eggs: 1-2 **Broods per year:** 1 Time of hatching: 31-32 days Time to independence: 30-34 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 7 years Food habits: Insects and smaller reptiles and amphibians Time in Texas: March-October

Red-shouldered Hawk Buteo lineatus

Author: Grant Massey

Description of Bird

Mass: 550-700 g

Length: 43-61 cm

Wingspan:

Sexes similar: Female slightly larger than male. Brown heads, dark brown backs and reddish underparts with dark brown streaks, reddish secondary upper wing coverts

Geographical Range

Found in Eastern half of United States and Mexico and the West Coast of America

Habitat

Tall trees in mature lowland forests

Life History Data

Time of Breeding: April-July Number of Eggs: 3-4 Broods per year: 2-4 Time of hatching: 33-40days Time to independence: 17-19 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 26 years Food habits: Mammals, (squirrels, rabbits), reptiles (snakes, lizards), amphibians (toads frogs), occasional food sources Small birds, large insects, crayfish Time in Texas: year round, northern populations rare in west Texas

Red-tailed Hawk *Buteo jamaicensis*

Author: Blaire Brown, Nathan Hicks, Marissa Dawkins

Description of Bird

Mass: 550-700 g Length: 43-64 cm

Wingspan: 122 cm

Due to sexual dimorphism, females are typically 25% larger than males. Red-tailed hawk feather coloring includes light auburn to dark brown. The underbelly is lighter than the upper portions of body, with a dark belly band going across it. The cere, legs and feet are yellow and the tail is red. Juveniles look similar to the adults one main difference is that the juveniles have yellowgray eyes that change to dark brown when they mature

Geographical Range

The red-tailed hawk is found throughout the United States and Canada, into Mexico and Central America. Many birds are year round occupants although the birds of the far north will migrate south during the fall to escape the harsh winter

Habitat

Grasslands along fields and perched on telephones poles, fencepost, or trees standing alone or along edges of fields. This includes desert, scrublands, grasslands, roadsides, fields and pastures, parks, broken woodland, and (in Mexico) tropical rainforest

Life History Data

Time of Breeding: Spring Number of Eggs: 1-5 Broods per year: 1 Time of hatching: 28- 35 days Time to independence: 10 weeks Age to reproductive maturity: Males: 3 year Females: 3 year Mating System: monogamous Life span: 21.5 years Food habits: Majority of diet consists of small rodents. Reptiles and other birds make up the rest of the diet Time in Texas: year round

Order Gruiformes

Family Rallidae

American Coot Fulica americana



Photo: Jordan Bartlett

Order Charadriiformes

Family Charadriidae

Killdeer Charadrius vociferus

Author: Shane Kelehan, Joshua Davis, Spencer C. Nelson, Mcentry Dunbar

Description of Bird

Mass: 75-128 g Length: 23-28 cm Wing span: 32-36 cm Double breasted bands, top band completely encircling the breast, another band is located around the head, bright reddish orange rump visible in flight

Geographical Range

found over much of North America and in parts of South America. From the Gulf of Alaska coastline the range extends southward throughout the United States and reaches the Atlantic and Pacific coasts. Distribution continues through the Nearctic zone and into South America, runs along the Andes Mountain Range and terminates at the southern border of Peru

Habitat

open grasslands, wetlands, fields, croplands and short-grass prairies



Photo: Kenneth Anding

Life History Data

Time of Breeding: Spring Summer Number of Eggs: 2–6 Broods per year: 1–3 Time of hatching: 24–28 days Time to independence: 20–31 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 12 years Food habits: omnivorous since berries are known to be included within the diet. Primarily though, the diet consists of various aquatic and terrestrial invertebrates, insects and crustaceans.

Time in Texas: year round



Photo: Skylar Williams

Order Charadriiformes

Family Scolopacidae

Least Sandpiper *Calidris minutilla*

White-rumped Sandpiper Calidris fuscicollis

Wilson's Snipe Gallinago delicata

Order Columbiformes

Family Columbidae

Eurasian Collared Dove Streptopelia decaocto

Author: Mcentry Dunbar, Dylan Bethea

Description of Bird

Mass: 153 g

Length: 25-31 cm

Wingspan:

Gray with pale gray under parts and brown eyes and a dark stripe on the back of its neck. The collar is a narrow, black crescent around the nape of the neck. A large dove, larger and heftier than a Mourning Dove. Wings are broad and slightly rounded. Tail is broad and squared at the tip.

Geographical Range

Found also in the southeastern parts of America from Florida to Texas and are beginning to be more prominent in the western parts of America as well. native of India and Sri Lanka, wide spread in Europe.

Habitat

Primarily found in big cities and can be sparsely found in near desert areas

Life History Data

Time of Breeding: early Spring Number of Eggs: 1-2 Broods per year: 3-6 Time of hatching: 12-14 days Time to independence: 15-19 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monoamous Life span: 15-17 years Food habits: seed and cereal grains such as millet, sunflower, milo, wheat, and corn. also eats berries, green parts of some plants and insects Time in Texas:



Photo: Troy A. Ladine

Inca Dove Columbina inca



Photos: Troy A. Ladine



Mourning Dove Zenaida macroura

Author : ShekinahWebb, Andrew Garay, Jeremy Alexander

Description of Bird

Mass: 85-171 g

Length: 23-33 cm

Wing span:

Medium-sized bird with small head and long, pointy tail with white on the outer edges, light brown or black grayish brown underside buffy, black spots on wings, black comma-shaped spot below and behind eye, tail graduated, with inner feathers longest, tail gray, with white tips bordered by black on outermost feathers with the bill small and thin, and black. Legs and feet dull red and its eyes are dark brown, surrounded by blue skin. Wings make whistling noise in flight. Sexes similar, but males slightly larger and slightly more colorful, with bluish crown and pink chest

Geographical Range

year round all over the United States and several parts of Central America. The Mourning Dove breeding birds are often spotted in the northern ,central part of the US, such as Montana and North and South Dakota, as well as several parts of southern Canada. Several of the non-breeding doves can be spotted in the southern part of Central America.

Habitat

open habitats which includes agricultural areas, open woods, forest edges, deserts, cities and suburbs. They are most abundant in agricultural and suburban areas

Life History Data

Time of Breeding: February-October Number of Eggs: 2 Broods per year: 3-6 Time of hatching: 14 days Time to independence: 23- 30 days Age to reproductive maturity: Males: 85 days

Females: 85 days

Mating System: monogamous

Life span: 1.5 years

Food habits: Seeds make up 99 percent of a Mourning Dove.s diet, including cultivated grains and even peanuts, as well as wild grasses, weeds, herbs, and occasionally berries. They sometimes eat snails. Mourning Doves eat roughly 12 to 20 percent of their body weight per day, or 71 calories on average.

Time in Texas: year round



Photo: Lindsey Vasquez

Rock Pigeon *Columba livia*

Author: Stacy M. Purser

Description of Bird

Mass: ca. 270 g

Length: 30-35 cm

They have 4 main plumage variations: natural, checkered, dark and brown, but all have pink legs and white cere. Natural is the most typical coloring, which is a bluish-gray head, neck and chest with glossy multicolored iridescence along their neck; two dark bands across the wings are seen in most and one bluishgray band across the tail.

Geographical Range

Wild *Columba livia* are native to Europe, North Africa, and southwestern Asia. Feral pigeons are found worldwide, including throughout all of North America

Habitat

wild rock doves nest in crevices along rocky seaside cliffs, close to agriculture or open shrub vegetation. Feral pigeons tend to live in old farm buildings in rural areas, and in skyscrapers in cities.

Life History Data

Time of Breeding: year round, peak during spring and fall
Number of Eggs: 1-2
Broods per year: 1-4
Time of hatching: 17-19 days
Time to independence: 30-37 days
Age to reproductive maturity:

Males: 1 year
Females: 1 year
Females: 1 year

Mating System: monogamous
Life span: 5 years
Food habits: Mainly seeds (corn, oats, cherry along with knotweed, elm, poison ivy and barley), Occasional food sources In cities they are often fed popcorn, cake, peanuts, bread and currants, they suck water through their beaks like straws
Time in Texas: year round

White-winged Dove Zenaida asiatica

Author: Cameron Burrell

Description of Bird

Mass:

Length:

Wingspan:

The plumage is grayish-brown with a slightly rounded tail and white tips. The wings have a white edge along the lower portion when the wing is folded. The breast is slightly darker than the rest of the body. The beak is grayish-black while the legs and feet are pinkish-red. Males and females are very similar but the males tend to be slightly more colorful and have a hint of purple on the neck and head

Geographical Range

They are found in Southern American, Mexico, South America, and the Caribbean. They are mainly found in the southern states of the U.S. although they can be seen in various parts throughout the country

Habitat

White-winged dove prefer to live in dense areas of woodlands along with a warm environment. These thick canopies can be found in trees such oak, ash, citrus, and elm trees. They are found to live in urban areas with large shade trees. Agricultural fields aren't normally attractive to the dove unless there is an abundance of food.

Life History Data

Time of Breeding: Spring-August Number of Eggs: 2 Broods per year: 1-3 Time of hatching: 14 days Time to independence: 14-16 days Age to reproductive maturity: Males: 2-3 years Females: 2-3 years Females: 2-3 years Mating System: monogamous Life span: 12 years Food habits: Mostly grain but also eats fruit, seeds, and pollen or nectar Time in Texas:



Photo: Troy A. Ladine

Order Cuculiformes

Family Cuculidae

Black-billed Cuckoo Coccyzus erythropthalmus

Author: Abby Tunnell

Description of Bird

Mass: 40-65 g Length: 28-31 cm Wingspan: 34-40 cm Dark bill, small white spots of tail, little rufous, slender body, off white belly. Can be a soft brown morphing into a gray color at the tail.

Geographical Range

Neartic, Neotropical regions.

Habitat

Wet openings with willows, thickets. Solitary life style.

Life History Data

Time of Breeding: Summer Number of Eggs: 2–5 Broods per year: 1–2 Time of hatching: 10–14 days Time to independence: 17 days Age to reproductive maturity: Males: Unknown Females: Unknown Mating System: Monogamous Life span: 5 years Food habits: Caterpillars, large insects, seeds and fruits. Will occasionally eat eggs of other birds. Time in Texas: Migratory

Greater Roadrunner Geococcys californianus

Author: Kimberley Ledbetter

Description of Bird

Length/height: 61cm. Approximately 300g. Bigger than an American crow. A long-legged,long-tailed, streaked, gray-brown ground bird with a bushy crest. This bird has bright yellow eyes.

Geographical Range

Resident from northern California, Nevada, Utah, Colorado, Kansas, Oklahoma, Arkansas, and Louisiana southward into Mexico.

Habitat

Open arid country with scattered thickets.

Life History Data

Time of Breeding: August-September
Number of Eggs: 3-5 ivory-colored eggs
Broods per year: 1-2
Time of hatching: 20 days
Time to independence: 18 days
Age to reproductive maturity: Males: 2-3 years
Females: 2-3 years
Females: 2-3 years
Mating System: monogamous
Life span: 7-8 years
Food habits: insects, scorpions, lizards, snakes, rodents, small birds, and young of ground nesting birds.
Time in Texas: Resides year-round in most sections of Texas, but is less common in the eastern portions of the state. Can be seen across the desert or plains and can be encountered in the East Texas Piney Woods

Yellow-billed Cuckoo Coccyzus americanus

Author: Bryan Whitmire

Description of Bird

Mass: 55-65 g Length: 26-30 cm

Wingspan:

Have grayish-brown plumage on head and back with white underparts and long tails. They also have a short to medium beak that curves downward and has a yellow or orange lower mandible

Geographical Range

Yellow-billed cuckoos are found in the Nearctic and Neotropical regions. They breed throughout eastern North America, in southeast Canada, northern Mexico and the Greater Antilles. They winter primarily in South America

Habitat

Open woodlands with a dense shrub layer and clearings

Life History Data

Time of Breeding: mid-late May Number of Eggs: 1-5 Broods per year: 1-2 Time of hatching: 9-11 days Time to independence: 28-30 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 4 years Food habits: exclusively insects Time in Texas: April-November





Photos: Troy A. Ladine

Order Strigiformes

Family Strigidae

Barred Owl *Strix varia*

Author: Nathan Ledkins, Stacy M. Purser

Description of Bird

Length: 40-63 cm Wingspan:

Mass: 500-1050 g

Medium-sized gray-brown owl streaked with white horizontal barring on the chest and vertical barring on the belly. Round-headed with a whitish/brown facial disk with dark brown trim. Brown eyes, yellow beak almost covered by feathers and a long tail. No difference in plumage between males and females

Geographical Range

Found in the U.S. and Southern Canada east of the Rocky Mountains

Habitat

Wetland forests with large mature trees with cavities for nesting

Life History Data

Time of Breeding: Dec-Mar
Number of Eggs: 1-5 (avg 2-3)
Broods per year: 1
Time of hatching: 28-33 days
Time to independence: 4-6 months
Age to reproductive maturity:
Males: 2 year
Females: 2 year
Mating System: monogamous
Life span: 10-18 years
Food habits: Generalist carnivores feeding on small mammals up to the size of rabbits, birds, reptiles, and amphibians Other food sources Fish, insects, invertebrates.

Time in Texas: year round

Eastern Screech-owl Megascops asio

Author: Reece McConnell, Abby Tunnell

Description of Bird

Mass:166-194 g

Length: 16-24 cm

Wingspan:

A screech owl is a small, grayish owl with small ear tufts, yellow eyes, and greenish-yellow beak. Males are grey with bold chest marks, and females are very similar. The young owls are gray or grayish-brown with less distinct chest markings

Geographical Range

These owls are found east of the Rocky Mountains, from southern Canada south into Mexico

Habitat

Forests, riparian areas, parks, suburban areas. Nocturnal. Lives in woodpecker holes, cavities in trees and any type of tree will do. Prefers trees near water. Can live in any are such as farms, woods, and suburban areas as long as few dense trees are around. Solitary.

Life History Data

Time of Breeding: end March-mid May Number of Eggs: 3-4, but up to 7 Broods per year: 1 Time of hatching: 26 days Time to independence: 56 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous for life Life span: 14 years Food habits: Most hunting is done during the first four hours of darkness. It hunts in woodlands, open fields, or wetlands. There are many different types of prey, but mainly small rodents and deer mice.

Time in Texas: year round

Great-horned Owl Bubo virginianus

Author: Thad Fortune, Brittany McCloskey

Description

Length: 46-63 cm

Wingspan: 101–145 cm

Weight: 32.1-88.2 oz

The Great Horned Owl is a large and bulky bird with distinct, widely spread and broad ear tufts that create a cat like head shape. The coloration of the bird is an overall grayish on the upper side and is heavily barred underneath. The face of the owl is a rusty-orange color. The owls throat is white and leads to a dark brown breast above the barred underside of the owl, (Sibley, 2011). The male and female are fairly uniform in weight, length and wingspan with the female being slightly larger in most cases, which are as follows:

Geographic Range

The Great Horned Owl can be found year round all over the United States and several parts of Canada and South America. The bird is more prominent in North America but is very abundant in several locations in South America as well

Habitat

Over the years the Great Horned Owl has adapted too many different habitats and climates. They may be found everywhere from dense forests to residential areas. They have also been known to habitat in the same place as the diurnal Red-tailed Hawk

Life History Data

- Time of breeding: January and February
- Number of eggs: 2-4
- Broods per year: 1

Time to hatching: 26-35 days

Time to fledging: 35 days)

Time to independence: Young cannot fly well until 9-10 weeks. They are slowly weaned for a few more weeks. Families are loosely associated for the summer before the young leave in the fall.

Age at reproductive maturity

Males: 730 days

Females: 730 days

- **Mating system:** The owls courtship begins in late January and early February. The male sings love songs to the female. After mating the pair occupies another bird's or squirrel's nest.
- **Life span:** Birds in captivity have been known to live up to 38 years old, with the average being around 34 years old. Birds in the wild can live up to 13 years old.
- **Food Habits:** The owls eat their food whole. Any parts not wanted (bones) are regurgitated in pellet form. The best way to study the eating habits of owls is to study their pellets. They hunt at night targeting small mammals like rabbits, skunks, and squirrels. They will also feed on birds including other large birds such as falcons.

Order Caprimulgiformes

Family Caprimulgidae

Common Nighthawk Chordeiles minor

Author: Cameron Burrell, Hannah Word

Description of Bird

Mass: 62 g

Length: 20-25cm

Wingspan: 51-61 cm

They are mottled gray and black birds with small black beaks. The beaks open wide and they have bristles that aid in catching insects. They have a white bar on the wings but the females are a little darker. The male has a think white band on the tail whereas the female does not. Both genders have dark legs and feet.

Geographical Range

Breeds from the Yukon east of Nova Scotia. It is found all of the U.S. except Hawaii. In the winter they migrate to South America.

Habitat

Common Nighthawks nest in both rural and urban habitats including coastal sand dunes and beaches, logged forest, recently burned forest, woodland clearings, prairies, plains, sagebrush, grasslands, open forests, and rock outcrops. They also nest on flat gravel rooftops, though less often as gravel roofs are being replaced by smooth, rubberized roofs that provide an unsuitable surface. During migration, Common Nighthawks stop in farmlands, river valleys, marshes, coastal dunes, and open woodlands. Their South American wintering habitat is not well known.

Life History Data

Time of Breeding: April-July Number of Eggs: 1-2 Broods per year: 1-2 Time of hatching: 1-20 days Time to independence: 30 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 4-5 years Food habits: eat flying insects almost exclusively. Queen ants, wasps, beetles, caddisflies, moths, bugs, mayflies, flies, crickets, grasshoppers, and other insects

Time in Texas:

Eastern Whip-poor-will Antrostomus vociferus

Author: Matt Tarver, Brian Whitmire

Description

Mass: 30-40 g

Length: 22-25 cm

Wingspan: 48 cm

The Whip-poor-will is known for its particular song, *(WHIP puwiw WEEW)*, and also for its concealment capabilities. They are often heard more than they are seen. They use their plumage to conceal themselves on the forest floor or along a branch. Males have a white necklace that borders their block colored throat while females have a buffed, gray colored necklace. Males are also distinguishable by white on their tails, which is used in breeding as a way to win a mate.

Geographic Range

Found North to South, from northern Mexico to southern Canada; ranging from the eastern Midwest to the east coast.

Habitat

Likes to perch on the forest floor or perched parallel on a branch that way it can use its plumage as camouflage from predators.

Life History Data Time of breeding: May-August Number of eggs: 2 Broods per year: 1, sometimes females will have two within the same area Time to hatching: 7-20 days Time to fledging: 15 days Time to independence: 20 days after hatching Age at reproductive maturity Males: after 1 yr old Females: after 1 yr old Mating system: Male looks for the female. A courtship takes place where the male tries to win over the pursued female. If she chooses him they will mate and the male will leave the female after mating has taken place Life span: 2 to 3 yrs Food Habits: Nocturnal Insectivores; catches nocturnal insects such as moths, beetles, and mosquitos, and eats them while flying. **Time in Texas**

Order Apodiformes

Family Apodidae

Chimney Swift Chaetura pelagica

Author: Cindy Jones, Darius Roberts, Michelle B. Backus

Description of Bird

Mass: 21.33 g Length: 13 cm Wingspan 39.1 mm Males and females display sexual dimorphism in which both have large eyes and are dark gray to brownish gray in appearance. A maximum of seven spiny feather tips are displayed on the tail end which contributes to the similar appearance of a .flying cigar

Geographical Range

Found in Canada (below the Arctic Circle), southern Alaska, the United States and northern Mexico in the summer. Found in southern Mexico, Central America and South America in the winter

Habitat

Found in areas settled by humans in temperate zones. In tropics, they are found near irrigated agricultural lands. They are also found at elevations of 2500 m.

Life History Data Time of Breeding: May-June Number of Eggs: 3-7 Broods per year: 1, may have more Time of hatching: 19-21 days Time to independence: 14-19 days Age to reproductive maturity: Males: 2 year Females: 2 year Mating System: monogamous Life span: 14 years Food habits: considered insectivores which feed while flying and catch insects while hovering over tree limbs Time in Texas:

Order Coraciiformes

Family Alcedinidae

Belted Kingfisher Megaceryle alcyon

Author: TravisW. Sammons

Description of Bird

Mass: 140-170 g

Length: 28-35 cm

Medium-sized, stocky birds with blue-gray plumage, except for a white collar and belly. Males and females have a gray chest band, but females also have an additional reddish brown chest band. Large head and bill compared to the size of their body, which includes a ragged, double-pointed crest that reaches from the base of the bill to the back of the neck.

Geographical Range

Native only to the Nearctic region, northern Canada and Alaska. During the winter, as far south as Central America and the Caribbean Islands .

Habitat

widespread around any sheltered open water with small fish

Life History Data Time of Breeding: South: Jan. North: June Number of Eggs: 5-8 Broods per year: 1 Time of hatching: 22-24 days Time to independence: 21 days Age to reproductive maturity: Males: 10 months Females: 10 months

- Mating System: monogamous
- Life span:
- **Food habits:** Fish (brown trout, blunt nose, minnows, bluegill sunfish, sculpin, Atlantic salmon) Other food sources: Snails, crustaceans, insects, amphibians, reptiles, young birds, small mammals, and berries
- Time in Texas: year round but not common

Order Piciformes

Family Picidae

Downy Woodpecker Picoides pubescens

Author: Savannah Higginbotham, Jessica Harrison

Description of Bird

Mass: 18-26 g

Length: 14-17 cm

Wingspan: 25-30 cm

Small woodpecker with black-and-white upperparts and white underparts. Boldy striped head. Broad white stripe down center of back. Hindcrown patch is red. Tail is black with black spotted white outer tail feathers. Female and juvenile are similar, but without red patch on head. Straight, chisel-like bill, blocky head, wide shoulders, and straight backed posture as they lean away from tree limbs and onto their tail feathers. The bill tends to look smaller for the bird's size than in other woodpeckers. Acrobatic Foraging

Geographical Range

Alaska across Canada and south throughout the U.S.Absent from most of the lowlands of the desert Southwest. Not a migratory species, but disperses long distances.

Habitat

Preferred habitats include open woodlands (deciduous woods), parks, gardens, and along streams. Also in urban areas: orchards, parks, and suburbs. Open areas as well, where they can nest along fence rows and feed amid tall weeds.

Life History Data

- Time of Breeding: late winter in south, early spring in north Number of Eggs: 3-8 Broods per year: 1 Time of hatching: 12 days Time to independence: 3 weeks Age to reproductive maturity: Males: 1 years Females: 1 years Mating System: monogamous Life span: 11 years Food habits: insects, beetle larvae that live inside wood or tree bark, ants, caterpillars, and various pests.¹/40f their diet consists of plant material, particularly berries, acorns, and grains. Downy Woodpeckers are common feeder birds, eating suet and black oil sunflower seeds and occasionally drinking from hummingbird feeders
 - Time in Texas: winter months

Hairy Woodpecker *Picoides villosus*

Author: Reggie Patrick

Description of Bird

Both Male and female are about 2217 cm Wing span 38-43 cm.

Mass: 71 g

The Hairy Woodpecker adults are mainly black on the upper breast and wings. Their back, throat and belly are all white and also have white spotting on their wings. There is a white line above and below the eye. Their tails are black with white feathers on the outside. The only difference between the males and females is the red patch on the back of the head of the males, which the females lack

Geographical Range

The Hairy Woodpecker is found just about everywhere in the U.S. and up into Canada except for southern parts of Texas, California and also Arizona. The central to northeastern United States are well more prominent for Hairy Woodpecker sightings than the south and south eastern parts. They can be seen year round except for in central to northwest Texas where they are very rare.

Habitat

The preferred habitat of the Hairy Woodpecker is deciduous forest. These birds are also found in Hardwood and mixed forests. They have also been sited in places including wooded parks and conifer-lined streams and shorelines. They like to nest in soft or rotten wood mainly in deciduous forests.

Life History Data

Time of Breeding: late winter Number of Eggs: Broods per year: 1 Time of hatching: 11-15 days Time to independence: 3 weeks Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 4-11 years Food habits: Beetle larvae in dead and dying trees, caterpillars, and gypsy moths, are preferred of Hairy Woodpeckers. They also feed on sap from sapsucker holes, berries, nuts, seeds, and suet.

Time in Texas: year round



Photo: Troy A. Ladine

Northern Flicker Colaptes auratus

Author: Michelle B. Backus

Description of Bird

Mass:

Length: 28 cm

Wing span:

Brown back and wings barred with black. Black crescent on upper breast Beige breast and belly spotted heavily with black, White rump (obvious in flight). Tail dark above, Two color forms, formerly separate species

Geographical Range

North America to Central America

Habitat

Found in wooded areas with dead trees, as well as open areas, forest edges, clear-cut areas, burnt areas, and agricultural lands

Life History Data

Time of Breeding: Number of Eggs: 3-10 Broods per year: 1, 2 in the south Time of hatching: 11-14 days Time to independence: Age to reproductive maturity: Males: Females: Mating System: Life span: Food habits: Insects, mostly ants, and fruit Time in Texas: year round



Photos: Troy A. Ladine



Pileated Woodpecker Dryocopus pileatus

Author: Luke Phillips

Description of Bird

Mass: 250-349 g

Length: 40-49 cm

Wing span: 66-75 cm

Pileated Woodpeckers are large sized woodpeckers that have a mostly black body with conspicuous white wing linings. They have a distinct bright red head with white face and neck stripes. The bill is grey. The Female is not so vibrant having a black not red moustache stripe and cap.

Geographical Range

Pileated Woodpeckers live from northeastern provinces throughout British Columbia east across southern Canada to Nova Scotia and south to northern California, southern Idaho, eastern North Dakota, south to central Texas, and east across the states to Florida. They do not live the desert, Rocky Mountains, and plains states.

Habitat

mature forests and borders.

Life History Data

Time of Breeding: February-March
Number of Eggs: 3-5
Broods per year: 1
Time of hatching: 15-18 days
Time to independence: 24- 28 days
Age to reproductive maturity:

Males: 1 year
Females: 1 year

Mating System: monogamous
Life span: 13 years
Food habits: Eats insects such as ants and boring beetle larvae, also fruits and nuts. Readily eats Suet, sunflower seeds, nuts, sugar water, and fruit
Time in Texas: year round

Red-bellied Woodpecker Melanerpes carolinus

Author: Kyle Nicholson, Thad Fortune, Sulam Peña

Description of Bird

Mass: 75 g (mean) Length: 22.9-26.7 cm Wing span: 38-46 cm Males are about 8-9% larger, on average, than females. Two characteristics that distinguish red-bellied woodpeckers from woodpeckers native to North America are the black and white zebra pattern on their backs, and the red belly found in a small section of the ventral region. The face and belly are a dull grayish color. Male red-bellied woodpeckers have a bright red cap that covers from the forehead to the nape of the neck. Females have red only on the napes of their necks. The legs and zygodactyl feet (two toes forward, two toes back) are dark gray, and the chisel shaped bill is black.

Geographical Range

The woodpecker can be found a year round throughout the eastern United States. It is rarely seen in central and west Texas as well as eastern New Mexico, also rarely seen in the southern and southeastern regions of Canada

Habitat

They are most commonly associated with mature hardwood forests, they also thrive in mixed pine hardwood forests, mesic pine flatwoods, heavily timbered

bottomlands, swampy woods, and riparian forests. They usually live below 600 m elevation, but can be found at up to 900 m in the Appalachian mountains. They will also often venture from forests to appear at backyard feeders.

Life History Data

Time of Breeding: early May Number of Eggs: 2-6 Broods per year: 1-3 Time of hatching: 24-27 days Time to independence: 5-6 weeks Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 12 years Food habits: They eat a wide variety of

Food habits: They eat a wide variety of fruits, nuts, seeds, berries and tree sap, as well as arboreal arthropods and other invertebrates. These include ants, flies, grasshoppers, beetle larvae and caterpillars. Red-bellied woodpeckers also take small vertebrates, including brown and green anoles, tree frogs, small fish, nestling birds and bird eggs

Time in Texas: year round



Photos: Justin Velasquez

Red-headed Woodpecker Melanerpes erythrocephalus

Author: Kimberly Ledbetter, Michelle B. Backus

Description of Bird

Mass: 70g.

Length: 23cm.

Head: red. Back: black with white patches. Belly: White. The head, neck, and upper chest are uniform with bright crimson with a semi-circular band of black across the chest. The back and shoulders are glossy blue/black and the wings are black with white tipping. The under parts below the upper chest are white with the abdomen having a dull yellowish or salmon color (may also be bright red). The bill is bluish-white. The iris is a deep brown or reddish-brown color.

Geographical Range

They are found sporadically throughout most of North America

Habitat

Prefer open woodlands and forest edges. Often found in deciduous woodlands, river bottoms, open woods, orchards, parks, open country, savannas and grasslands with scattered trees

Life History Data

Time of Breeding: April-July Number of Eggs: 4-6 Broods per year: 1-2 Time of hatching: 12-14 days Time to independence: 24-31 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous, some polygyny Life span: 12 years Food habits: insects (grasshoppers), spiders, flies, earthworms, nuts (beech), seeds, cultivated fruit, corn, eggs of poultry and pigeons, berries, and occasionally small mammals.

Time in Texas: Panhandle region, North Texas, and East Texas



Photo: Jordan Brewer



Photo: Matthew Armendarez

Yellow-bellied Sapsucker Sphyrapicus varius

Author: Jessica Harrison

Description of Bird

Length: 18.22 cm

Wingspan: 34.40 cm

Weight: 43.54 g

Fairly small woodpeckers with stout, straight bills and brush-tipped tongues. Black-and-white barred back, buff breast, white wing patches, red cap and throat, and yellowish underparts. Females differ with a white throat and paler underparts.

Geographical Range

Native to Nearctic and Neotropical regions: North and Middle America, wintering in the southern United States, Central America, and the West Indies. Females tend to migrate farther south than males. Summer breeding months spent across South-central Canada, and Northeastern United States.

Habitat

Spring & Summer: favor young forests and edge habitat, regenerating forests. Fast-growing trees for sapwells. Decayed heartwood or dead limbs for their cavity nests. Winter: forests of hickory or pines and oaks. Range from bottomland hardwood forests to as high as 10,000 feet, though never in pure conifer stands Life History Data Time of Breeding: Summer months Number of Eggs: 4-7 Broods per year: 1 Time of hatching: 10-13 days Time to independence: unknown Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 6 years Food habits: Tree sap, ants & spiders in bark, flying insects, occasional fruit Time in Texas: **Order Passeriformes**

Family Tyrannidae

Acadian Flycatcher Empidonax virescens

Alder Flycatcher Empidonax alnorum

Black Phoebe Sayornis nigricans

Eastern Kingbird *Tyrannus tyrannus*

Author: Rusty Collier

Description of Bird

Mass: 33-55 g Length: 19-23 cm Wingspan: Medium-sized songbird. Head and back are dark. Throat, chest, and belly are white. White tip or dark tail

Geographical Range

Across all of the eastern United States and southward in the western states to northern Nevada, northern New Mexico, and southern Texas

Habitat

Open environments with scattered perches such as fields. Uses urban parks and golf courses

Life History Data

Time of Breeding: Summer Number of Eggs: 2-5 Broods per year: 1 Time of hatching: Time to independence: 8 weeks Age to reproductive maturity: Males: Females: Mating System: monogamous Life span: 7 years Food habits: flying insects and fruits Time in Texas: summer



Photo: Talton Cooper



Photo: Lacey Liles

Eastern Phoebe Sayornis phoebe

Author: Joshua L. Davis

Description of Bird

Mass: 20 g Length: 18 cm Wingspan: 28 cm

Geographical Range

The breeding range of the Eastern Phoebe extends from northern Canada down into the southeastern U.S. It winters primarily in the southeastern U.S., with especially heavy concentrations in Texas and Florida. The winter range can also reach well into Mexico.

Habitat

Woodlands, often near water. May also be found in urban areas

Life History Data

Time of Breeding: Spring / Summer Number of Eggs: 3-6 Broods per year: 2 Time of hatching: 13-16 days Time to independence: 21 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monoamous Life span: 7-8 years Food habits: insects Time in Texas: November- March, year round in northeast

Eastern Wood-pewee Contopus virens

Author: Weston Godsey

Description of Bird

Mass: 10-19 g

Length: 15 cm

Wingspan: 23-26 cm

Olive-gray birds with dark wings, and little to no yellow on the underparts. The sides of the breast are dark with an off-white throat and belly. They have a white eye ring. Adults have thin, white wing bars, distinguishing them from the Eastern Phoebe. The underside of the bill is mostly yellow-orange, except in some juveniles.

Geographical Range

Breeds from eastern Great Plains to the Atlantic Ocean, ranging from southern Canada to northern Florida, the Gulf coast and central Texas. Winters in the tropics.

Habitat

Usually found in clearings and forest edges, Eastern Wood-Pewees breed in nearly any type of wooded habitat in the eastern United States and southeastern Canada. including mature woodlands, urban shade trees, roadsides, woodlots, and orchards. They prefer deciduous forest but also live in open pine woodlands of the south and mixed hardwood-conifer forest of the north. Although they usually avoid streams in eastern forests, they often nest in riverside habitat in the Great Plains. During spring and fall migration, Eastern Wood-Pewees stop in a variety of habitats with trees and shrubs, including edges, clearings, primary forest, and secondary forest. They spend the winter in wooded, partially cleared, and shrubby habitats of northern South America and possibly Central America, usually below 4,300 feet of elevation.

Life History Data

Time of Breeding: May-June Number of Eggs: 2-4 Broods per year: 1 Time of hatching: 12-14 days Time to independence: 16-18 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 5 years Ecoed habits: cheap incosts from foliage of

- **Food habits:** glean insects from foliage or the ground, sometimes taking advantage of locally abundant prey during insect emergences. Its diet includes flies, bugs, butterflies, moths, bees, wasps, beetles, grasshoppers, crickets, stoneflies, and mayflies. The pewee also eats small amounts of vegetable matter, including the berries and seeds of dogwood, blueberry, raspberry, and poison ivy.
- **Time in Texas:** Winters: April-May, Sept. Oct. for migration Summers: eastern and central Texas

Great Crested Flycatcher Myiarchus crinitus

Least Flycatcher Empidonax minimus

Olive-sided Flycatcher Contopus cooperi

Scissor-tailed Flycatcher Tyrannus forficatus

Author: Rachel Hastie, ShekinahWebb, Marissa Dawkins

Description of Bird

Mass: 42 g

Length: 25-38 cm

Wingspan:

The adult has bright salmon-pink sides and belly, head, upper back and its breast is a pale grayish white, it has an about nine inch long black and white forked tail, males usually have a longer tail than their mates, tail feathers get longer from inner to outer feathers adult females and juveniles are paler with cream-colored or very light pink flanks, belly and wing linings

Geographical Range

Scissor-tailed flycatchers can be seen from eastern Colorado and Nebraska to Texas, Oklahoma, Kansas and sometimes in western Louisiana and southwestern Missouri during breeding time. At migration time they will go to and winter in Central America. Their wintering grounds can be anywhere within southern Mexico to central Costa Rica

Habitat

Preferences: open areas with scattered trees, mangroves, shrubby marsh borders, and residential areas near coast



Photo: Jordan Bartlett

Life History Data

Time of Breeding: late March late August Number of Eggs: 3 6 Broods per year: 1 Time of hatching: 14 17 days Time to independence: 28 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 3 5 years Food habits: insects, some berries Time in Texas: summer



Photo: Lacey Liles

Western Kingbird *Tyrannus verticalis*

Author: Cindy Jones

Description of Bird

Mass: 37-46 g Length: 17.8 cm Wingspan: Males and females have a large bill and head with a yellow belly and gray head and chest. This flycatcher is characterized by a black square tail and white feathers

Geographical Range

North America west of the Mississippi River

Habitat

open places and nest in trees, on poles, or on fences

Life History Data

Time of Breeding: April-late July Number of Eggs: 3-5 Broods per year: 1 Time of hatching: 18-19 days Time to independence: 48-50 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 7 years Food habits: primarily insects, some berries Time in Texas: summer

Willow Flycatcher Empidonax traillii

Yellow-bellied Flycatcher Empidonax flaviventris

Family Vireonidae



Author: Christy Lopez

Description of Bird

Length: 11-12 cm

Wingspan: 18 cm

Mass: 7-10 g

Small insectivorous song bird that is drab grey to green on top and white to yellow below. It tends to have a prominent wing bar and a fainter one above, and eyes tend to be dark with a faint white color around them. Its beak is slightly flat and colored gray, which is the same color as its legs. This bird species tends to be more yellow the farther east it gets in its range and it gets grayer the more it moves farther to the west.

Geographical Range

Breeds from southern California, Colorado, Dakotas, and Indiana southward. Absent from eastern third of the U.S. Spends winters along the Pacific coast from northern Mexico south to northern Nicaragua.

Habitat

Thickets, orchards, dense, low, shrubby vegetation, brushy fields, mesquite brush lands, old fields, savannas, streamside thickets, forest undergrowth, and woodlands.

Life History Data

Time of Breeding: March-Aug Number of Eggs: 3-5 Broods per year: Time of hatching: 14 days Time to independence: Age to reproductive maturity: Males: Females: Mating System: Life span: 7 years Food habits: Plants, Fruits, seeds, spiders, ticks, scorpions, mites, daddy longlegs, and insects.

Time in Texas:

Red-eyed Vireo Vireo olivaceus

Author: Christy Lopez

Description of Bird

Mass: 12-16 g

Length: 12-13 cm

Wing span: 23-25 cm

The back of this small drab bird tends to be olive-green and turns whiter underneath. It has a gray to blue-gray crown and has a white eye brow with a black stripe through the eye. The eyes tend to be a dark red.

Geographical Range

Breeds from the Northwest Territories east to Ontario and Gulf of Saint Lawrence and south through British Columbia to Oregon, Colorado, the Gulf Coast, and Florida.

Habitat

Breeds in deciduous and mixed deciduous forests, is more abundant in forest interiors, and lives in urban areas and parks with large trees.

Life History Data

Time of Breeding: April-August Number of Eggs: 3-5 Broods per year: Time of hatching: 11-14 days Time to independence: 35-37 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 7-10 years Food habits: Primarily insectivores, but also sometimes eat fruit. Butterflies, larvae, beetles, mosquitoes, cicadas, wasps, ants, grasshoppers, and dragonflies make up their main source of food.

Time in Texas:

Warbling Vireo *Vireo gilvus*

White-eyed Vireo Sitta carolinensis

Author: Christy Lopez

Description of Bird

Mass: 10-14 g

Length: 11-13 cm

Wingspan: 17 cm

Small to medium-size songbird that is olive-green on upper parts has yellow sides and spectacles, white throat and eyes, and have two white wing bars. It is one of the few birds to have a jet black mouth lining and blue-gray legs.

Geographical Range

Breeds from Nebraska to Massachusetts, south to eastern Mexico and throughout Florida. The Also found in the southeastern United States, including New Jersey, northern Missouri, Texas, Florida, northern Central America, Cuba and the Bahamas. Most northern populations in North America will migrate south in winter months, searching for warmer climates

Habitat

Found in deciduous scrub, overgrown pastures, old fields, wood margins, streamside thickets, mangroves, cypress swamps, scrubby edges of roads, and ponds

Life History Data

Time of Breeding: March-August
Number of Eggs: 3-5
Broods per year:
Time of hatching: 13-15 days
Time to independence: 23 days
Age to reproductive maturity:
Males: 1 year
Females: 1 year
Females: 1 year
Mating System: monogamous for one season
Life span: unknown
Food habits: This is a foliage gleaning species it locates a prey and captures it by hovering, lunging, or picking insects from plants. Caterpillars, damselflies, mayflies, beetles, cockroaches, stinkbugs, leafhoppers, bees, ants, wasps, and grasshoppers make up their main source of food.



Photo: Skylar Williams

Family Corvidae

American Crow Corvus brachyrhynchos

Author: Rachel Hastie, Zane Gruznina, Darius Roberts

Description of Bird

Mass: 316-620 grams

Length: 44-45 cm

Wingspan: 85-00 cm

Crows are completely black with a glossy look. Bill is black with a slight hook on the end

Geographical Range

Breeds from British Columbia, central interior Canada, and Newfoundland south to southern California, Gulf Coast, and Florida. Winters north to southern Canada.

Habitat

Growth along rivers and streams, orchards and city parks. Also mixed and coniferous woods, but avoids closed coniferous forests and desert expanses.



Photos: Troy A. Ladine

Life History Data

Time of Breeding: late winter to early summer
Number of Eggs: 3-7; generally 4 bluish green with brown marks
Broods per year: 1
Time of hatching: 17-18 days
Time to independence: stay with parents until young find a home of their own
Age to reproductive maturity:
Males: 2 year
Females: 2 year
Mating System: monogamous
Life span: 6-10 years
Food habits: omnivorous: seeds, insects, small reptiles, frogs, mice, and young rabbits, eggs, nestling of other birds, clams, carrion, nuts, fruit, earthworms, and crops such as corn, roadkill, eat from bird feeders and sometimes garbage

Time in Texas: year round



Blue Jay Cyanocitta cristata

Author: Holly R. Potter, Zane Gruznina, Janae Wineland, Austin Dicks

Description of Bird

Mass: 70-100 g

Length: 24-30 cm

Wingspan: 34-43 cm

Blue jays are bright blue on top and whitish gray on the belly and chin. They have a gray-blue, feather crested head, which they can raise and lower. The feathers on their wings and tails are bright blue with white and black bands. Blue jays also have a collar of black feathers across the throat and continuing around the head. Their bills, legs, feet, and eyes are black.

Geographical Range

Resident from southern Canada through eastern United States to Gulf Coast, westward to central Texas. Small, local, expanding populations westward to Washington.

Habitat

These birds live in woodlands, around forest edges, towns, cities and parks and are often found where oak trees are located

Life History Data

Time of Breeding: March-July Number of Eggs: 3-6 Broods per year: 2 Time of hatching: 17-18 days Time to independence: 30-60 days Age to reproductive maturity: Males: 1 year Females: 1 year

Mating System: monogamous, A group of seven or more blue jays including one female would gather on top of a tree. When the female flies away, she will be followed by the males until she lands in another location. The males will show off by nodding their heads up and down. The female will then choose her mate and the nesting cycle comes next.

Life span: 14 years

Food habits: omnivore, seeds, grains, and nuts, fruit, birds. mammals, amphibians, small reptiles, eggs, insects, terrestrial non-insect arthropods **Time in Texas:** year round



Photo: Lindsey Vasquez



Photo: Steven Ramage

Fish Crow Corvus assifragus

Author: Nathan Ledkins

Description of Bird

Mass: Length: 38 cm Wingspan: 91 cm Dark brown eyes, black body with a greenish sheen and a black beak.

Geographical Range

Coastal and tidewater regions of the southeast United States

Habitat

Coastal marshes and beaches are frequented, also rivers, inland lakes and marshes, and river banks

Life History Data

Time of Breeding: Spring
Number of Eggs: 4-5
Broods per year: 1
Time of hatching: 16-18 days
Time to independence: 6 weeks
Age to reproductive maturity:
Males: 3.3 years
Females: 4.9 years
Mating System: monogamous
Life span: 10 years
Food habits: Small crustaceans such as crabs, shrimps, other invertebrates, stranded fish and live fish if the situation favors their capture, eggs and nestlings, small reptiles and fruits of many trees, peanuts and grains, human scraps where available
Time in Texas:

Family Hirundinidae

Barn Swallow Hirundo rustica

Author: Katy Gifford, Kwame Spikes

Description of Bird

Length of both sexes: 15-18 cm

Wingspan of both sexes: 29-32 cm

Mass of both sexes: 17-20 g

The birds are small and slender with long wings and a long, forked tail. These birds have a small, black bill with tiny legs and feet and are very acrobatic fliers. Both the male and female have blue upperparts and rufous underparts, but the male has a deeper chestnut color on his underparts and a longer tail than the female.

Geographical Range

Found in Canada (below the Arctic Circle), southern Alaska, the United States and northern Mexico in the summer. Found in southern Mexico, Central America and South America in the winter

Habitat

The barn swallow forages over fields and ponds and builds its mud nests on house eaves, road bridges and other man-made structures, and sometimes on cliffs

Life History Data

Time of Breeding: May-Aug Number of Eggs: 3 Broods per year: 2 Time of hatching: 13-15 days Time to independence: 2 weeks Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous, polyandrous, cooperative breeder Life span: 4 years Food habits: Flies, beetles, bees, wasps, ants, butterflies, moths, and other flying insects primarily while in flight. Time in Texas:



Photo: Jordan Brewer

Cliff Swallow Petrochelidon pyrrhonota



Photo: Jordan Bartlett

Purple Martin Progne subis

Author: Matt Tarver, Holly R. Potter, Merideth Runion

Description of Bird

Mass: 45-60 g

Length: 19-20 cm

Wing span:

Adult males are a glossy dark, purple, and females are dark on top with some purple on the back and lighter underparts. Juveniles are grayish-brown about and whitish below, gaining some purple feathers by their first winter.

Geographical Range

Can be found stretching throughout the Midwest to the East coast in about every state. Have also been found in some west coast states west of the Rocky Mountains

Habitat

These birds enjoy being near open areas close to water. They also enjoy living in saguaro cactus, and in western montane forests around beaver ponds. Another place they will live is near human settlements because they can find nest houses.

Life History Data

Time of Breeding: Summer months Number of Eggs: 2-7 Broods per year: 2 Time of hatching: 16-18 days Time to independence: 5-6 weeks Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 4-5 years Food habits: Feeds on all flying Insects: flies, dragonflies, Junebugs, moths, grasshoppers, bees, butterflies, Japanese beetles

Time in Texas: summer breeding season

Tree Swallow Tachycineta bicolor

Family Paridae

Black-crested Titmouse Baeolophus atricristatus

Carolina Chickadee Poecile carolinensis

Author: Janae Wineland, Grant Murray. Brittany McCloskey

Description of Bird

Mass: 9-12 g

Length: 12 cm

Sexes similar: Female slightly smaller than male Black crown, throat and lower neck, white cheek and underparts with grey wings and tail

Geographical Range

abundant in the southeastern and eastern part of the United States. Also not found in any other part of North America or Central and South America

Habitat

found in a variety of habitats that include deciduous and mixed deciduous and coniferous woodlands as well as swamps, open woods, parks, and suburban and urban areas



Photo: Troy A. Ladine

Life History Data

Time of Breeding: early April-mid June Number of Eggs: 3-10 Broods per year: 1 Time of hatching: 12-15 days Time to independence: 37-40 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous

Life span: 10-12 years

- **Food habits:** omnivore feeding on both plants and animals throughout the winter and then eating animals as about eighty-five percent of their diet throughout the rest of the year with a smaller amount of plants during that time. Insects and spiders are what make up most of the chickadees diet, as well as some seeds and berries. There actual feeding habits are to glean insects from foliage and tree bark, often hanging upside down to do so
- Time in Texas: year round

Tufted Titmouse Baeolophus bicolor

Author: Weston Godsey

Description of Bird

Mass: 18-26 g Length: 14-16 cm

Wingspan: 20-26 cm

Small sparrow-sized birds. Slate-gray on their upper parts with white and reddish on the under parts. The bills are short and stout with long and rounded wings. The tail is shorter than the wings and is slightly rounded. They have a black crest on its forehead and a dull white eye region. The ear region is pale gray. The irises of these birds are brown and have a dull white coloring passing down the sides and flanks to a rusty coloring.

Geographical Range

These birds are normally found in the Eastern United States. North to South Pennsylvania and New Jersey, central Ohio, northern Indiana, northern Illinois, southern Iowa, and northeastern Nebraska, Connecticut, Southern New York, southern Minnesota, west to eastern portion of the Great Plains south to the Gulf coast, including south-central Florida and eastern and central Texas.

Habitat

Tufted Titmice can be found in most eastern woodlands below 2,000 feet elevation, including deciduous and evergreen forests. Tufted Titmice are also common visitors at feeders and can be found in backyards, parks, and orchards.



Photo: Steven Ramage



Photo: Matthew Armendarez

Life History Data

Time of Breeding: March-May Number of Eggs: 3-9 Broods per year: 1 Time of hatching: 12-14 days Time to independence: 15-16 days Age to reproductive maturity: Males: 1 year

Females: 1 year

Mating System: monogamous

Life span: 1-2 years

Food habits: insects in the summer, including caterpillars, beetles, ants and wasps, stink bugs, and treehoppers, as well as spiders and snails. Tufted Titmice also eat seeds, nuts, and berries, including acorns and beech nuts. Experiments with Tufted Titmice indicate they always choose the largest seeds they can when foraging.

Time in Texas: year round

Family Sittidae

Brown-headed Nuthatch Sitta pusilla

Author: Zane Gruznina

Description of Bird

Mass:10 g Length: 10-11 cm Wingspan: 16-18 cm Sex Differences: Sexes alike. Immature: similar to adult, but duller and with more gray and less brown. White neck spot indistinct or absent.

Geographical Range

South Eastern United States from Texas to Virginia.

Habitat

Coniferous and mixed forests



Photo: Jordan Brewer

Life History Data

Time of Breeding: March-June Number of Eggs: 3-9 Broods per year: Time of hatching: 14 days Time to independence: 18-19 days Age to reproductive maturity: Males: Females: Mating System: Life span: Food habits: Forages over branches, twigs, creeps up and down tree trunks in search of beetles, bugs, roaches, caterpillars, moths, ants, grasshoppers, scale insects, pine seeds and spiders Time in Texas: year round



Photo: Matthew Armendarez

Red-breasted Nuthatch Sitta canadensis

White-breasted Nuthatch Sitta carolinensis

Author: Katie R. Hood

Description of Bird

Mass: 20 g Length: 13 cm Wingspan: Straight gray bill, Black crown and nape, White face and underparts, Blue-gray upperparts, Rusty undertail coverts, Short tail, Sexes similar but female duller

Geographical Range

North America, including the continental United States, southern regions of Canada, and central Mexicoppi River

Habitat

large trees in areas such as forests, farm woodlots, country towns and parks

Life History Data

Time of Breeding: April-May Number of Eggs: 3-10 Broods per year: 1 Time of hatching: 12 days Time to independence: 20-30 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 2 years Food habits: insects, nuts, seeds, 65% plant material during winter, 100 % animal foods during summer Time in Texas: year round



Photo: Lindsey Vasquez

Family Certhidae

Brown Creeper Certhia americana

Family Troglodytidae

Bewick's Wren Thryomanes bewickii

Carolina Wren Thryothorus ludovicianus



Photo: Talton Cooper

Marsh Wren Cistothorus palustris

Winter Wren Troglodytes hiemalis

Family Regulidae

Golden-crowned Kinglet *Regulus satrapa*

Ruby-crowned Kinglet Regulus calendula

Author: Lynlea Hansen

Description of Bird Life History Data

Mass: 5.5-11.5 g. Length: 10-11 cm

Wingspan: 16-18 cm

Very tiny. Green. No face pattern except for narrow white-eye ring. Males have tuft of red feathers on crown, however kept concealed unless bird is aroused. The upper parts are olive while the under parts are a gravish color, and there are two pale wing-bars. Have stubbier tails than warblers

Geographical Range

Breeds form Alaska east to Newfoundland, and south to southern California and New Mexico in West, and to Great Lakes region and northern New England in East. Winters from southern British Columbia and California across southern tier of sates to southern New England.

Habitat

Though Ruby-crowned Kinglets are most often found in spruce-fir forests in the northwestern United States and Canada, they also live in mixed woods, in isolated trees in meadows, in coniferous and deciduous forests, in mountain shrub habitat, or in floodplain forests of oak-pine, spruce or aspen.

Life History Data Time of Breeding: Spring Number of Eggs: 5-12 Broods per year: 1 Time of hatching: 12-14 days Time to independence: 16-18 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 6 years Food habits: Eats spiders and many different types of insects, such as ants and wasps. Eats small amounts of seeds and fruit.

Time in Texas: September-May

Family Turdidae

American Robin *Turdus migratorius*

Author: Jessica Harrison, Devin Phillips, Cameron Burrell

Description of Bird

- Length: 20-28 cm.
- Wingspan: 31-40 cm.
- Weight: 75-85 g

Large, round body, long legs, and fairly long tail. Gray-brown with warm orange underparts and dark heads. Underparts vary from deep, rich reddish maroon to gray-scalloped, peachy orange. White throats, black streaks. In flight, a white patch on the lower belly and under the tail is observable. Bill color yellow with variable, season-dependent, black tip. Males are generally darker, and females have paler heads that contrast less with the gray. Regional differences: Western populations are often paler than eastern populations and have almost no white at the tail corners. Breeding robins on the Canadian Atlantic coast are richly colored, with black on the upper back and neck.

Geographical Range

Native to Neartic region: frequent the lower 48, along the Sierra Madre in Mexico, and Southern Canada year-round. Winter in southern tips of the US, Mexico, and West Indies (rare). Summer reeding months are spent in Canada, Alaska, and various Northern states.

Habitat

lawns, fields, and city parks, as well as in more wild places like woodlands, forests, mountains up to near treeline, recently burned forests, and tundra. During winter many robins move to moist woods where berry-producing trees and shrubs are common



Photo: Jordan Brewer

Life History Data

Time of Breeding: April-July Number of Eggs: 3-5 Broods per year: 1-3 Time of hatching: 12-14 days Time to independence: 14-16 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 6 years

Food habits: large numbers of both invertebrates and fruit. Particularly in spring and summer they eat large numbers of earthworms as well as insects and some snails. (They have rarely been recorded eating shrews, small snakes, and aquatic insects.) Robins also eat an enormous variety of fruits, including chokecherries, hawthorn, dogwood, and sumac fruits, and juniper berries.

Time in Texas: year round



Photo: Jordan Bartlett

Eastern Bluebird Sialia sialis

Author: Travis W. Sammons

Description of Bird

Mass: 27-34 g

Length: 16-21 cm

Wingspan:

Small birds with short, slender beaks and short legs. Brightly colored, blue upper body, red breast, and white abdomen. Males have blue wings and tail feathers with black or gray shaft and tips. Heads are light blue that fade into the red throat. Females are similar, but they do have duller color and more gray

Geographical Range

Found east of the Rocky Mountains, spanning from southern Canada to the Gulf States and on into Mexico and Honduras

Habitat

Preferences: open fields and trees orchards, golf courses, and parks



Photo: Jordan Bartlett

Life History Data

Time of Breeding: spring-summer Number of Eggs: 3-7 Broods per year: 2 Time of hatching: 13-16 days Time to independence: 7-21 days Age to reproductive maturity: Males: 1 year Females: 1 year

Mating System: monogamous, may be polygynous

Life span: 6 years

Food habits: Beetles, crickets, caterpillars, grasshoppers, fruits and plants

blackberries, honeysuckle, dogwood, red cedar, wild grapes) **Time in Texas:** year round, migrates south during winter



Photo: Lacey Liles

Hermit Thrush Catharus gutatus

Author: Lynlea Hansen

Description of Bird Life History Data

Mass: 23-36 g

Length: 14-18 cm

Wingspan: 25-29 cm

Upper parts are a dull, russet-brown, and the chest has large spots of grayish brown. Has dull white eye-ring. Sides of head are a sooty color with narrow shaft streaks of dull white-sooty streak below cheeks on each side of throat.

Geographical Range

Breeds from central Alaska east to Newfoundland, and south to southern California, northern New Mexico, Wisconsin, and Virginia. Winters from Washington and southern New England southward. Occasionally heard in spring before birds head north to nest.

Habitat

Coniferous and mixed forests, swampy woods during migration and winter, deciduous woodlands and thickets

Life History Data

Time of Breeding: Spring Number of Eggs: 3-6 Broods per year: 1-2 Time of hatching: 11-13 days Time to independence: 10-15 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 10 years Food habits: In spring and summer the Hermit Thrush feeds mainly on insects, but in fall and winter it eats mainly wild fruits and berries. Time in Texas: October-May

Swainson's Thrush Catharus ustulatus

Townsend's Solitaire Myadestes townsendi

Veery Catharus fuscescens

Wood Thrush Hylocichla mustelina

Author: Katie R. Hood

Description of Bird

Mass: 40-59 g Length: 18 cm Wingspan: large forest thrush, just slightly smaller than an American Robin. Back brown, chest white with large dark spots. Both sexes look alike

Geographical Range

Eastern North America, Southern Canada

Habitat

cool mature, lowland, mixed or more typically, deciduous forests, damp woodlands with an abundance of saplings, often near swamps or water

Life History Data

Time of Breeding: Spring- summer Number of Eggs: 2-8 Broods per year: 2 Time of hatching: 13 days Time to independence: 33-43 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 8 years Food habits: insects, fruits, worms Time in Texas:

Order Passeriformes

Family Mimidae

Brown Thrasher Toxostoma ru<u>fum</u>

Author: John Jones, Taylor Weaver

Description of Bird

Mass: 61-90 g Length: 23-30 cm Wingspan: 29-32 cm Large long-tailed songbird. Upperparts bright rufous. Underparts white or buff, with block structing. Tail long and rufous. Two whitish winchars. Bill

buff. with black streaking. Tail long and rufous. Two whitish wingbars. Bill straight. Eyes yellow

Geographical Range

Brown thrashers are found from southeastern Canada through eastern, central, and southeastern United States. During the breeding season brown thrashers primarily inhabit areas of southern Canada south to east central Texas. Migration is over short distances and at night. In winter, these birds migrate from the northern parts of their range into the southern parts of their range.

Habitat

brushy open country, thickets, shelter belts, riparian areas, and suburbs. It winters in hedgerows, gardens, thickets, and brushy woodland edges.

Life History Data

Time of Breeding: Summer Number of Eggs: 3-5 Broods per year: 2-3 Time of hatching: 11-14 days Time to independence: 9-13 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 12 years Food habits: eat mainly insect, fruits, nuts, and occasionally lizards Time in Texas: year round



Photo: Troy A. Ladine

Gray Catbird Dumetella carolinensis

Author: Courtney Brinker

Description of Bird

Length: 21-24 cm Wingspan: 22-30 cm Mass: 23-56 g Medium-sized songbird. Small bill. Long tail. Uniform gray all over. Black cap. Undertail rufous. Eyes black. Legs and feet black. Bill black.

Geographical Range

Summer Range: Breeds across southern Canada, southward to northeastern Arizona, and eastward to northern Florida. Winter Range: Winters along East Coast from southern Massachusetts to Florida, and from the Gulf Coast southward into Central America and the Caribbean.

Habitat

Found in dense, shrubby habitats, such as abandoned farmland, fencerows, roadsides, streamsides, forest edges, and some residential areas

Life History Data

Time of Breeding: Summer Number of Eggs: 1-5 Broods per year: 2 Time of hatching: 14 days Time to independence: 10-15 days Age to reproductive maturity: Males: 1 year Females: 1 years Mating System: monogamous Life span: 2-4 years Food habits: insects and small fruits Time in Texas: summer

Northern Mockingbird Mimus polyglottos

Author: George Plumlee, Darius Roberts, Lisa Ebarb

Description of Bird

Mass: 47-51 g

Length: 21-25 cm

Wing span: 31-35 cm

Northern Mockingbirds are of medium size. They have a pale gray under with a darker gray body. Dark wings with white wing bars are present. They have long black beaks that have little to no curvature. Northern Mockingbirds also have long legs and long tails. Large patches of white on the wings are very noticeable during flight. Females are slightly smaller in size and usually have darker tail feathers. Juveniles look much like adults but usually have brownish spots on the underbody.

Geographical Range

They can be found throughout North America, including Canada & Mexico, however, they are most common in the southern U.S., especially Texas.

Habitat

They prefer residential areas, farmlands, along roads, city parks, open grassy areas with thickets and brushy deserts



Photo: Shana Midgely

Life History Data

Time of Breeding: March-August Number of Eggs: 2-6 Broods per year: common 2, but up to 4 Time of hatching: 11-14 days Time to independence: 10-15 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 8 years Food habits: insects in summer, fruit in fall and winter Time in Texas: year round



Photo: Lacy Liles

Order Passeriformes

Family Sturnidae

European Starling Sturnis vulgaris

Author: Sulam Peña

Description of Bird

Mass: 70-100 g

Length: 21.50 cm

Both males and females have similar iridescent green glossed feathers covering the back, nape, and breast. Both sexes also share similarities in leg color, iris color and in the seasonal changes in bill color (yellow during mating season, otherwise black). Males have elongated feathers over the breast, whereas females have short and petite plumes. Males sport a bluish spot at the base of their beaks, while the female displays a reddish pink speck. In juvenile birds, the fine gloss is not as noticeable as in the adults.

Geographical Range

Dispersed mainly over its natural Palearctic region (from Central Siberia in the east and the Azores in the west to Norway in the north and the Mediterranean in the south), starlings were introduced to North America in 1890. The European Starling is found today sprawled from the Atlantic to the Pacific (east to west) and from Southern Canada to Northern Mexico

Habitat

Starlings typically live around people, using mowed lawns, city streets, and agricultural fields for feeding and trees, buildings, and other structures for nesting. Their main requirements are open, grassy areas in which to forage, a water source, and trees or buildings that contain suitable cavities or niches for nesting. They avoid large, unbroken stretches of forest, chaparral, and desert. Starlings too plunder on other birds' nests and use them as their own.

Life History Data

Time of Breeding: March-June Number of Eggs: 4-7 Broods per year: 3 Time of hatching: 15 days Time to independence: 25-27 days Age to reproductive maturity:

Males: 1 year

Females: 1 year

Mating System: monogamous

Life span: 15 years

Food habits: seeds, insects, vertebrates, invertebrates, plants, and fruits. The most common animals eaten by the starling are centipedes, spiders, moths, earthworms. The most popular plants are berries, seeds, apples,

pears, plums, and cherries

Time in Texas: year round



Photo: Rileigh Welch

Order Passeriformes

Family Bombycillidae

Cedar Waxwing Bombycilla cedrorum

Author: TaylorWeaver

Description of Bird

Length: 14-17 cm,

Wingspan: 22-30 cm,

Mass: 32 g

Grayish-brown plumage with pale yellow on the breast and belly. The secondary wing feathers are tipped with red wax-like droplets, and the tail is square with a bright yellow band at the tip. Cedar waxwings have a crest and a black mask edged with white.

Geographical Range

breeding range extends throughout the southern half of Canada and the northern half of the United States. The winter range includes the United States, Mexico and Central America as far south as Panama. They also winter in the Caribbean region. Many birds in the northern United States and extreme southern Canada are year-round residents

Habitat

nest in open woodlands (deciduous, coniferous and mixed) or oldfield habitats. They prefer habitats with numerous small trees and shrubs for nesting and food. They frequently inhabit riparian areas, which provide nesting shrubs and trees, fruits and emerging aquatic insects, but also use farms, orchards, conifer plantations, and suburban gardens

Life History Data

Time of Breeding: June-August Number of Eggs: 2-5 Broods per year: 1-2 Time of hatching: 11-13 days Time to independence: 17-23 days Age to reproductive maturity:

Males: 1 year

Females: 1 year

Mating System: monogamous

Life span: 7 years

Food habits: Feed mainly on fruits year round, such as serviceberries, strawberries, mulberries, raspberries, and cedar berries. In the summer they will also feed on insects, such as mayflies and dragonflies, often congregating around ponds to catch the insects in the air.

Time in Texas: winter



Photo: Troy A. Ladine

Order Passeriformes

Family Calcariidae

Smith's Longspur Calcarius pictus

Order Passeriformes

Family Parulidae

American Redstart Setpohaga ruticilla

Author: Pete Fitzsimmons

Description of Bird

Length: 11-13 cm Wingspan: 16-19 cm Mass: 6-10 g Male is black with orange patches on side of chest, in wings, and tail. Females have grey head and back and yellow Instead of orange patches.

Geographical Range

Typically breeds in Canada, as well as through the Central and Northeast part of United States. They Migrate south to the tip of South America

Habitat

Moist second growth deciduous forest, with abundant shrubs.

Life History Data

Time of Breeding: Number of Eggs: Broods per year: Time of hatching: Time to independence: Age to reproductive maturity: Males: Females: Mating System: Life span: Food habits: insects and some small fruit Time in Texas:

Bay-breasted Warbler Stephaga castanea

Author: Reece McConnell

Description of Bird

Mass: 12.5 g

Length: 14 cm

Wingspan:

Male has chestnut cap, throat, and sides blackish face, pale patch on the side of the neck. Females are like males. Young warblers have 2 white wing bars with dark legs and a rust color on flanks.

Geographical Range

Adults appear to migrate west of the Appalachians, while immatures may follow more easterly. Few are encountered in the southern United States.

Habitat

Mature, low elevation, dense, boreal spruce-fir forests near water.

Life History Data

Time of Breeding: March-May Number of Eggs: 3-7 Broods per year: 1 Time of hatching: 12-13 days Time to independence: 10-11 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous for life Life span: Food habits: Forages in and out along branches, mostly at mid-level trees. Rarely catches flying insects in the air. They eat small insects. Time in Texas: Very uncommon, only in the east part of Texas during the winter

Black-and-white Warbler Mniotilta varia

Author: Sheridan A. Beeman, Genea Shoulders

Description of Bird

Length: 13 cm

Wingspan: 19 cm

Mass: 10 g

Female . striped on crown and upper body, moderate contrast between cheeks, chin, and chin has whitish or gray color, upperpart mostly white with gray streaks.

Male . strong white between stripes on head and upperparts, two white wingbars, white eye, gray streaks.

Geographical Range

Eastern U.S. and most of Canada

Habitat

Deciduous and mixed forests, winter disturbed areas to mature forests

Life History Data

Time of Breeding: Late spring and summer. Number of Eggs: 4-6 Broods per year: 1-2 Time of hatching: 10 days Time to independence: Age to reproductive maturity: Males: 1 years Females: 1 years Females: 1 years Mating System: monogamous Life span: 11 years Food habits: caterpillars, adult insects and spiders Time in Texas: Mar-Oct

Black-throated Blue Warbler Setophaga caerulescens

Author: Jacob Stone

Description of Bird

Mass:

Length:

Male: Back, tail, and top of head blue-gray. Face and throat black. Black extending in line down sides to flanks. White below. Base of primaries white, showing as a large white patch in flight, but a small white spot near the edge of the wing when folded. Outer tail feathers with large white spots and black tips. Female: Tail, wings, back, and head grayish olive-green. Yellowish to cream white stripe above eye. Darkish spot in front of eye extending to ear feathers. Lower eyelid white. Underside whitish to yellowish. White spot at base of primaries. Indistinct pale spot on outer tail feathers

Geographical Range

A bird of the deep forest, the Black-throated Blue Warbler breeds in the northeastern United States and southeastern Canada. On migration to its Caribbean wintering grounds it can be seen in a variety of habitats, including parks and gardens.

Habitat

Breeds in mature deciduous and mixed coniferous-deciduous woodlands with a thick understory, often in hilly or mountainous terrain. Winters in dense tropical forests. On migration, found in variety of habitats, including forest, forest edges, parks, and gardens.

Life History Data

Time of Breeding: late summer Number of Eggs: up to 4 Broods per year: Time of hatching: Time to independence: 14-21 days Age to reproductive maturity: Males: during 1st year Females: 1 year Mating System: monogamous Life span: 10 years Food habits: insects and some small fruit Time in Texas: migration

Blackburnian Warbler Setophaga fusca

Author: Jacob Stone

Description of Bird

Length:

Mass:

Male: Throat and upper breast deep orange. Sides of neck, eye stripe, line on fore crown, and eye arc Yellow-orange. Face patch, crown, and back black. Lower breast yellowish with black streaks on Sides. Belly white or yellowish. Wings black with broad white wing bars that run together into a white Patch. Back black with two creamy white lines. Tail black with large white patches in outer tail feathers.

Female: Throat, upper breast, eye stripe, fore crown stripe, and sides of neck orange yellow. Crown, Face patch, and flank streaks greenish gray. Back gray with dark and light streaking. Two broad white wing bars.

Geographical Range

They breed in eastern North America, from southern Canada, westwards to the southern Canadian Prairies the Great Lakes region and New England, to North Carolina. Blackburnian Warblers are migratory, wintering in southern Central America and in South America and are very rare vagrants to western Europe.

Habitat

Breeds in mature coniferous and mixed coniferous/deciduous forests. Winters in montane forests.

Life History Data

Time of Breeding: April-May Number of Eggs: 3-5 Broods per year: 1 Time of hatching: 12-13 days Time to independence: 3 weeks Age to reproductive maturity: Males: 2 years Females: 1 year Mating System: monogamous Life span: 8 years Food habits: insects and spiders Time in Texas:

Blackpoll Warbler Setophaga striata

Author: Hannah Word

Description of Bird

Mass: 9.7 to 21 g Length: 12.5 to 15 cm

Wingspan: 20 to 25 cm

Medium-sized warbler with black- streaked, gray upper parts, white under parts, and black-white sides. Head has black cap and prominent white cheek patch. Bill is black. Wings are dark with two white bars. Bright orange, pink legs and feet. They have a swift, direct flight with rapidly beating wings. Female Blackpolls look similar in body plumage to males, but lack the distinctive head pattern.

Geographical Range

Breeds in northern North America, from Alaska, through most of Canada, and into the Great Lakes region and New England. They are a common migrant through much of North America move down to northwestern South America in the winter.

Habitat

Preferred breeding habitat is coniferous forests during migration found mainly in tall trees

Life History Data

Time of Breeding: Spring and Summer Number of Eggs: 3-5 Broods per year: 1-2 Time of hatching: 12-13 days Time to independence: 2-3 weeks Age to reproductive maturity: Males: 1 years Females: 1 year Mating System: monogamous Life span: 7-8 years Food habits: insects such as aphids, beetles, mosquitoes, ants, wasps, gnats and spiders Time in Texas:

Blue-winged Warbler Vermivora cyanoptera

Canada Warbler Cardellina canadensis

Author: Merideth Runion

Description of Bird

Mass: 9-13 grams

Length: 12-15 cm

Yellow underparts, blue-gray upperparts, yellow eye-ring and thin pointed bill. Adult males have black forehead and black necklace, females have faint grey necklace

Geographical Range

Across Canada east of the Rockies and eastern United States; Migrate to northern South America

Habitat

Hardwood forests, usually near water

Life History Data

Time of Breeding: May-June Number of Eggs: 3-5 Broods per year: 1 Time of hatching: 12 days Time to independence: 22-26 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 8-10 years Food habits: insects in flight and spiders Time in Texas: summer breeding season

Cerulean Warbler Setophaga cerulea

Author: Weston Godsey

Description of Bird

Mass: 8-10 g

Length: 11 cm

Wingspan: 20 cm

Male: Deep cerulean blue above. White throat and underparts. Blue streaking down sides of breast. Dark band across throat. Black stripe into eye, creating a blue eye stripe above. Faint black streaks on back. Female: Bluish-green above. White washed with yellow below. White or yellowish line over eye. Dusky streaking down sides of breast, two white wing bars and back unstreaked.

Geographical Range

The breeding range of the cerulean warbler extends from Quebec and Ontario, Canada, south to northern Texas, Louisiana, Mississippi, Alabama and Georgia in the USA. The cerulean warbler migrates south for winter where it can be found in Colombia and Venezuela, south to eastern Peru and northern Bolivia

Habitat

During the breeding season the Cerulean Warbler inhabits mature deciduous forest, generally with open understory, between 30-1,000 meters above sea level. Over winter, the cerulean warbler can be found in broad-leaf evergreen forests and woodland on the east slopes of the Andes and in the montane forests of Venezuela, at elevations of about 500-1,500 meters.

Life History Data

Time of Breeding: Mid-May to July Number of Eggs: 3-5 Broods per year: 1 Time of hatching: 11-13 days Time to independence: 10-11 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 5 years Food habits: insects, with some plant material taken in winter. Time in Texas: May-August

Chestnut-sided Warbler Setophaga pensylvanica

Author: Stacy M. Purser

Description of Bird

Mass: 9.6 g

Length: 10.8 -12.7 cm.

Both male and female have distinct chestnut sides in spring: immature females are without chestnut Females can be identified by their bright, unstreaked green back, yellow wing bars, white underparts and narrow wing eye. Male has a black and yellow striped back with a black tail and white under parts with the chestnut sides year round. Nearly always holds tail raised at an angle strikingly different seasonal plumage, the male lacks a lot of its black plumage during the winter season.

Geographical Range

Spring to summer: northern hardwood and mixed forests of southern Canada and northeastern United States. Winter: Central America

Habitat

common in deciduous brush as well as orchards and along roadsides

Life History Data

Time of Breeding: Spring, early summer Number of Eggs: 3-5 Broods per year: 1 Time of hatching: 11-12 days Time to independence: 30 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 7 years Food habits: Almost exclusively insects and other arthropods: gleans from bottoms of leaves Occasionally fruit during the winter Time in Texas: spring and fall migration

Common Yellowthroat Geothlypis trichas

Connecticut Warbler Oporornis agilis

Hooded Warbler Setophaga citrina

Magnolia Warbler Setophaga magnolia

Author: Luke Philips

Description of Bird

Mass: 6-15 g Length: 11-13 cm

Wing span: 6-15 cm

Black tipped tail with large white spots forming a band. Belly is mostly yellow with black streaks along the breast. Male: black head Female: gray head with more dull colors than male

Geographical Range

During their breeding season, magnolia warblers can be found throughout the central and southern parts of Canada along with some northern states in the US. Winter migration takes the birds into Mexico and Panama along with some southwestern regions of the US.

Habitat

Found mostly in damp coniferous forests with trees such as pine, red maple, spruce, hemlocks, and balsam firs

Life History Data

Time of Breeding: Spring-Summer Number of Eggs: 3-5 Broods per year: 1 Time of hatching: 11-13 days Time to independence: 8-10 days Age to reproductive maturity: Males: **Females:** Mating System: monogamous Life span: 7 years Food habits: mostly insects, occasionally berries **Time in Texas:**

Mourning Warbler Geothlypis philadelphia

Nashville Warbler Oreothlypis ruficapilla

Northern Parula Setophaga americana



Photo: Talton Cooper

Ovenbird Seiurus aurocapilla

Pine Warbler Setophaga pinus

Author: Genea Shoulders

Description of Bird

Mass: 12 g Length: 14 cm Wing span: 22 cm Male . Brownish upper body, bright yellow throat, dark streaks on sides, two

white wing-bars, and legs are blackish, with eyes being small and black. Female . Brownish tinged upper body, yellow throat and dark streaks on sides, two white wing-bars, and legs are blackish, with eyes being small and black.

Geographical Range

Southern United States

Habitat

Pine Forest or open pine woods in Eastern North America

Life History Data

Time of Breeding: mid March-early June Number of Eggs: 3-5 Broods per year: 1 Time of hatching: 10 days Time to independence: 21-35 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 5 years Food habits: primarily arthropods, some fruits and seeds. Time in Texas:



Photo: Troy A. Ladine

Prothonotary Warbler Protonotaria citrea

Author: Katy Little

Description of Bird

Mass: 16 g

Length: 12-14 cm

Wing span:

Males have a brilliant orange, yellow head and blue-grey wings. Very bright yellow on head, with thin, pointed, long bill and mostly white undertail. Eyes black to black-greenish. Wings grey without wingbars with white spots in tail

Geographical Range

Ranges from southern Minnesota and southern Ontario southward to central Texas and around Florida in summer. Winters in Central America and northern South America

Habitat

wooded swamps or lowland deciduous forest with ponds or other standing water. Flooded bottomland hardwood forests, cypress swamps Winters in mangrove swamps and coastal tropical forests

Life History Data

Time of Breeding: Spring-early Summer Number of Eggs: 3-8 Broods per year: 2 Time of hatching: 12-14 days Time to independence: 18 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: mostly monogamous Life span: 2-3 years Food habits: Insects such as caterpillars, flies, midges, spiders, mayflies. Snails When wintering: Seeds, Fruit, Nectar Time in Texas: Spring and early summer, leave for winter grounds in late July

Swainson's Warbler Limnothlypis swainsonii

Tennessee Warbler Oreothlypis peregrina

Townsend's Warbler Setophaga townsendi

Wilson's Warbler Cardellina pusilla

Worm-eating Warbler *Helmitheros vermivorum*

Yellow-breasted Chat Ictera virens

Yellow-throated Warbler Setophaga dominica

Author: Kolby Sharp

Description of Bird

Mass: 0.33 oz Length: 5.5 inches

Wingspan: 8 inches

Small sized black and white warbler with a bright yellow throat. Has a black mask, and white on sides on the neck and usually has yellow lores and yellow chin. Gray unstreaked upper parts. Both males and females are alike.

Geographical Range

In the winter they are mostly found from the Gulf Coast states southward. They breed from Illinois, Ohio, and New Jersey south to Missouri, Texas, Gulf Coast, and Northern Florida.

Habitat

Common in forests of pine, cypress, sycamore, and oak, in both swampy places and dry uplands.

Life History Data

Time of Breeding: Spring Number of Eggs: 4 purple-spotted greenish eggs Broods per year: 2 Time of hatching: 12 days Time to independence: 10 days after hatching Age to reproductive maturity: Males: 1 year Females: 1-2 years Mating System: monogamous Life span: Oldest recorded at 6 years old Food habits: Small insects and their larvae Time in Texas: Summer through Winter

Yellow Warbler Setophaga petechia

Author: Shane Kelehan, TravisW. Sammons

Description of Bird

Mass: 7-25 g Length: 10-18 cm Wing Span: 19-21 cm Plump, short-tailed yellow overall, dark eye prominent reddish streaks below are distinct in male and faint in female

Geographical Range

Found in much of North America Alaska, northern Canada, and the northern 2/3 of the United States

Habitat

Favors wet habitats especially with willow trees present and abundance of insects. Also inhabits open woodlands, gardens, and orchards

Life History Data

Time of Breeding: May-June Number of Eggs: 1-7 Broods per year: 1, will breed a second time if first attempt fails Time of hatching: 10-13 days Time to independence: 30-46 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 10 years Food habits: insects and other arthropods, occasionally fruit Time in Texas: summer

Yellow-rumped Warbler Setophaga

Author: Mcentry Dunbar

Description of Bird

Mass: 9-12 g Length: 10-18 cm Wingspan: It is blue and has yellow on its throat, crown, rump and sides. Black and white wings and tails with black eyes.

Geographical Range

They can be found in North and South America from Canada to Peru

Habitat

They live in the coniferous forests, mixed woodlands, and deciduous forests during the summer and brushy thickets of bayberry and wax myrtle during the winter.

Life History Data

Time of Breeding: mid spring Number of Eggs: 4-5 Broods per year: 2 Time of hatching: 12-13 days Time to independence: 13-19 days Age to reproductive maturity: Males: 1-2 years Females: 1-2 years Mating System: monogamous Life span: 7 years Food habits: insects in summer, berries in winter Time in Texas:

Order Passeriformes

Family Thraupidae

Scarlet Tanager *Piranga olivacea*

Author: Alyssa Edwards

Description of Bird

Mass: 28 g

Length: 18 cm

The Scarlet Tanager males are distinctive being a bright red bird all over with black wings and tail. The females have an olive green to yellow body, brightest on throat and under tail. They also have brownish olive wings and tail edged green.

Geographical Range

The Scarlet Tanager is found in the eastern U.S. and northern South America.

Habitat

Found in the woodlands, mature forests, and suburban areas with large trees and in the winter are found in evergreen forests.

Life History Data

Time of Breeding: May-August Number of Eggs: 1-6 Broods per year: 1 Time of hatching: 13-14 days Time to independence: 14-28 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 5 years Food habits: Feeds on insects, larvae from leaves, spiders, earthworms, and fruits Time in Texas:

Summer Tanager Piranga rubra

Author: Courtney Brinker, Austin Dicks

Description of Bird

Mass: 30 g

Length: 17 cm

Wingspan:

Male: Entirely bright red. Wings slightly darker or more gray, especially in winter

Female: Upperparts plain yellowish olive green. Brighter yellow on crown and rump. Under parts dull yellow, with olive green wash on sides. Wing feathers grayish brown with yellow edge

Geographical Range

Across the southern United States, extending as far north as Iowa. These birds migrate to Mexico, Central America and northern South America. This tanager is an extremely rare vagrant to Western Europe.

Habitat

Their breeding habitat is open wooded areas, especially with oaks across the southern United States. They build a cup nest on a horizontal tree branch.

Life History Data

Time of Breeding: Summer Number of Eggs: 3 -4 Broods per year: 2-3 Time of hatching: 12-13 days Time to independence: 20-30 days Age to reproductive maturity: Males: 1 years Females: 1 years Females: 1 years Mating System: monogamous Life span: 5 years Food habits: Insects, especially bees and wasps, fruit outside of breeding season Time in Texas: summer



Photo: Skylar Williams

Western Tanager Piranga ludoviciana

Author: Kolby Sharp

Description of Bird

Mass: 28 g

Length: 19 cm

Wing span: 30 cm

The adult breeding male has a bright red head while a nonbreeding male has only a slight red color surrounding their black beaks. The adult females have yellow-green above and yellow below. Both sexes have similar wing bars, black wings with white bars.

Geographical Range

Breeds from southern Alaska and Mackenzie southward. Winters in tropics

Habitat

Common in both coniferous and deciduous forests.

Life History Data

Time of Breeding: Spring **Number of Eggs:** 3-5 speckled bluish-green eggs Broods per year: 1 Time of hatching: 13 days Time to independence: 11-15 days Age to reproductive maturity: Males: 1-3 years Females: 1-3 years Mating System: Male and female stay together. Male will feed his female while she is sitting on the nest and are almost always together when she is not sitting on the nest

Life span:

Food habits: Eat mostly insects during breeding season, Fruit during fall and winter

Time in Texas: Migration



Photo: Troy A. Ladine

Order Passeriformes

Family Emberizidae

Chipping Sparrow Spizella passerina

Author: Travis Jones

Description of Bird

Mass: 12 g

Length: 14 cm

This is a small bird with a long, thin tail. It has an unstreaked whitish underside, distinct dark eyeline extending to bill, and usually grayish rump

Geographical Range

common and widespread throughout most of North America, except for the far northeastern portion of Canada. This bird breeds from very eastern Alaska through Canada, southward to southern United States and into Mexico and Central America. Absent from southern Great Plains and Florida.

Habitat

Breed in open woodlands with grass, along river and lake shorelines, orchards, farms, and in urban and suburban parks. They typically spend winter in similar areas



Photo: Nicholas Hanson

Life History Data

Time of Breeding: summer or rainy seasons Number of Eggs: 2-7 Broods per year: 1, at times 2 Time of hatching: 10-15 days Time to independence: 21-35 days Age to reproductive maturity: Males: 1 year

Females: 1 year

Mating System: monogamous

Life span: 2-5 years

Food habits: seeds during the winter and insects during the summer. Their choice of prey usually consists of whatever insects are most common and easiest to catch. They forage by scratching at the ground looking for insects and seeds, pulling them off of vegetation, picking them off the ground, or gleaning insects from vegetation.

Time in Texas:

Clay-colored Sparrow Spizella pallida

Author: Kolby Sharp

Description of Bird

Mass: 12 g

Length: 14 cm

Wing span: 19 cm

Small sparrow similar to the Chipping Sparrow but is brighter with rump brownish buff and buff cheek patch bordered above and below with black. Has streaked crown and buffy upperparts and clear gray breasts.

Geographical Range

Winters in southern Texas. Breeds from north-central Canada to Colorado and Michigan.

Habitat

Brushy grasslands and prairies

Life History Data

Time of Breeding: Spring Number of Eggs: 3-5 pale blue eggs, spotted with dark brown Broods per year: 1-2 Time of hatching: 10-14 days Time to independence: 7-9 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: Males are territorial and will remain in the same area for years, while females choose a different breeding area each season Life span: Oldest known is 6 years, 11 months Food habits: Seeds and leaf buds of various grasses, forbs, and shrubs. Insects Time in Texas: Migration period and Winter

Dark-eyed Junco Junco hyemalis



Photo: Troy A. Ladine

Eastern Towhee *Pipila erythrophthalmus*

Author: Grant Massey

Description of Bird

Mass: 40 g

Length: 22 cm

Sexes similar: Female slightly larger than male. Male with black head back and wings while female is brown. Conical bill, rusty sides, white underbelly, white primary bases

Geographical Range

Eastern United States

Habitat

Ground low nesting, scrub

Life History Data

Time of Breeding: midApril-August Number of Eggs: 2 -6 Broods per year: 2-3 Time of hatching: 12-13 days Time to independence: 4-6 weeks Age to reproductive maturity: Males: 14 months Females: 14 months Mating System: monogamous Life span: 4-6 years Food habits: seeds, fruits, nuts, small insects and spiders Time in Texas: east during winter, rare elsewhere

Lark Sparrow Chondestes grammacus

Author: Merideth Runion

Description of Bird

Mass: 24-33 grams Length: 15-17 cm Male slightly larger; Dark-streaked brown back and white underpants with a dark central spot. The cheeks and crown sides are chestnut with white eyebrow and crown stripes

Geographical Range

Distributed throughout North America

Habitat

Grasslands with scattered bushes and trees; open country generally in winter

Life History Data Time of breeding: Summer Number of eggs: 3-6 Broods per year: 1 Time to hatching: 11-12 days Time to fledging: 9-10 days Time to independence: Age at reproductive maturity Males:1 year (average) Females: 1 year (average) Mating system: Monogamous Life span: 10 years Food Habits: Mainly seeds, sometimes insects Time in Texas: Year round



Photo: Chelsea Parrott

Savannah Sparrow Passerculus sandwichensis

Song Sparrow Melospiza melodia

Author: Samual Buzzard, Leslie Fletcher, Reggie Patrick

Description of Bird

Mass: 14-49.6 g Length: 12.7-17.8 cm Wingspan: 17.8-22.9 cm

The Song Sparrow is small and rounded. They are mainly brown on their backs and white underneath. Underneath the bird it has a few brown streaks with a spot in the middle of the chest. There are two thick brown stripes on each side of the neck with grayish white eyebrows. The song sparrow also has a long rounded tail. Both female and male species look alike

Geographical Range

The Song sparrow is found in all parts of the U.S., northern Mexico, and up into Canada. It is found in Central to South eastern U.S. down into Mexico during the winter months, north central to southern Canada during the summer and all of western and northeastern U.S. all year round

Habitat

The preferred habitats of the Song sparrow include forest edges, somewhat clear and also dense forests, and marshes. They are also found in open grasses for feeding and in parks that are heavily wooded around them. Most of the time, they are found in shrubs or low grasses

Life History Data

Time of Breeding: February-May Number of Eggs: 2-6 Broods per year: 3 Time of hatching: 12-14 days Time to independence: 33-40 days Age to reproductive maturity: Males: 1 years Females: 1 years Females: 1 years Mating System: monogamous Life span: 1 years Food habits: Fish (Marine and Freshwater), Crustaceans (crabs, crawfish, shrimp), Earthworms, Snakes and Lizards Time in Texas: winters through the U.S. to the Gulf coast

Vesper Sparrow Pooecetes gramineus

White-crowned Sparrow Zonotrichia leucophrys

White-throated Sparrow Zonotrichia albicollis



Photo: Ashley Ayers

Order Passeriformes

Family Cardinalidae

Blue Grosbeak Passerina caerulea

Author: Cortney Brinker

Description of Bird

Mass: 26-31 g

Length: 15-16 cm

Wingspan: 38 cm

Large silver-gray bill. Male deep blue with two brown wingbars. Female mostly brown with two brown wingbars.

Geographical Range

Summer: Breeds from central California across the central United States, as far northward as southern North Dakota, to northern New Jersey. Generally does not breed along Gulf Coast. Also breeds throughout Mexico and Central America. Winter: from Mexico to Panama. Also recorded in winter in South America

Habitat

Forest edge, fields, powerline cuts, riparian areas, hedgerows, and other areas with medium-sized trees and low shrub density.

Life History Data

Time of Breeding: Summer Number of Eggs: 2-5 Broods per year: 2 Time of hatching: 12-14 days Time to independence: 10-15 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 6-8 years Food habits: insects, and other invertebrates, and seeds. Gathers in rice fields during migration Time in Texas: summer



Photo: Anhre Gray

Dickcissel Spiza americana

Author: Kyle Nicholson

Description of Bird

Length: 14-16 cm

Wingspan: 25 cm

Mass: 23-28 g

Adult Dickcissels are small songbirds with a stout, pointed bill. Has Rusty patch on shoulders with a yellow or yellowish chest. A breeding male has large black "V" on yellow chest. Male Dickcissels are more vibrantly colored than the female Dickcissel

Geographical Range

Breeds from eastern Montana to the Great Lakes through the Mississippi River Valley south through Texas and the Gulf Coast. They spend the winter in the Tropics form southern Mexico south.

Habitat

Dickcissels prefer open country in grain or hay fields with and/or weed patches

Life History Data

Time of Breeding: In Texas, breeding takes place in the third week of May. Time is later the further North the Dickcissels have to fly: in Oklahoma, first week of Jun, Kansas, third week of Jun, Wisconsin, fourth week of Jun.

Number of Eggs: 3-5

Broods per year: 1, possibly 2

Time of hatching: 12-13 days

Time to independence: 8-10 days

Age to reproductive maturity:

Males: 1 years

Females: 1 year

Mating System: polygamous

Life span: 4-5 years

Food habits: Seeds, grass, and insects, the younger birds eat more insects. They readily eat Safflower, Apple Slices, Suet, Millet, Peanut Kernels, and Fruit.

Time in Texas: summer

Indigo Bunting Passerina cyanea

Author: Kathleen Santanello

Description of Bird

Length: 11.5-13 cm Wingspan: Mass: 12-18 g Males are bright blue with a slightly darker head than rest of body. Females are brown with a slight bit of blue on the tail

Geographical Range

Indigo buntings breed throughout eastern North America from the Great Plains eastward, south of the coniferous forest region. There are also some breeding populations in the western United States, including Utah, Arizona, California. Indigo buntings winter in the coastal regions of Mexico, Central America, northern South America, and the Caribbean.

Habitat

brushy and weedy habitats along the edges of farmed land, woods, road, power lines, railways, and riparian habitats

Life History Data

Time of Breeding: early Spring-winter Number of Eggs: 3-6 Broods per year: 1-2 Time of hatching: 11-14 days Time to independence: 18-21 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 8-10 years Food habits: During the breeding season, indigo buntings eat small spiders and insects, seeds of grasses and herbs, and berries. Major food items taken include caternillars grasshoppers bugs beetles seeds and berries

taken include caterpillars, grasshoppers, bugs, beetles, seeds and berries. In winter, indigo buntings eat small seeds, buds, and some insects. Their main food in winter is small seeds of grasses. They also frequent feeders, and eat the seeds of rice in rice fields.

Time in Texas: summer, winter in extreme southeast



Photo: Anhre Gray

Northern Cardinal *Cardinalis cardinalis*

Author: Marrisa Dawkins, Devin Phillips, Sulam Peña, Jeremy Alexander

Description of Bird

Mass: 42-48 g

Length: 21-23 cm

Wing span: 25-31 cm

The Northern Cardinal is a fairly large, long-tailed finch with a short, very thick bill and a prominent crest. Cardinals often sit with a hunched over posture and with the tail pointed straight down. Male cardinals are brilliant red all over, with a reddish bill and black face immediately around the bill. Females are pale brown overall with warm reddish tinges in the wings, tail, and crest. They have the same black face and red orange bill.

Geographical Range

They are found throughout eastern and central North America from southern Canada into parts of Mexico and Central America

Habitat

dense shrubby areas such as forest edges, overgrown fields, hedgerows, backyards, marshy thickets, mesquite, regrowing forest, and ornamental landscaping. Cardinals nest in dense foliage and look for conspicuous, fairly high perches for singing



Photo: Kenneth Anding

Life History Data

Time of Breeding: early Spring-Summer Number of Eggs: 3-4 **Broods per year: 2-5** Time of hatching: 12-13 days Time to independence: 25-56 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous, occasional polygyny Life span: 16 years Food habits: Northern Cardinals eat mainly seeds and fruit, supplementing these with insects (and feeding nestlings mostly insects). Common fruits and seeds include dogwood, wild grape, buckwheat, grasses, sedges, mulberry, hackberry, blackberry, sumac, tuliptree, and corn. Also eat beetles, crickets, katydids, leafhoppers, cicadas, flies, centipedes, spiders, butterflies, and moths.

Time in Texas: year round



Photo: Dylan Benge

Painted Bunting Passerina ciris

Author: Luke Phillips

Description of Bird

Mass:

Length:

Wing span:

Male: dark blue head, red eye ring, yellow-green back, ducky flight feathers, other wing feathers are dull blue, red belly Female: dull green, pale yellowish belly

Geographical Range

Breeding: SE United States, NE Mexico Winter: Florida, Bahamas, Cuba, Costa Rica, W. Panama

Habitat

Found in thickets & shrubby areas, edge of woods, overgrown fields

Life History Data

Time of Breeding: March-August Number of Eggs: 3-5 Broods per year: 2 Time of hatching: 11-12 days Time to independence: 8-9 days Age to reproductive maturity: Males: 2-3 years Females: 2 years Mating System: monogamous Life span: 12 years Food habits: seeds Time in Texas:

Pine Grosbeak Pinicola enucleator

Author: Reece McConnell

Description of Bird

Mass: 56.7 g

Length: 23 cm

Wingspan:

Males are mostly red with gray underparts, black wings, and white wingbars. Females are mostly gray with some yellow on the head and back. Wings are black with white wingbars. Both have black tails and bills are short.

Geographical Range

Northern part of America and in Canada. They are also found in the western part of the United States.

Habitat

Conifers and some other trees. In the winter, they are often found in deciduous trees, especially fruiting trees.

Life History Data

Time of Breeding: Spring Number of Eggs: 2-5 Broods per year: 1 Time of hatching: 13-14 days Time to independence: 15 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous for life Life span: Food habits: Seeds, fruit, buds, berries, and some insects make up the majority of their diet. Time in Texas: rare

Rose-breasted Grosbeak *Pheucticus ludovicianus*

Author: Luke Philips

Description of Bird

Mass:

Length: 19 O 22 cm Male: black head, wings, back, and tail, bright rose red patch on breast, wings have 2 white patches with rose red linings, underside is white Female: dark grey upper parts/darker wings and tail, white super cilium buff strip on head, black streaked belly

Geographical Range

Relatively common throughout much of eastern and central N. America. Migrate to Central America

Habitat

Open deciduous forests across Canada and NE United States

Life History Data Time of Breeding: May-July Number of Eggs: 1-5 Broods per year: 1-2 Time of hatching: 13-14 days Time to independence: 21 days Age to reproductive maturity: Males: 1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 9 years Food habits: forages in shrubs/trees for insects, seeds, and berries while also catching insects in flight and occasionally eats nectar Time in Texas:

Order Passeriformes

Family Icteridae

Baltimore Oriole Icterus galbula

Author: JanaeWineland, George Plumlee, Pete Fitzsimmons

Description of Bird

Mass:

Length: 17-20 cm

There is sexual dimorphism in plumage and in size males are 1-5% larger than females in a variety of measurements.

Adult males have a black head, bill, and back, and a bright orange breast, rump, and underparts.

Adult females are paler than males, olive-brown to orange. Their wings are brown with white wing bars, and the bill is gray.

Geographical Range

Baltimore Orioles spend summer in the Eastern portion of the United States and spend winter in northern Mexico and the southern coast of the United States.

Habitat

Prefers open wooded areas. They are very adaptable to urban parks and residential areas. During winter in Mexico they are found in flowering canopy trees. Life History Data Time of Breeding: May-June Number of Eggs: 3 -7 Broods per year: 1 Time of hatching: 11-14 days Time to independence: 11-14 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: usually monogamous but polygamous known Life span: 11 years Food habits: primarily caterpillars, including many pest species. They also eat other insects, some small fruits, and nectar. They are an important predator of the nuisance forest tent caterpillar, which it eats in both its larval and pupal forms

Time in Texas:

Bobolink Doliochonyx oryzivorus

Author: Kristopher Carroll

Description of Bird

Length: 11-12 cm

Wingspan: 27 cm

Mass: 28-56 g

Description: Medium-sized songbird. Short, pointed tail. Short conical bill Male: Face, chest, belly, tail, and wings black. Shoulders, lower back, and rump white to pale gray. Straw-colored back of head. Bill glossy black. Female: Underparts yellowish buff. Black streaks on sides, back, and under tail. Black stripe behind eyes and on top of head

Geographical Range

South America, Colombia and Venezuela, Florida peninsula to Texas and Louisiana.

Habitat

tall-grass prairies, hay fields, and similar open areas, irrigated hay fields and other agricultural crops. During migration they can be found in freshwater marshes, especially rice fields, and at coastal areas.

Life History Data

Time of Breeding: May-June
Number of Eggs: 1-7 bluish gray or pale reddish brown irregular spots and blotches
Broods per year:
Time of hatching: 11-13 days
Time to independence: 14 days
Age to reproductive maturity:

Males:
Females:

Mating System: polygynous
Life span: 5 years
Food habits: Primarily seed-eaters. Feed heavily on rice, weed seeds, and other grains during the fall and winter. During the breeding season they also eat insects and other invertebrates.

Time in Texas:

Brewer's Blackbird Euphagus cyanocephalus

Author: Kristopher Carroll

Description of Bird

Length:

Wingspan:

Mass: 60-80 g

A small, fairly long-legged songbird with the well proportioned look of many blackbirds: the fairly long tail is balanced by a full body, round head, and long, thick-based beak

Male: Glossy black all over with a staring yellow eye. Blue sheen on the head grading to greenish iridescence on the body.

Female: Females are plainer brown, darkest on the wings and tail, with a dark eye.

Geographical Range

Western half of North America, from below sea level in southern California to more than 8,000 feet in the Rocky Mountains

Habitat

open habitats of the West, such as coastal scrub, grasslands, riversides, meadows, as well as lawns, golf courses, parks, and city streets.

Life History Data

Time of Breeding: May-June
Number of Eggs: 3-7 Pale gray to greenish white, clouded or spotted with brown, pink, yellow, violet, and gray.
Broods per year: 1-2
Time of hatching: 11-17 days
Time to independence: 14-15 days
Age to reproductive maturity:
 Males:
 Females:
Mating System: polygynous
Life span: 3 years
Food habits: mostly seeds and grain, lots of insects, occasionally frogs and young voles. Anything not closely guarded,
Time in Texas:

Brown-headed Cowbird Molothrus ater

Author: Rachel Hastie, Katie R. Hood

Description of Bird

Mass: 40-50 g Length: 15-20 cm Wingspan: Medium size with a stout, dark, sparrow-like bill, short tail. Male: has a brown head and black body with a greenish, glossy iridescence. Female: uniformly grayish brown with no markings

Geographical Range

Breeds in most of North America. Winters from USA and Mexico

Habitat

Preferences: pastures, edges of woods, thickets, forest clearings, farmland and suburban gardens and lawns

Life History Data

Time of Breeding: spring-mid June Number of Eggs: 1 egg per host nest: female can lay up to 40 eggs per season Broods per year: brood parasite Time of hatching: 10-13 days Time to independence: 9-11 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous to polygamous Life span: 13 years Food habits: grains, grasses and weed seeds on the ground, insects Time in Texas: year round



Photo: Talton Cooper



Photo: Steven Ramage

Common Grackle Quiscalus quiscula

Author: Christopher Powell, Alyssa Edwards

Description of Bird

Mass: 92-131 g

Length: 28-34 cm

Wingspan:

Common grackles are large and lanky blackbirds with long legs and long tails. The head is flat and the bill is longer than most blackbirds with more of a downward curve. In flight, wings appear short in comparison to the tail. Males are slightly larger than the females. Common grackles appear black but up close have glassy purple heads with bronzy-iridescent bodies, and they also have a bright golden eye. Females are slightly less glossy than males.

Geographical Range

Found year round from Central Texas up into South Dakota across to the Eastern shore. During summer they can be found as west as Arizona and up into Canada

Habitat

Found around agricultural fields, feedlots, city parks, suburban lawns, woodland, forest edges, meadows, and marshes

Life History Data

Time of Breeding: March-July Number of Eggs: 4-7 Broods per year: 1-2 Time of hatching: several weeks Time to independence: 9-11 days Age to reproductive maturity: Males: 1-2 years Females: 1-2 years Mating System: monogamous Life span: 15 years Food habits: Particularly seeds, but during summer a small number of grackles are known to eat beetles, grasshoppers, caterpillars, spiders, crustaceans, mollusks, fish, frogs, salamanders, mice, and other birds

Time in Texas: year round



Photo: Troy A. Ladine

Eastern Meadowlark Sturnella magna

Author: Clay Nail, Jeff A. Savote

Description of Bird

Mass: 90-150 g Length: Males: 21-25 Females: 19- 23 cm

Wingspan:

Males have a broad white moustachial stripe and a yellow chin, which is divided from the under parts by a broad black breast band. The under parts turn offwhite on the streaked flanks and under the tail coverts. The pale undertail coverts are streaked and spotted dusky black. Females are similar to males except that they are smaller, paler, and have a narrower breast band.

Geographical Range

widespread in the eastern US and south eastern Canada extending as far west as Arizona. It is also resident in the Bahamas and extends south to Mexico

Habitat

Grasslands, pastures, savannas, alfalfa and hay fields, cropland borders, roadsides, orchards, golf courses, airports, reclaimed strip mines, overgrown fields, and other open areas. In the western range, tallgrass prairies and desert grassland. In the winter they are generally found in open country, cultivated fields, feedlots, and marshes

Life History Data

Time of Breeding: Summer Number of Eggs: 3-5 Broods per year: 2 Time of hatching: 13-15 days Time to independence: 2 weeks Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: polygamous Life span: 5 years Food habits: flying insects and fruits Time in Texas: year round

Great-tailed Grackle Quiscalus mexicanus



Photo: Troy A. Ladine

Orchard Oriole Icterus <u>spurius</u>

Author: John Jones

Description of Bird

Mass: 16-25 g

Length: 15-18 cm

Wing span:

- Breeding adult males are black on the head, neck, upper breast, nape, back, and scapulars. The rump, upper-tail coverts, and underparts from breast to under-tail coverts are rich chestnut. The wings are primarily black, except for chestnut epaulets and white wing bar and tips. The tail is black with narrow brownish-white tips.
- Breeding adult females are brownish olive from forehead to upper-tailcoverts on upperparts. This coloring is brighter on the forehead, more yellow on the rump and upper-tail coverts, and fades to olive on the flanks or gray tips on the tail may be more noticeable than on the breeding male.

Geographical Range

Canada to Mexico

Habitat

preference for settling near a source of water, such as a lake or river, and may be found in narrow riparian zones, floodplains, or marshes

Life History Data

Time of Breeding: May-August Number of Eggs: 2-7 Broods per year: 1 Time of hatching: 12-14 days Time to independence: 21 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 9 years Food habits: omnivore, Animal Foods: insects, terrestrial noinsect arthropods. Plant Foods: fruit, nectar, flowers Time in Texas: Summer

Red-winged Blackbird Agelaius phoeniceus



Photo: Troy A. Ladine

Rusty Blackbird *Euphagus carolinus*

Order Passeriformes

Family Passeridae

House Sparrow Passer domesticus

Author: Kathleen Santanello

Description:

Mass:

Length:

Wingspan:

They are short and stocky with shorter legs and thicker bills than native sparrows. The back is brown with black streaking. The breast and belly are unstreaked dull gray. Males in breeding plumage have a gray crown, with chestnut bordering the crown and extending down the back of the neck. A black bib extends to the throat and meets the black stripe in front of the eye. Fall and winter males may lack the bright colors and black bib. Females have a grayish brown crown and a grayish buff superciliary stripe. They lack the chestnut and black colors of the male, and their upperparts and wings are much grayer than the male

Geographical Range:

The House Sparrow is distributed worldwide (excluding the Poles). It is native to Eurasia and North Africa. It was introduced into S. Africa, South America, Australia, New Zealand, and America. Its introduction into North America occurred in 1851, when a group of 100 birds from England was released in Brooklyn, New York.

Habitat:

House Sparrows like areas that have been modified by humans, including farms, residential, and urban areas. They are absent from uninhabited woodlands, deserts, forests, and grasslands



Photo: Lacy Liles

Life History Data

Time of Breeding: mid-Winter - Spring Number of eggs: 3-5 Broods per year:2-3 Time of hatching: 10-13 days Time to independence:2 weeks Age to reproductive maturity: Males:1 year Females: 1 year Females: 1 year Mating System: monogamous Life span: 13 years Food habits: corn, oats, wheat, and other types of grain or weed seeds. The

birds primarily forage on the ground. During spring and summer when feeding nestlings, the birds will switch their feeding habits to insects and spiders.

Time in Texas: year round



Photo: Kenneth Anding

Order Passeriformes

Family Passeridae

American Goldfinch Spinus tristis

Author: Kathleen Santanello

Description of Bird

Mass:

Length: 11.4-12.8 cm

During mating season the male goldfinch has a bright yellow body, black wings with white stripes, a black cap on its head, and a white rump. Females and winter males have duller feathers that are an olive-yellow color. The male's black cap may disappear in the winter or turn a dull black. Females don't have the black cap on their heads. Both males and females have a small cone-shaped bill.

Geographical Range

winter and breeding range includes southern Canada, most of the continental United States and parts of Mexico. he goldfinch can be found year round on the upper east coast, on the west coast and in the mid-section of the United States. Northern populations winter in the southern U.S. and northern Mexico

Habitat

weedy fields and floodplains as well as cultivated land, orchards and gardens



Photo: Troy A. Ladine

Life History Data

Time of Breeding: mid-late summer Number of Eggs: 4-6 Broods per year: 1 Time of hatching: 14 days Time to independence: 10-16 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 11 years Food habits: mostly of the seeds of grasses, weeds and other plants. It also eats the seeds of trees like birch, alder and elm. It feeds during the day. The goldfinch usually gets seeds that are still on the plant

Time in Texas: winters



Photo: Matthew Armendarez

House Finch Haemorhous mexicanus

Author: Kathleen Santanello, Reggie Patrick

Description of Bird

Length: Males: 14 cm Females 12.5 cm Wingspan: 16.8 cm Males: 19-22 g Females: 16-19 g

Pinkish throat and rump. Red stripes over eyes and a little down their backs. Whitish belly streaked with brown. Brown streaked wings and tails. The females are brownish all over with a slight pink coloring on some

Geographical Range

Found in Southern parts of Canada and in all of the U.S down into Mexico all year round

Habitat

In the East, found almost exclusively in urban and suburban habitats, especially in areas with buildings, lawn, and small conifers. In West, found around people, but also in desert, chaparral, oak savanna, riparian areas, and open coniferous forests

Life History Data

Time of Breeding: March-August Number of Eggs: 1-6 Broods per year: 1-3 Time of hatching: 12-17 days Time to independence: 12-17 days Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 11 years Food habits: Weeds, seeds, occasionally fruit and small insects Time in Texas: year round



Photo: Troy A. Ladine



Photo: Troy A. Ladine

Purple Finch Haemorhous purpureus

Order Passeriformes

Family Polioptillidae

Blue-gray Gnatcatcher Polioptila caerulea

Author: Kristopher Carroll

Description of Bird

Length: 20-28 cm.

Wingspan: 10-11 cm.

Weight: 5-7 g

Tiny bird with a long tail. The gnatcatcher has a white underside with white eyeing. The outer feathers are also white and a small, thin bill, no wingbars.

Male: Black line meeting over the bill and extending around head above the eyes to just behind the eyes.

Female: Face is all gray with white eyeing.

Geographical Range

Breeding in Southern New England, Pennsylvania, California, Mexico, Winter: South Carolina through the coastal states to California to Central America.

Habitat

Breeding: Open, moist woodlands interspersed with brushy clearings, often oak, pine, or mixed woods, bottomland forests with closed canopies, wooded swamps, stream-side thickets. Favors tall trees.

Life History Data

Time of Breeding: late April-May Number of Eggs: 3=6 pale blue with small dark spots Broods per year: 1-2 Time of hatching: 19-15 days Time to independence: Age to reproductive maturity: Males: 1 year Females: 1 year Mating System: monogamous Life span: 8 years Food habits: insects, spiders, vegetables obtain water from food Time in Texas:

Citations to Accounts

American Crow

Alderton, David. Encyclopedia of North American Birds. Bath: Parragon, 2008.

Book of North American birds. Pleasantville, N.Y: Reader's Digest Association,1990.

Parr, C. 2005. "Corvus brachyrhynchos" (On-line), Animal Diversity Web. Accessed May 25, 2009. Roth, Sally. The Backyard Bird Feeder's Bible The A-to-Z Guide To Feeders, Seed Mixes, Projects And

Treats (Rodale Organic Gardening Book). New York: Rodale Books, 2000. Stokes, Donald, and Lillian Stokes. Stokes Backyard Bird Book: The complete

guide to attracting, identifying, and understanding the birds in your backyard. 1st ed. Emmaus: Rodale Book Readers' Service, 2003.

Cornell Lab of Ornithology, 2003 American Crow (Corvus brachyrhynchos) food habits. http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/American_Crow_dtl.html accessed May 28, 2008

http://home.earthlink.net/~challehudson/crow/

American Goldfinch

http://www.nhptv.org/natureworks/goldfinch.htm http://www.biokids.umich.edu/critters/information/Carduelis_tristis.html

American Robin

Sallabanks, R., R. James. 1999. American Robin (Turdus migratorius). Birds of North America, 462: 1-20.

USGS Patuxent Wildlife Research Center. 2011. Longevity records of North American Birds. Birding - american robin. (2006). *National geographic*. Retrieved from

http://animals.nationalgeographic.com/animals/birding/american-robin/ Conrell Lab of Ornithology. (2011). American robin. Retrieved from

http://www.allaboutbirds.org/guide/american Robin/id

Hall, S. (n.d.). American robin: Turdus migratorius. *Encyclopedia of Life*. Retrieved from http://fieldguides.eol.org/fguides/fieldguide-view.php?guidekey=645&eol_id=1177506&sci_flag=0

Bald Eagle

Cornell University Lab of Ornithology. Buehler, David A. (2000) Birds of NorthAmerica. Accessed May 26, 2009 at http://bna.birds.cornell.edu/bna/species/506/articles/introduction Hinterland's Who's Who. (2009) Wildlife in Canada. Accessed May 26, 2009 at

http://www.hww.ca/hww2.asp?id=27"Bald Eagle Facts Sheet." American Bald Eagle Information. Web. 11 May 2011.<http://www.baldeagleinfo.com/eagle/eagle-facts.html>.

Cornell University. "Bald Eagle, Life History, All About Birds - Cornell Lab of Ornithology." Your Online Guide to Birds and Bird Watching, All About Birds, Cornell Lab of Ornithology. Cornell University. Web. 11 May 2011. <http://www.allaboutbirds.org/guide/Bald_Eagle/lifehistory>.

DverCity. "Normal Lifespan and Causes of Deaths for Bald Eagles." DverCITY.com

U.S. Local Community News Showcasing the Diversity of Culture, Community, Service, and the American Dream - Submit Press Releases, News, Stories, and Articles for Free, Regional Features, Cultural Events, Service Projects, Arts and Entertainment Such as Theatres, Church Programs, and Businesses. Web. 11 May 2011. <http://www.dvercity.com/causes of death bald eagles.html>.

<nttp://www.dvercity.com/causes_of_death_baid_eagles.html>.

"Pallas Sea-Eagle (Haliaeetus Leucoryphus) » Planet of Birds." Planet of Birds » Source to All Birds on the Planet. Web. 11 May 2011.

<http://www.planetofbirds.com/pallas-sea-eagle-haliaeetus-leucoryphus>.

Philadelphia Zoo. "Philadelphia Zoo - Northern Bald Eagle." Philadelphia Zoo -

Home. Philadelphia Zoo. Web. 11 May 2011.<http://www.philadelphiazoo.org/zoo/Meet-Our-Animals/Birds/Birds-of-Prey/Bald-Eagle.htm>.

www.baldeagleinfo.com

www.earthlife.net/birds/classifications

www.birds.cornell.edu

Baltimore Oriole

Alderfer, Jonathan, ed. National Geaographic Complete Birds of North America. Washington, `D.C.:National Geographic, 2006.

Animal Diversity Web. 26 May 2009 <http://animaldiversity.ummz.umich.edu/site/index.html>. The Birds of North America online. 26 May 2009<http://bna.birds.cornell.edu/bna>. Cornell Lab of Ornithology. 26 May 2009<http://www.birds.cornell.edu/>.

Barred Owl

http://www.owlpages.com/owls.php?genus=Strix&species=varia http://animaldiversity.ummz.umich.edu/site/accounts/information/Strix_varia.html

Barn Swallow

All About Birds: Barn Swallows [Internet]. Ithaca (NY): Cornell Lab of Ornithology; c2003 [cited 2008 May 26]. Available from: http://www.birds.cornell.edu/

AllAboutBirds/BirdGuide/Barn_Swallow_dtl.html

Dewey T, Roth C: Hirundo rustica. [Internet]. Michigan: University of MichiganMuseum of Zoology Animal Diversity Web; c19952008 [cited 2008 May 27].Available from http://animaldiversity .ummz.umich.edu/site/accounts/information/Hirundo rustica.html

Bay-breasted Warbler

Bay-breasted Warbler. Audubon. 13 Nov. 2014. Web. 10 May 2015.
Bay-breasted Warbler. Boreal Songbird Initiative. Bay-breasted Warbler, Boreal Songbird Initiative. Web. 10 May 2015.
Bay-breasted warbler. Wbu.com. Web. 10 May 2015.

Bell's vireo

http://www.birdzilla.com/birds/Bells-Vireo/bent_life_history.html http://txtbba.tamu.edu/species-accounts/bells-vireo/ http://identify.whatbird.com/obj/649/overview/Bells_Vireo.aspx http://www.allaboutbirds.org/guide/Bells_Vireo/lifehistory http://mdc4.mdc.mo.gov/applications/mofwis/Mofwis_Detail.aspx?id=0400306

Belted Kingfisher

 $Ivory, A. 1999. \\ "Megaceryle alcyon" (On-line), Animal Diversity Web (ADW). \\ Accessed May 10, 2006 \\ \\ http://animaldiversity.ummz.umich.edu/site/accounts/information/Megaceryle_alcyon.html \\ \\ \end{tabular}$

Black Vulture

BirdLife International 2009. Coragyps atratus. In: IUCN 2010. IUCN Red List of Threatened Species. Version 2010.1. <www.iucnredlist.org>. Downloaded on May 18 2010.

Lowney, M. 1999. Damage by black and turkey vultures in Virginia, 1990-1996. Wildlife Society Bulletin, 27: 715-719.

Elliott, G. 2001. "Coragyps atratus" (On-line), Animal Diversity Web.AccessedMay 21, 2010 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Coragyps_atratus.

htmlwww.mbr-pwrc.usgs.gov/id/framlst/i3260id.html www.vultures.homestead.com/Black.html

www.peregrinefund.org/explore_raptors/vultures/blackvul.html

www.zoo.org/educate/fact_sheets/raptors/vulture.htm

Vulture's: Natures Noble Caretakers [Internet]. [cited 2009 May 20]; Available from: http://vultures.homestead.com/

American Black Vulture [Internet]. [cited 2009 May 20]; Available from http://www.pestproducts.com/americanblack-vulture.htm

Buckley, Neil J. 1999. Black Vulture (Coragyps atratus), The Birds of North

America [Internet] (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; [cited

2009 May 24]; Retrieved from the Birds of North America Online. Available from: http://bna.birds.cornell.edu/bna/species/411doi:10.2173/bna.411

Elliott, G. 2001. "Coragyps atratus" [Internet], Animal Diversity Web. [cited May 25, 2009]; Available from:

Black-and-White Warbler

Birds of the Pineywoods of Eastern Texas: A Field Checklist. D. E. Wolf, C. E. Shackelford, G. Luneau, and C. D. Fisher. Texas Parks and Wildlife, 2001

Kirschbaum, Kari. "Mniotilta varia." Animal Diversity Web. 2006. University of Michigan. 9 May 2006 http://animaldiversity.ummz.umich.edu/site/accounts/information/Mniotilta_varia.html>

Kricher, John C. 1995. Black-and-White Warbler; The Birds of North America. Vol. 4, No. 158. American Orinithologists' Union.

The Academy of Natural Sciences of Philadelphia. Robbins, C.S., Bruun, B., Zim, H.S., "Black-and-white warbler Mniotilta varia." USGS. 1996. Western Publishing Company, Inc. . 9 May 2006 < http://www.mbrpwrc.usgs.gov/id/framlst/i6360id.html>.

Waite, Mitch. "Black-and-white Warbler." What Bird. 2005. Mitch Waite Group. 9 May 2006. http://identify.whatbird.com/obj/248/Black-and-white_Warbler.aspx.

Black-throated blue warbler

http://www.allaboutbirds.org/guide/Black-throated_Blue_Warbler/lifehistory

Blackburnian Warbler

http://www.borealbirds.org/birdguide/bdo357_species.shtml

Blackpoll Warbler

Dick, Gary. WhatBird.com. N.p.. Web. 26 May 2013. http://www.whatbird.com/.

Blue Grosbeak

Cornell Lab of Ornithology: All About Birds. 2006.Cornell Lab of Ornithology. 15 May 2006 < http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/>.

Blue-gray Gnatcatcher

- "All About Birds." *Blue-gray Gnatcatcher, Identification,*. Web. 28 May 2012. http://www.allaboutbirds.org/guide/Blue-gray_Gnatcatcher/id.
- "Blue-Gray Gnatcatcher." *National Geographic*. Web. 29 May 2012.

http://animals.nationalgeographic.com/animals/birding/blue-gray-gnatcatcher. "Blue-gray Gnatcatcher." - South Dakota Birds and Birding. Web. 29 May 2012.

chttp://sdakotabirds.com/species/blue_gray_gnatcatcher_info.htm>.

Blue Jay

- Alderfer, Jonathan, ed. National Geaographic Complete Birds of North America. Washington, D.C.: National Geographic, 2006.
- The Birds of North America online. 26 May2009. < http://bna.birds.cornell.edu/bna>.

Cornell Lab of Ornithology. 26 May 2009 <http://www.birds.cornell.edu/>

Tarvin, Keith A. and Glen E. Woolfenden. 1999. Blue Jay (Cyanocitta cristata),

The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of NorthAmericaOnline: http://bna.birds.cornell.edu/bna/species/469 on May 24, 2009.

http://www.allaboutbirds.org/guide/Blue_Jay/lifehistory

- National Geographic Society. 1996. http://animals.nationalgeographic.com/animals/birds/blue-jay.html; Retrieved from May 24, 2009.
- Frysinger, J. 2001. "Cyanocitta cristata" (On-line), Animal Diversity Web. Accessed May 24, 2009 at http://animaldiversity.ummz.umich.edu/site/index.html

Blue-Winged Teal

http://www.allaboutbirds.org/guide/Blue-winged_Teal/lifehistory

http://www.mbr-pwrc.usgs.gov/Infocenter/i1400id.html

http://www.birdzilla.com/birds/Blue-winged-Teal/description.html?Itemid=1044

http://www.mbrpwrc.usgs.gov/Infocenter/i1400id.html

http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Blue-winged_Teal.html

Bobolink

"bobolink". Encyclopædia Britannica. Encyclopædia Britannica Online. Encyclopædia Britannica Inc., 2012. Web. 29 May. 2012

Brewer's Blackbird

"All About Birds."*Brewer's Blackbird, Identification,*. Web. 29 May 2012. http://www.allaboutbirds.org/guide/Brewers_Blackbird/id>.

"Brewer's Blackbird." *BirdWeb*. Web. 29 May 2012. http://birdweb.org/birdweb/bird/ brewers blackbird.

"Brewer's Blackbird." National Geographic. Web. 29 May 2012. http://animals.nationalgeographic.com/animals/birding/brewers-blackbird

Brown Headed Cowbird

Book of North American birds. Pleasantville, N.Y: Reader's Digest Association, 1990.
Roof, J. 1999. "Molothrus ater" (On-line), Animal Diversity Web. Accessed May 25, 2009 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Molothrus_ater.html.
Stokes, Donald, and Lillian Stokes. Stokes Backyard Bird Book: The complete guide to attracting, identifying, and understanding the birds in your backyard. 1st ed. Emmaus: Rodale Book Readers' Service, 2003.
http://www.birds.cornell.edu/bfl/speciesaccts/bnhcow.html

Brown Thrasher

Gray, P. and A. Fraser. 2007. "Toxostoma rufum" (On-line), Animal Diversity Web. Accessed May 25, 2010 at http://animaldiversity.ummz.umich.edu/ site/accounts/information/Toxostoma_rufum.html. http://www.mbr-pwrc.usgs.gov/Infocenter/i1400id.html bna.birds.cornell.edu/BNA/account/ Brown_Thrasher/DEMOGRAPHY_AND_POPULATIONS.htm

Canada Goose

Tanya Dewey; c1995-2008 [cited 2009 May 26]. Available from: http://animaldiversity.ummz.umich.edu/site/accounts/information/ Branta_canadensis.html

Canada Goose Microsoft Encarta Online Encyclopedia 2009: Microsoft Corporation; c1993-2009 [cited 2009 May 26]. Available from: http://encarta.msn.com/ encyclopedia_761587847/canada_goose.html

Infonatura: Animals and Ecosystems of Latin America . Arlington (VA): Branta Canadensis-Canada Goose; cited 2009 May 26]. Available from: http://www.natureserve.org

Canada Warbler

www.birds.cornell.edu www.biokids.umich.edu

Carolina Chickadee

Alderfer, Jonathan, ed. National Geaographic Complete Birds of North America. Washington, D.C.:National Geographic, 2006.

The Birds of North America online. 26 May 2009 http://bna.birds.cornell.edu/bna.

Cornell Lab of Ornithology. 26 May 2009. http://www.birds.cornell.edu/. Erikson, Laurie, Read, Marie 2011. "All About Birds." Cornell University Ornithology

Department [internet]. [2011, May 2011]. Available from: http://www.allabout birds.org/guide/search

Emiley, A. Dewey, T. 2007. "Zenaida macroura." Animal Diversity Web [internet]. [2008, May, 2011]. Available from: http://animaldiversity.ummz.umich.edu/ site/accounts/information/Zenaida_macroura.html

Great Horned Owl." 2011. Interagency Education Research Initiative and the University of Michigan [internet]. [2011, May 2011]. Available from: http://www.biokids.umich.edu/critters/Bubo_virginianus/

Carolina Chickadee." 2011. Plone and Cornell University Lab of Ornithology [internet]. [2011, May 2011]. Available from: http://www.birds.cornell.edu/ nestinginfo/bios/sp_accts/cach

Cattle Egret

- Chang, Alex. "all about birds". May 26, 2009. http://www.allaboutbirds.org/guide/ Cattle Egret/lifehistory.
- Cattle Egret". May 26, 2009 < http://txtbba.tamu.edu/accounts/caeg/caegacc.html>. S, Adams. "Nature Works/Cattle Egret". May 26, 2009. http://www.nhptv.org/ natureworks/cattleegret.htm.
- www.mbr-pwrc.usgs.gov/id/framlst/i2001id.htmlwww.nhptv.org/natureworks/ cattleegret.htm
- animaldiversity.ummz.umich.edu/ site/accounts/information/Bubulcus_ibis.html www.zoo.org/educate/fact sheets/savana/egret.htm

Cedar Waxwing

- Witmer, M. C., D. J. Mountjoy and L. Elliot. 1997. Cedar Waxwing (Bombycilla cedrorum), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/309 Accessed May 24th, 2010.
- Animal Diversity Web. Accessed May 25, 2010 at http://animaldiversity.ummz.umich. edu/site/accounts/information/Bombycilla cedrorum.html.

Chimney Swift

Janice Pappas: Chaetura pelagica University of Michigan: c1995-2008 [cited 2009 May 25]. Available from: http://animaldiversity.ummz.umich.edu/site/accounts/information/Chatura_pelagica.html Chimney swift. Raleigh (NC): Species Report; cited 2009 May 26]. Available from: http://www.basic.ncsu.edu/ncgap/sppreport/abnua03010.html Infonatura: Animals and Ecosystems of Latin America . Arlington (VA): Chaetura pelagica- Chimney swift; cited 2009 May 26]. Available from: http://www.natureserve.org

www.eNature.com

www.wild-bird-watching.com

Chestnut-sided Warbler

http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Chestnut-sided Warbler.html http://animaldiversity.ummz.umich.edu/site/accounts/information/Dendroica_pensylvanica.html http://www.wildlife.state.nc.us/pg07_WildlifeSpeciesCon/Profiles/warblerchestnut.pdf

Chipping Sparrow

- Animal Diversity Web: http://animaldiversity.ummz.umich.edu/site/index.html; site accessed on May 21st, 2008
- All About Birds: http://www.birds.cornell.edu/AllAboutBirds/; site accessed on May 21 2008

Common Grackle

- Cornell University. Common Grackle. Available from: http://www.allaboutbirds.org/guide/ Common Gracklelifehistory
- ODNR. Common Grackle. Department of Natural Resources. Available from: http://www.dnr.state.oh.us/ Home/species a to z/SpeciesGuideIndex/commongrackle/tabid/6835/Default.aspx
- Smithsonian Field Guide to the Birds of North America Floyd, Ted. New York: HarperCollins; 2008. Available from: http://suite101.com/article/common-grackle-quiscalus-quiscula-a134277

Common Nighthawk

- All About Birds. Cornell University. The Cornell Lab of Ornithology. Accessed
- May 17, 2012. Available from: http://www.allaboutbirds.org/guide/common_nighthawk /lifehistory 2012. Common Nighthawk. Nature Works. Accessed May 17, 2012. Available from:
- http://www.nhptv.org/natureworks/commonnighthawk.htm
- 2006. Complete Birds of North America. National Geographic. Accessed May 17, 2012. Available from: http://animals.nationalgeographi.com/animals/birding/common-nighthawk
- Kropp, Robin. "Chordeiles minor common nighthawk." Animal Diversity Web. N.p.. Web. 26 May 2013. http://animaldiversity.ummz.umich.
 - edu/accounts/Chordeiles_minor/.

Coopers Hawk

www.animaladversity.ummz.umich.edu www.birds.cornell.edu www.nenature.com/easternkingbird www.baldeagleinfo.com www.earthlife.net/birds/classifications

Double-crested Coromorant

Kirschbaum, Kari. "Phalacrocorax auritus double-crested cormorant." Animal Diversity Web. N.p., n.d. Web. 26 May 2013. http://animaldiversity.ummz.umich.edu/accounts/ Phalacrocorax_auritus www.mbr-pwrc.usgs.gov/Infocenter/i1200id.html www.nhptv.org/Natureworks/doublecorm.htm birds.cornell.edu/AllAboutBirds/ BirdGuide/Double-crested Cormorant.html

Downy Woodpecker

Birding -Downy Woodpecker (2006). National geographic. Retrieved from http://animals.nationalgeographic.com/animals/birding/downywoodpecker?source=A-to-Z Downy Woodpecker (2002) Kids' Inquiry of Diverse Species. Retrieved from http://www.biokids.umich.edu/critters/Picoides pubescens/ Cornell University of Ornithology. (n.d.). Retrieved from http://www.allaboutbirds. org/guide/downy_woodpecker/lifehistory Tyler, W. (1939). Downy woodpecker. Retrieved from http://birdsbybent.netfirms.com/ch11-2 o/downv.html Muchnic, A. (n.d.). Retrieved from http://www.nhptv.org/natureworks/ downywood.htm

Eastern Bluebird

Fimbel, K. 2000. "Sialia sialis" (On-line), Animal Diversity Web (ADW). Accessed May 10, 2006. http://animaldiversity.ummz.umich.edu/site/accounts/information/Sialia_sialis.html

Eastern Kingbird

www.nenature.com/easternkingbird www.birds.cornell.edu www.earthlife.net/birds/classifications

Eastern Meadowlark

- http://www.allaboutbirds.org/
- http://www.birdnature.com/meadowlark.html
- http://www.mbr-pwrc.usgs.gov
- Dexheimer, T. and A. Fraser. 2006. "Sturnella magna" (On-line), Animal DiversityWeb. Accessed May 22, 2006 at http://animaldiversity.ummz.umich.edu/site/accounts/information/ Sturnella magna.html.

Eastern Phoebe

www.virtualmuseum.com www.animaldiversity.ummz.umich.edu

Eastern Screech Owl

Eastern Screech-Owls, Eastern Screech-Owl Pictures, Eastern Screech-Owl Facts - National Geographic." National Geographic. N.p., n.d. Web. 05 May 2015. Lewis, Deane. "Screech Owl." Owlpages.com. 10 July 2013. Web. 5 May 2015. "Screech Owl." Owlinstitute.org. Web. 5 May 2015.

Eastern Towhee

http://www.mbr-pwrc.usgs.gov/id/mlist/h5870.html

- http://museum.nhm.uga.edu/gawildlife/birds/passeriformes/perythrophthalmus.html
- http://www.dlia.org/atbi/species/animals/vertebrates/birds/emberizidae/eastern tow hee.shtml http://birdsbybent.com/ch31-40/towhee.html

Eurasian Collared Dove

www.discoverlife.org www.biology.unm.edu www.globalspecies.org

European Starling

Chow, J. 2000. "Sturnus vulgaris" Animal Diversity Web. Accessed May 23, 2009 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Sturnus_vulgaris.html. Starling, 2000. ". Microsoft, Encarta Online Encyclopedia" (On-line). AccessedMay 23, 2009 at http://encarta.msn.com

Starling, 2000. "World Book Online Americas Edition" (On-line). Accessed May 25, 2009 at http://www.worldbookonline.com/wbol/wbAuth/na/ar/fs/ar529920.htm

Gray Catbird

Cornell Lab of Ornithology: All About Birds. 2006.Cornell Lab of Ornithology. 15 May 2006 http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/.

Dewey, T. and T. Pinkoski. 2001. 15 May 2006 http://animaldiversity.ummz.umich.edu/ site/accounts/information/Dumetella_carolinensis.html.

Great Blue Heron

All About Birds: Great Blue Heron [Internet]. Ithaca (NY): Cornell Lab of Ornithology; 2003 [cited 2008 May 26]. Available from: http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Great_Blue_Heron.html

Naumann, R. 2002. "Ardea herodias" Accessed May 22, 2006 at http://animaldiversity. ummz.umich.edu/site/accounts/information/Ardea herodias.html.

Green Heron

Dewey, T. and J. Butzbaugh. 2001. "Butorides virescens" (On-line), Animal Diversity Web. Accessed May 24, 2010v at http://animaldiversity.ummz.umich.edu/site/accounts/information/Butorides_virescens.html.

Great-horned Owl

http://www.owlpages.com/owls.php?genus=Bubo&species=virginianus, 2008

http://www.owlpages.com/owls.php?genus=Bubo&species=virginianus, 2008

http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Great_Horned_Owl_dtl.html#reproduction, 2003 http://www.mbr-pwrc.usgs.gov/Infocenter/i3750id.html, 2008

Hairy Woodpecker

http://www.birdweb.org/birdweb/bird_details.aspx?id=275 accessed May 27, 08 http://www.mbr-pwrc.usgs.gov/Infocenter/i3930id.html accessed May 27, 08

House Finch

http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/House_Finch_dtl.html#reproduction http://animaldiversity.ummz.umich.edu/site/accounts/information/Carpodacus mexicanus.html

http://www.birdsforever.com/finch.html May 26, 08

http://www.mbr-pwrc.usgs.gov/id/framlst/i5190id.html May 26, 08

House Sparrow

http://www.birds.cornell.edu/BOW/HOUSPA/ http://www.wild-bird-watching.com/House_Sparrows.html

Indigo Bunting:

All About Birds: http://www.birds.cornell.edu/AllAboutBirds/site accessed on May 21st, 2008 Zumberg, R. 1999. "Passerina cyanea". http://animaldiversity.ummz.umich.edu/site/accounts/ information/Passerina_cyanea.html.

Killdeer

Jackson, Bette J. and Jerome A. Jackson. (2000) Birds of North America. Accessed May 26, 2009 at http://bna.birds.cornell.edu/bna/species/517/articles/introduction

Hinterland's Who's Who. (2009) Wildlife in Canada. Accessed May 26, 2009 at http://www.hww.ca/hww2.asp?id=50

Dewey, T. A., Chung Hugh. (2006) The Animal Diversity Web. Accessed May 26, 2009 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Charadrius_vociferus.html

Lark Sparrow

www.wikipedia.org www.birds.cornell.edu www.enature.com

Mallard

Esse, Jason. "Mallard Classification." BioWeb Home. Web. 11 May 2011. http://bioweb.uwlax.edu/bio203/s2009/esse_jaso/Classification.htm.

"Mallard Ducks, Mallard Duck Pictures, Mallard Duck Facts - NationalGeographic." Animals, Animal Pictures, Wild Animal Facts - National Geographic. Web. 11 May 2011. http://animals.nationalgeographic.com/animals/birds/mallard-duck/

Mayntz, Melissa. "Mallard - What Is a Mallard - Mallard Ducks." Birding and Wild Birds. Web. 11 May 2011. http://birding.about.com/od/birdprofiles/p/mallard.htm.

Sharp, Jay, and Lynn Bremner. "The Mallard Duck - DesertUSA." Desert Biomes by DesertUSA. Web. 11 May 2011. http://www.desertusa.com/animals/mallard-ducks.html.

http://www.stanford.edu/group/stanfordbirds/text/species/Mallard.html May, 2008 http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Mallard_dtl.html May, 2008 http://animaldiversity.ummz.umich.edu/site/accounts/information/Aves.html May, 2008

Mississippi Kite

http://www.allaboutbirds.org http://www.tpwd.state.tx.us/huntwild/wild/species/kites/ http://www.mbr-pwrc.usgs.gov www.virtualmuseum.com www.animaldiversity.ummz.umich.edu

Mourning Dove

http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Mourning_Dove_dtl.html

http://animaldiversity.ummz.umich.edu/site/accounts/information/Zenaida_ macroura.html

http://identify.whatbird.com/obj/163/Behavior/Mourning Dove.aspx

http://www.mbr-pwrc.usgs.gov/id/framlst/i3160id.html

http://museum.nhm.uga.edu/gawildlife/birds/Columbiformes/zmacroura.html

http://www.michigan.gov/dnr/0,1607,7-153-10370_12145_12202-77390-,00.html

http://www.biokids.umich.edu/critters/information/Zenaida_macroura.html

Miller, Wilmer J. (1969-01-16). "The biology and Natural History of the Mourning

Dove". http://www.ringneckdove.com/Wilmer's%20WebPage/mourning_doves.htm

Northern Mockingbird

http://nhptv.org/wild/northerncardinal.asp

http://www.biokids.umich.edu/critters/Cardinalis_cardinalis/

http://www.allaboutbirds.org/guide/Northern_Cardinal/lifehistory

Nature Works, 2008. Northern Mockingbird (Mimus polyglottos) geographical range.

http://www.nhptv.org/natureworks/mockingbird.htm Accessed May 29, 2008 http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Northern_Mockingbird_dtl.html (May, 2008) http://www.enature.com/flashcard/show_flash_card.asp?recordNumber=BD0136 May, 2008

http://animaldiversity.ummz.umich.edu/site/accounts/information/Mimus_polyglottos.ht May, 2008

orthern Bobwhite

Pollard, S. (o). Retrieved from http://www.allaboutbirds.org/guide/Northern_Bobwhite/id Retrieved from http://www.biokids.umich.edu/critters/Colinus_virginianus/ Cornell Lab of Ornithology: All About Birds: http://www.birds.cornell.edu/AllAboutBirds/ www.npwrc.usgs.gov/resource/birds/platte/species/colivirg.htm www.fwie.fw.vt.edu/www/projects/quail/quail.htm

http://www.mbr-pwrc.usgs.gov/id/framlst/i2890id.html

http://museum.nhm.uga.edu/gawildlife/birds/Galliformes/cvirginianus.html

http://animaldiversity.ummz.umich.edu/site/accounts/information/Colinus_virginianus.html

Northern Flicker

http://www.mbr-pwrc.usgs.gov/Infocenter/i4120id.html

http://animaldiversity.ummz.umich.edu/site/accounts/information/Colaptes_auratus.html

Orchard Oriole

http://www.mbr-pwrc.usgs.gov/Infocenter/i1400id.html

Painted Bunting

allaboutbirds.org animaldiversity.ummz.umich.edu junglewalk.com eol.com

Pine Grosbeak

Pine Grosbeak-Pinicola enucleator. (n.d.). Retrieved May 11, 2015, from http://www.nhptv.org/w ild/pinegrosbeak.asp

Pine Grosbeak. (2014, November 13). Retrieved May 11, 2015, from http://www.audubon.org/field-guide/bird/pine-grosbeak

Pine Grosbeak. (n.d.). Retrieved May 11, 2015, fromhttp://birdweb.org/birdweb/bird/pine-grosbeak

Prothonotary Warbler

Audubon WatchList- Prothonotary Warbler. http://audubon2.org/webapp/watchlist/viewSpecies.jsp?id=165 Copyright 2002 by National Audubon Society, Inc.

 $U.\,S.\,Geological\,Survey-\,Prothonotary\,Warbler.\ http://www.mbr-pwrc.usgs.gov/id/framlst/i6370 id.html$

Cornell Lab of Orinthology: All About Birds http://www.birds.cornell.edu/Allaboutbirds/birdguide/ Prothonotary_Warbler_dtl.html

 $eNature.com.\ http://eNature.com/flashcard/show_flash_card.asp?recordNumber=BD0376$

Ontario's Biodiversity: Species at Risk. http://www.rom.on.ca/ontario/risk.php?doc_type=fact&lang=&id=123 Species at Risk: Prothonotary Warbler. http://www.speciesatrisk.gc.ca/search/peciesDetails_e.cfm?SpeciesI D=31#biology

Purple Martin

Brown, C. R. 1997. Purple Martin (Progne subis). In The Birds of North America, No. 287 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.

Purple Martin. Canisius Ambassadors for Conservation. http://www.conservenature.org/learn_about_wildlife/birds_of_wny/purple_martin.htm

The Purple Martin Conservation Association. 1999-2006. http://purplemartin.org/main/mgt.html

Red-Bellied Woodpecker

http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Redbellied_Woodpecker_dtl.html#food. Accessed 27 May 2008.

http://www.nhptv.org/natureworks/redbelliedwoodpecker.htm. Accessed 27 May 2008.

1990. Red-Bellied Woodpecker. Pp. 203 in Book of North American Birds. NewYork: The Reader's Digest Association, Inc.

Eckhardt, L. and K. Kirschbaum. 2001. "Melanerpes carolinus" (On-line), Animal

Diversity Web. Accessed May 23, 2009 at http://animaldiversity.ummz.umich.edu/site/accounts/information/ Melanerpes_carolinus.html Shackelford, C., R. Brown, R. Conner. 2000. Red-bellied woodpecker (Melanerpescarolinus). Pp. 1-24 in A. Poole, F. Gill, eds. The Birds of North America, Vol. 500. Philadelphia, PA: The Birds of North America, Inc.

Red-eyed Vireo

http://animals.nationalgeographic.com/animals/birding/red-eyed-vireo/ http://identify.whatbird.com/obj/573/_/Red-eyed_Vireo.aspx http://www.biokids.umich.edu/critters/Vireo_olivaceus/

Red-Headed Woodpecker

 $\label{eq:http://animaldiversity.ummz.umich.edu/site/accounts/classification/path/Melanerpes_erythrocephalus. html#Melanerpes%20erythrocephalus$

Red-Shouldered Hawk

http://animaldiversity.ummz.umich.edu/site/accounts/information/Buteo_lineatus.html

Red-Tailed Hawk

All about birds; Red-tailed Hawk [Internet]. c2009. Ithaca (NY): Cornell Lab ofOrnithology; [cited 2009 May 20] Available from:\http://www.allaboutbirds.org/guide/Red-tailed_Hawk/lifehistory

Dewey, T. and D. Arnold. 2002. "Buteo jamaicensis" (On-line), Animal Diversity Web. Accessed May 27, 2008 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Buteo_ jamaicensis.html.

Nature Works; Red-tailed Hawk . c2009. Durham (NH); New Hampshire Public Television; [cited 2009 May 25]. Available from: http://www.nhptv.org/Natureworks/redtailhawk.htm#6

Tesky, Julie L. 1994. Buteo jamaicensis. In: Fire Effects Information System, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). [Cited 2009 May 26]. Available from: http://www.fs.fed.us/database/feis/

Hawk - Red Tailed Bird Care Information. Hawk - Red Tailed Food, Health, Habitat, Behavior, Origin." Pet Care Informations - Pet Information - Pet Health. Web. 01 June 2011.

http://www.petinfospot.com/902/bird/_hawk_red_tailed.html.

- Red Tail Hawk." Red Tail Hawk. Web. 11 May 2011. http://mayo.personcounty.net/Wildlife%20Page/red%20tail%20hawk%20page.htm.
- Red Tailed Hawk." Raptor Center, Birds of Prey. Web. 11 May 2011.http://www.raptorcenter.org/red-t ailed-hawk.asp.

Red Tailed Hawk." Web. 11 May 2011. http://pelotes.jea.com/hawkredt.htm.

Red-tailed Hawk." FCPS Home Page Redirect Page. Web. 11 May 2011.

http://www.fcps.edu/islandcreekes/ecology/red-tailed_hawk.htm.

Red-Winged Blackbird

Birds of the Pineywoods of Eastern Texas: A Field Checklist. D. E. Wolf, C. E. Shackelford, G. Luneau, and C. D. Fisher.Texas Parks and Wildlife, 2001

Robbins, C.S., Bruun, B., Zim, H.S., "Red-winged blackbird Agelaius phoeniceus."USGS. 1996. Western Publishing Company, Inc. 9 May 2006 http://www.mbr-pwrc.usgs.gov/id/framlst/i4980id.html.

Rosenthal, Anthony. "Agelaius phoeniceus." Animal Diversity Web. 2006. University of Michigan. 9 May 2006. http://animaldiversity.ummz.umich.edu/site/accounts/information/Agelaius_phoeniceus.html>.

Waite, Mitch. "Red-winged Blackbird." What Bird. 2005. Mitch Waite Group.9 May 2006. http://identify.whatbird.com/obj/144/_/Red-winged_Blackbird.aspx>.

Rock Pigeon

http://animaldiversity.ummz.umich.edu/site/accounts/information/ Columbia livia.html

http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Rock_Pigeon_dtl.html

http://www.biokids.umich.edu/critters/information/Columbia_livia.html

Rose-breasted Grosbeak

allaboutbirds.org animaldiversity.ummz.umich.edu junglewalk.com eol.com

Ruby-Throated Hummingbird

http://animaldiversity.ummz.umich.edu/site/accounts/information/Archilochus_colubris. html. Accessed 28 May 2008.

http://www.mbr-pwrc.usgs.gov/id/framlst/i4280id.html. Accessed 28 May 2008.

Robinson, T. R., R. R. Sargent and M. B. Sargent. 1996. Ruby-throated Hummingbird (Archilochus colubris), The Birds of North America Online (A.Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online on May 24, 2009.

http://www.allaboutbirds.org/guide/Ruby-throated_Hummingbird/lifehistory

- Harris, M., R. Naumann and K. Kirschbaum. 2000. "Archilochus colubris" Animal Diversity Web. Accessed May 24, 2009 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Archilochus_ colubris.html.
- Natinal Geographic Society. 1996. http://animals.nationalgeographic.com/animals/birds/ruby-throathummingbird.html; retrieved from May 24, 2009.

Scarlet Tanager

- Mowbray, T. 1999. Scarlet Tanager (*Piranga olivacea*). *In* The Birds of North America, No. 479 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA. Available from: http://www.allaboutbirds .org/guide/scarlet_tanager/lifehistory
- National Park Service. Scarlet Tanager. Available from: http://www.nps.gov/shen/naturescience/scarlet-tanager.htm

Scissor-Tailed Flycatcher

Alderton, David. Encyclopedia of North American Birds. Bath: Parragon, 2008. Book of North American birds. Pleasantville, N.Y: Reader's Digest Association.

Williams, A. 2002. "Tyrannus forficatus" (On-line), Animal Diversity Web. Accessed May 25, 2009 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Tyrannus forficatus.html

- http://www.birdsofoklahoma.net/Scissor-tail09.htm
- http://www.mbr-pwrc.usgs.gov/id/framlst/i4430id.html
- http://www.shawcreekbirdsupply.com/scissortailed_flycatcher_info.htm
- http://animaldiversity.ummz.umich.edu/site/accounts/information/Tyrannus_forficatus.hml
- http://conserveonline.org/docs/2001/05/stfl.do
- http://birds.cornell.edu/programs/AllAboutBirds/http://www.news-
- leader.com/apps/pbcs.dll/article?AID=/20050908/LIFE06/509080305/1037

Snowy Egret

- http://www.allaboutbirds.org/guide/Snowy_Egret/id
- http://www.nhptv.org/natureworks/snowyegret.htm#1
- http://www.zonianlady.com/snowyegret/snowyegret.html
- Weslosky, A. 2002. "Egretta thula". Animal Diversity Web. Accessed May 20, 2006 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Egretta_thula.html.

Song Sparrow

- http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Song_Sparrow.html#description May 27, 08
- http://www.birdhouses101.com/song-sparrow.asp May 27, 08)
- $http://animaldiversity.ummz.umich.edu/site/accounts/information/Melospiza_melodia.html$
- Cornell University. "Song Sparrow, Identification, All About Birds Cornell Lab of Ornithology." Your Online Guide to Birds and Bird Watching, All About Birds, Cornell Lab of Ornithology. Cornell University. Web. 11 May 2011. http://www.allaboutbirds.org/guide/song_sparrow/id
- National Geographic. "Song Sparrows, Song Sparrow Pictures, Song Sparrow Facts-National Geographic." Animals, Animal Pictures, Wild Animal Facts -National Geographic. National Geographic, 2006. Web. 11 May 2011. http://animals.nationalgeographic.com/animals/birding/song-sparrow>.
- Stanford University. "How Long Can Birds Live?" Stanford University. Web. 11 May 2011. http://www.stanford.edu/group/stanfordbirds/text/essays/How_Long.html

Zink, Robert M., and Donna L. Dittmann. "Gene Flow, Refugia, and Evolution of Geographic Variation in the Song Sparrow (Melospiza Melodia)." Nature 161.4083 (1948): 162-63. Abstract. Evolution: An International Journal of Organic Evolution 3rd ser. 47 (1993): 716-18.

Summer Tanager

Cornell Lab of Ornithology: All About Birds. 2006.Cornell Lab of Ornithology. 15 May 2006 http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/

Tennessee Warbler

http://nationalzoo.si.edu ttp://www.mbr-pwrc.usgs.gov http://www.allaboutbirds.org

Turkey Vulture

Turkey Vulture Society, May 30, 2012 The Cornell Lab of Ornithology: All About Birds, May 30, 2012 Desert USA: Turkey Vultures, May 30, 2012

Western Kingbird

- Deloy Roberts: Western Kingbird cited 2009 May 26]. Available from: http://www.d91.k12. id.us/skyline/teachers/robertsd/kingbird.htm
- Western Kingbird. Ithaca (NY): The Cornell Lab of Ornithology; c2009 [cited 2009 May 26]. Available from: http://www.allaboutbirds.org/guide/Western_Kingbird/lifehistory
- Robbins, C.S., Brum, B., Zim, H.S. Birds of North America. New York: Western Publishing Company, Inc. Available from: http://www.mbr-pwrc.usgs.gov/id/framlst/i4470id.html
- M. Green: Western Kingbird [homepage on the Internet]. California Wildlife Habitat Relationships Systems: M. Green; c1988-1990 [cited 2009 May 26]. Available from: http://nrm.dfg.ca.gov
- P. Myers: Tyrannus verticalis [homepage on the Internet]. University of Michigan: P. Myers; c1995-2008 [cited 2009 May 26]. Available from: http://animaldiversity. ummz.umich.edu/site/accounts/information/Tyrannus_verticalis.html
- Mitchell Waite: Western Kingbird [homepage on the Internet]. Mitchell Waite; c2002-2008 [cited 2009 May 26]. Available from: http://identify.whatbird.com

White-Breasted Nuthatch

- http://www.birds.cornell.edu/BOW/WBNH/
- http://www.wbu.com/chipperwoods/photos/wbnut.htm
- http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/White-breasted_Nuthatch.html
- http://www.mbr-pwrc.usgs.gov/id/framlst/i7270id.html

White-eyed Vireo

- http://nationalzoo.si.edu/scbi/migratorybirds/featured_birds/default.cfm?bird=White-eyed_Vireo
- http://www.allaboutbirds.org/guide/White-eyed_Vireo/lifehistory
- http://identify.whatbird.com/obj/574/overview/White-eyed_Vireo.aspx
- http://txtbba.tamu.edu/species-accounts/white-eyed-vireo/
- http://www.biokids.umich.edu/critters/Vireo_griseus

White-winged Dove

2008. All About Birds. Cornell University. The Cornell Lab of Ornithology. Accessed May 17, 2012. Available from: http://www.allaboutbirds.org/guide /White-winged_Dove

Kropp, R. 2002. Animal Diversity Web. Accessed May 17, 2012. Available from:

http://animaldiversity.ummz.umich.edu/site/accounts/information/Zenaida_asiatica.htm 2008. Animal Fact Sheet: White-winged Dove. Arizona-Sonora Desert Museum. Accessed May 17, 2012.

Available from: http://www.desertmuseum.org/kids/oz/long-factsheets/white-winged%20dove.php

Whip-poor-will

http://museum.gov.ns.ca/mnh/nature/nsbirds/bns0222.htm

http://www.inhs.uiuc.edu/chf/pub/virtualbird/species/whip-poor-will.html

bna.birds.cornell.edu/BNA/account/Whip-poor-will

http://wildspace.ec.gc.ca/life.cfm?ID=BAWW&Page=More&Lang=e

http://museum.nhm.uga.edu/gawildlife/birds/caprimulgiformes/cvociferus.html

Whip-poor-will Birds. What-When-How, The Crankshaft Publishing Company. http://what-when-how.com/ birds/whippoorwill-birds/

Whip-poor-Will.BioKIDS, University of Michigan. 2002-2011. http://www.biokids.umich.edu/critters/ Caprimulgus_vociferus/

Wood Duck

Georgia Museum of Natural History. Wood Duck. University of Georgia. Available from:

- http://dromus.nhm.uga.edu/~GMNH/gawildlife/index.php?page=speciespages/species_page&key=asponsa
- The University of Michigan. Wood Duck. BioKIDS. Available from: http://www.biokids./

umich.edu/critters/Aix_sponsa/

Shaw Creek Bird Supply. Wood Duck. Availabel from: http://www.shawcreekbirdsupply.com/woodduck_i nfo2.htm

Wood Thrush

http://www.birds.cornell.edu/BOW/WOOTHR/

http://www.mbr-pwrc.usgs.gov/id/framlst/i7550id.html

http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Wood_Thrush.html

Yellow-bellied Sapsucker

Birding - Yellow-Bellied Sapsucker (2006). National geographic. Retrieved from

http://animals.nationalgeographic.com/animals/birding/yellow-bellied-sapsucker?source=A-to-Z

Conrell Lab of Ornithology. (2011). Yellow-bellied sapsucker. Retrieved from

http://www.allaboutbirds.org/guide/Yellow-bellied_Sapsucker/lifehistory#at_food Yellow-Bellied Sapsucker (n.d.) *Field guide to birds of north america*. Retrieved from

http://identify.whatbird.com/obj/584/behavior/Yellow-bellied_Sapsucker.aspx

Yellow Warbler

Bachynski, K. and M. Kadlec. 2003. "Dendroica petechia" (On-line), Animal Diversity Web (ADW). Accessed May 10, 2006 http://animaldiversity.ummz.umich.edu/site/accounts/information/Dendroica_ petechia.html

Cornell University Lab of Ornithology. Lowther, P. E., C. Celada, N. K. Klein, C. C. Rimmer and D. A. Spector. (1999) Birds of North America. Accessed May 26, 2009 at http://bna.birds.cornell.edu/bna/ species/454/articles/introduction National Geographic. Field Guide to Birds of North America. Forth Edition (2002)

Yellow-billed Cuckoo

http://www.mbr-pwrc.usgs.gov/id/framlst/i3870id.html

http://animaldiversity.ummz.umich.edu/site/accounts/information/Coccyzus_americanus.html

http://www.tpwd.state.tx.us/huntwild/wild/species/yellowbilledcuckoo

Yellow-rumped Warbler

www.allaboutbirds.org www.birdweb.org www.biokids.umich.edu

Yellow-Throated Vireo

Discover Life In America, Inc. and the All Taxa Biodiversity Inventory http://www.dlia.org/ atbi/species/animals/vertebrates/birds/vireonidae/yellow throated vireo.shtml

Florida's Breeding Bird Atlashttp://mvfwc.com/bba/vtvi.htm

Mark Johns, North Carolina Partners in Flight: Yellow-throated Vireo

http://faculty.ncwc.edu/MBrooks/pif/Bird%20Profiles/yellowthroated_vireo.htm

U. S. Geological Survey, http://www.mbr-pwrc.usgs.gov/id/framlst/i6280id.html