Audubon Arkansas Important Bird Area Nomination Form For Woolsey Wet Prairie Sanctuary





Prepared By Bruce Shackleford and Seth Pickens



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Preface

On behalf of the City of Fayetteville, Arkansas, Environmental Consulting Operations, Inc. hereby submits the Audubon Arkansas Important Bird Area (IBA) Nomination Form for a site known as Woolsey Wet Prairie Sanctuary. Questions should be directed to Bruce Shackleford or Seth Pickens at the following:

Bruce Shackleford, President 501-765-9009 bruceshackleford@aristotle.net

Seth Pickens, Environmental Scientist 501-315-9009 sethpickens@ecoarkansas.com

Environmental Consulting Operations, Inc. 17724 I-30, Suite 5A Benton, AR 72019



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Cover Photograph Credits:

Joe Neal: Northern Shrike, Sora, Cassin's Sparrow, Greater & Lesser

Yellowlegs

Jacque Brown: Henslow's Sparrow, Spotted Towhee

David Oakley: Brewer's Sparrow Mitchell Pruitt: Wilson's Phalaropes Joan Reynolds: White-faced Ibis Bruce Shackleford: Yellow Warbler

An electronic version of the IBA nomination form for Woolsey Wet Prairie Sanctuary can be found online at http://ecoarkansas.com/WoolseyMain.html under the hyperlink IBA Nomination Form.





Audubon Arkansas IBA Nomination Form

RETURN TO:	100 m	* " *			
Audubon Arkansas				×	
Important Bird Areas Program					
4500 Springer Blvd.					
Little Rock, AR 72206				8 1	
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SITE NAME: Woolsey We	+ Prairie	Sanctuary	Date Submitte	ed: 6/4/2013	

Thank you for your interest and participation in the Important Bird Areas Program. Please read the INSTRUCTIONS FOR COMPLETION OF IBA NOMINATION FORM before filling out this form. You don't need to have all the information requested, just fill out as much of the form as you can. IBA Criteria and Species Population Data are the most important. Please type or neatly print your entries. Feel free to attach additional sheets to provide more information for any section. If you need help filling out the form contact Dan Scheiman, Bird Conservation Director, at 501-244-2229, dscheiman@audubon.org.

I. Nominator Information Pickens Seth 1. Name: Organization/Affiliation: ECO, Inc. Address: 17724 I-30 Suite 5A City: Benton State: AR Zip: 72019 Phone: (501) 315-9009 Email seth Decoarkansas. com Bruce Shackle ford Name: Organization/Affiliation: Eco, Inc. Address: 17724 I-30 Suite SA City: Benton State: AR Zip: 72019 Phone: (501) 765-9009 Email bruceshackleford 2 aristotle. net II. Site Details Site Name: Woolsey Wet Prairie Sanctuary Nearest Town(s): Fagetteville County/Counties: Washington Area (hectares): 17.73 ha Area Accuracy: 6003

Site Name Woolsey Wet Prairie Sanctuary

(Choose good) medium, poor, unknown)

Elev	vation (meters) min: 12	23 max	: 1229 :	avg: 1226	
Cer	ntral Coordinates – Latitude: 36 °	4 02.30	N Central Co	oordinates – Longitude: 94°14	01.13" W
Owr	nership/Management:	r federal, state, c	Fayettevill county, private, corp	e orate, non-profit (communal,	other-specify)
1.	Owner Contact: David	Jurgens		Aware of IBA program	n? √Yes _ No
	Organization/Affiliation:	City of	Fayetteu)	lle Utilities De	epartment
	Address: 113 West	- Mounta	ria Street	e and the second	
	City: Fagetteu: 11	e	State: AR	Zip:7270	. [
	Phone: (479) 575-	8318	Emailj	orgens a ci. fage	rteville. ar . us
	Owner Contact:			· ·	
	Organization/Affiliation:		2		
	Address:	*	11		× 4
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	Phone:	To the second se	Email		
	Description: General descripts within/adjacent to the site,			abitat, prominent featur	es, protected
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Site Description:

Woolsey Wet Prairie (WWP) is a 43.8-acre wetland mitigation site constructed in 2006 to offset the permanent alteration of 9.88 acres of wetlands during the construction of the City of Fayetteville's Westside Wastewater Treatment Plant (WWTP). WWP is located adjacent to the WWTP at 15 North Broyles Road. WWP is named after, and was a part of, the original farm settled in 1830 by Samuel Gilbert Woolsey and his wife, Matilda only two years after Washington County was formed, and six years before Arkansas achieved statehood. The site, originally a tall grass wet prairie, still has intact upland prairie mounds that appear to have never been subjected to plowing, and depressional areas between mounds where water seasonally ponds forming wetlands. Such prairie mounds and wet prairie depressions were common in the area prior to the western expansion by settlers in the early to mid 1800's. Recognizing that this is a very rare and endangered natural resource in northwest Arkansas, the designers developed a wetland mitigation strategy with the objective of restoring the natural prairie ecosystem that once existed on the site.

Hydrological modifications were made by the construction of earthen berms to create a series of seven wetland cells. Design work was a joint effort of ecologists from Environmental Consulting Operations, Inc., and engineers from McGoodwin, Williams, and Yates Consulting Engineers, Inc. WWP is permanently protected by a deed-restricted covenant in perpetuity as a wetland mitigation site.

The many islands within the wetland cells are actually prairie mounds that are a natural feature of unplowed and undisturbed former prairies. Through the continued implementation of adaptive management strategies at the site WWP is now a mosaic of habitat types including: wet meadow wetlands, marsh, open water, mudflats, forested wetlands, and upland prairie. WWP has quickly become an excellent spot for birding (an eBird birding hotspot) with several county and state records occurring at the site over a relatively short time period. For more information about the history of WWP, the management of the site, or to view pictures of the many extraordinary finds at the site, you can visit our website that can be accessed at http://ecoarkansas.com/WoolseyMain.html. A site location map, as-built drawing, and an aerial photo of the site can be found in Appendix I.

III. IBA Criteria

Check all that apply. You must <u>explain</u> how this site meets each selected criteria. To make more space you may delete criteria that do not apply.
✓1: (D1) Regularly supports significant populations of one or more of the bird species considered by
Audubon as vulnerable in Arkansas (Arkansas Birds of Conservation Interest) – see Table 1.
2: (D3) Site contains an assemblage of species characteristic of a representative, rare, threatened, or unique habitat (Table 2)
√3: (D4i) Regularly supports more than 1% of a <u>single species</u> ' state population during some portion of the year.
4: (D4ii) Regularly supports 10,000 or more wintering waterfowl (excluding Snow Geese).
5: (D4iii) Regularly supports 25 breeding pairs or more of wading birds.
6: (D4iv) Regularly supports 2,000 or more wintering gulls.
7: (D4v) Regularly supports 1,000 or more migrating shorebirds.
8: (D4vi) 3,000 or more raptors pass site per seasonal migration, or 100 per day; or 3 raptors on winter territory per square mile.
, and a square mile.

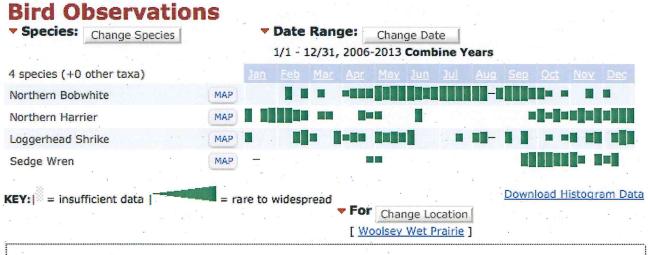
Criterion 1: (D1) Site regularly supports significant populations of one or more of the bird species considered by Audubon as vulnerable in Arkansas (Arkansas Birds of Conservation Interest)

Woolsey Wet Prairie (WWP) is an important site for a variety of birds with over 182 species reported as being found there on eBird.org since 2006. Of these, 20 are among the 36 species of birds listed as Arkansas Birds of Conservation Interest (ABCI) by the Arkansas Audubon Society. Of the 20 ABCI species found at WWP, 4 of those species meet or exceed the nonbreeding threshold criterion set for the species as highlighted in orange in Table 1 below. Additionally, four more ABCI species as highlighted in blue in Table 1 below, have been documented as occurring just a few individuals shy (<3) as meeting the nonbreeding threshold criterion.

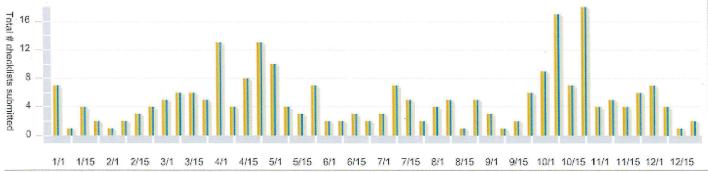
Table 1. ABCI Species Present at Woolsey Wet Prairie Sanctuary.

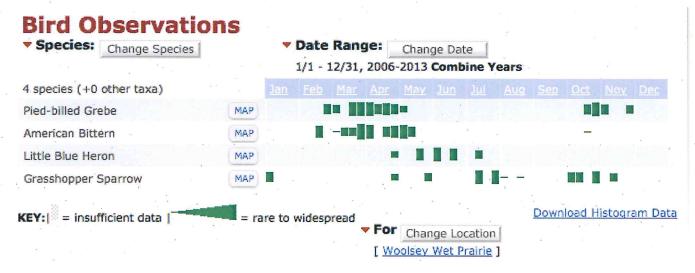
Species	Nonbreeding Threshold Individuals Criterion	Nonbreeding Individuals High Count Observed During a Single Observation	Date Observed
Pie-billed Grebe	60	5	4/16/2009
American Bittern	6	4	3/19/2011
Least Bittern	6	10	5/15/2011
Little Blue Heron	60	5	6/7/2009
Yellow-crowned Night-Heron	20	2	7/8/2009
Hooded Merganser	10	1	4/5/2011
Osprey	4	1	9/7/2011
Northern Harrier	10	9	1/23/10
Northern Bobwhite	60	30	8/8/2010
Purple Gallinule	6	1	4/26/2011
Short-eared Owl	5	6	1/14/2010
Willow Flycatcher	4		5/3/2011
Loggerhead Shrike	15	2	5/14/2010
Bell's Vireo	15	1	8/8/2011
Bank Swallow	50	1	4/26/2011
Sedge Wren	10	15	11/29/2009
Marsh Wren	10	17	10/11/2012
Grasshopper Sparrow	10	3	10/30/2010
Henslow's Sparrow	5	2	10/23/2011
Rusty Blackbird	60	15	4/5/2011

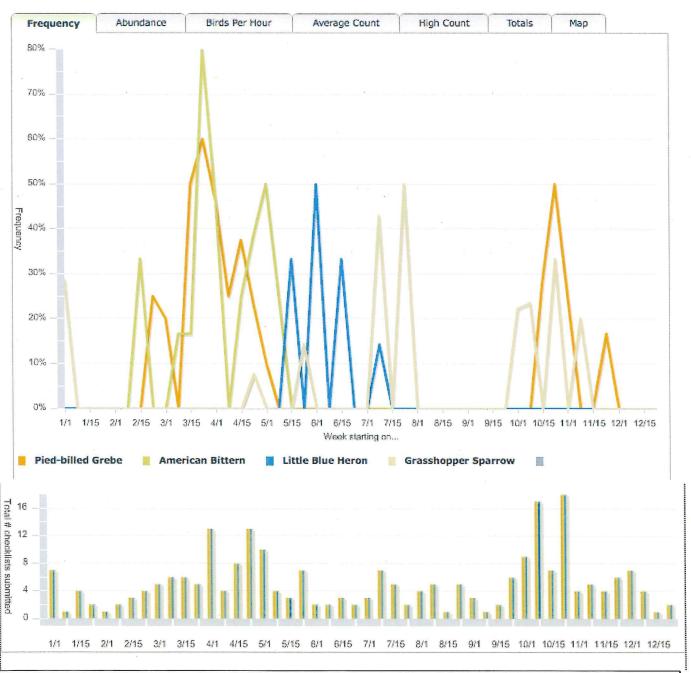
WWP regularly supports significant breeding, wintering, and/or migrating populations of several of the ABCI species. While some of these ABCI species such as the Hooded Merganser, Purple Gallinule, Osprey, and the Henslow's Sparrow have only been documented as being seen at WWP on one occasion, the site still provides the critical habitat that these species require and there is a great likelihood that these same species will be seen again in the future at WWP. The Pied-billed Grebe, American Bittern, Little Blue Heron, Grasshopper Sparrow, Northern Bobwhite, Northern Harrier, Loggerhead Shrike, and the Sedge Wren are all ABCI species that have been well documented on eBird as being found throughout the year at WWP since 2006 as shown by the eBird data attached to this document.











Criterion 2: (D3) Site contains an assemblage of species characteristic of a representative, rare, threatened, or unique habitat

Woolsey Wet Prairie (WWP) has consistently demonstrated that the site contains a broad assemblage of species characteristic of representative, rare, threatened, or unique habitat types. WWP is 43.8 acres in size and supports significant bird populations of species with very particular habitat requirements. Attached to this document is a highlighted version of Table 2, which lists all species of habitat specialists that occur in the relevant habitat types and are ABCI species or species of Great Conservation Need. WWP consists of mainly 3 habitat types including prairie, marsh/emergent wetlands, and mudflats, all of which were listed in Table 2. The species of birds in each relevant habitat type listed in Table 2 that have been recorded on eBird.org as being observed at WWP since 2006 have been highlighted. For the prairie habitat type, there were 16 of 21 (76%) of the total species listed under this habitat type. For the marsh/emergent wetland habitat type, there were 9 of the 20 (45%) of the total species listed under this habitat type. For the sandbar/mudflat habitat type, there were 13 of the 19 (68%) of the total species listed under this habitat type. For the 3 relevant habitat types that are found at WWP combined, there were a total of 38 of 60 (63%) species that were listed in Table 2. These numbers only further demonstrate how the mosaic of habitat types at WWP meets the unique set of habitat requirements for a large variety of ABCI and Great Conservation Need species.

Table 2. Bird species of conservation concern characteristic of important habitat types in Arkansas for Criterion 2.

Glade	- *
Greater F	Roadrunn

Greater Roadrunner Bewick's Wren Prairie Warbler

Rufous-crowned Sparrow

Henslow's Sparrow

Cypress-tupelo Swamp

Black-bellied Whistling-Duck Wood Duck Anhinga Snowy Egret Little Blue Heron

Black-crowned Night-Heron

Yellow-crowned Night-Heron White Ibis

Wood Stork
Purple Gallinule
Common Gallinule
Ivory-billed Woodpecker

Winter Wren Northern Parula Yellow-throated Warbler Prothonotary Warbler

Bottomland Hardwood Forest

Wood Duck Swallow-tailed Kite Mississippi Kite American Woodcock Yellow-billed Cuckoo Barred Owl Ivory-billed Woodpecker Winter Wren Yellow-throated Warbler Prothonotary Warbler Kentucky Warbler Hooded Warbler Swainson's Warbler Rusty Blackbird

Prairie

Greater Prairie-Chicken
Northern Harrier
American Golden-Plover
Buff-breasted Sandpiper
Upland Sandpiper
Barn Owl
Short-eared Owl

Pine Savanna/Woodland
Northern Bobwhite
Red-headed Woodpecker
Red-cockaded Woodpecker

Oak Savanna/Woodland Wild Turkey Northern Bobwhite Ruffed Grouse Greater Roadrunner Red-headed Woodpecker Eastern Wood-Pewee Eastern Kingbird
Scissor-tailed Flycatcher
Loggerhead Shrike
Sedge Wren
Sprague's Pipit
Field Sparrow
Vesper Sparrow

Brown-headed Nuthatch Bachman's Sparrow Pine Warbler

Red-eyed Vireo Bewick's Wren Wood Thrush Black-throated Green Warbler Black-and-white Warbler Kentucky Warbler Lark Sparrow
Grasshopper Sparrow
Henslow's Sparrow
Le Conte's Sparrow
Smith's Longspur
Dickcissel
Eastern Meadowlark

Prairie Warbler Yellow-breasted Chat

Hooded Warbler Yellow-breasted Chat Eastern Towhee Bachman's Sparrow Shrub-Scrub

Northern Bobwhite Willow Flycatcher

White-eyed Vireo

Bell's Vireo

Bewick's Wren Gray Catbird

Blue-winged Warbler

Prairie Warbler

Yellow-breasted Chat

Painted Bunting Eastern Towhee

Canebrake

Swainson's Warbler Hooded Warbler

Marsh / Emergent Wetland

Black-bellied Whistling-Duck

Mottled Duck

Pied-billed Grebe

American Bittern

Least Bittern

Snowy Egret

Little Blue Heron

Tricolored Heron

Black-crowned Night-Heron

Yellow-crowned Night-Heron

White Ibis

Wood Stork

Yellow Rail

Black Rail

King Rail

Virginia Rail

Sora

Purple Gallinule

Common Gallinule

Black-necked Stilt

Sandbar/Mudflat

Black-bellied Plover

Piping Plover

Black-necked Stilt

American Avocet

Spotted Sandpiper

Solitary Sandpiper

Greater Yellowlegs

Lesser Yellowlegs

Sanderling

Semipalmated Sandpiper

Western Sandpiper

Least Sandpiper

White-rumped Sandpiper

Pectoral Sandpiper

Dunlin

Stilt Sandpiper

Wilson's Snipe

Wilson's Phalarope

Least Tern

Natural Lake (oxbow, meander scar)

Trumpeter Swan

Wood Duck

American Black Duck

Mottled Duck

Northern Pintail

Hooded Merganser

Pied-billed Grebe

Anhinga

Snowy Egret

Little Blue Heron

Tricolored Heron

Black-crowned Night-Heron

Yellow-crowned Night-Heron

White Ibis

Wood Stork

Osprev

Bald Eagle

American Coot

Criterion 3: (D4i) Site regularly supports more than 1% of a single species' state population during some portion of the year

This is a very open ended question that has the potential to be viewed in many different ways as it is extremely difficult to even estimate the state population of a given species of bird. The mere 1% of a population in question may be a rather extremely large number if the population of the species of bird in question is in fact a very common and overly populated species such as the Red-winged Blackbird. Conversely, it may in fact be a very small number for a species such as the Cassin's Sparrow. While Woolsey Wet Prairie (WWP) consistently supports a plethora of species throughout the year, with 182 different species being documented on eBird.org at WWP since 2006, let us for the sake of this question discuss the 1% of the rare bird species that have been observed.

Species of birds, such as the Brewer's Sparrow found at WWP on December 1, 2012, was the first record of the species ever being recorded in the state of Arkansas. Consequently, it would be safe to presume that WWP supports more than 1% of the state population for this species. The same can be said for the Cassin's Sparrow and Northern Shrike found at WWP that were both only the second record of both species being found in Arkansas. The Purple Gallinule found at WWP on April 26, 2011 was the first record of the species in Arkansas, north of Cleburne County. The Prairie Falcon observed on December 16, 2012 was the first record of the species in Washington County as well as a record for the Christmas Bird Count. WWP boasts a long list of state and county records for rare bird species that have not been observed, or have only been observed but in a few areas throughout the state. Those species only having been observed at WWP in Arkansas, potentially represent more than 1% of the population of that species in the state.

Criterion 8: (D4vi) 3,000 or more raptor pass the site per seasonal migration, or 100 per day; or 3 raptors on winter territory per square mile

Woolsey Wet Prairie (WWP) easily meets the criteria of having 3 raptors on winter territory per square mile. As shown in the table below, according to data reported on eBird, from 2010 to present between the months of November to February WWP had routinely had 3 to 6 species of raptors present on the site each year with as many as 33 individuals recorded at the site during the winter months. With WWP being 43.8 acres in size and a square mile being equal to 640 acres, WWP more than meets the criteria standard as having more than 3 raptors present per square mile during the winter months at only 0.068437 mi² in size.

Table 2. Raptor species recorded on eBird as present at WWP between the months of November and February from 2010 to Present.

Year	Number of Raptor Species Recorded	Number of Individual Raptors Recorded				
2010	6	33				
2011	6	24				
2012	3	12				
2013	4	5				

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		36 2 3				
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10: (D4vii) Supports 100 or more roosting vultures. Habitat supporting roost is natural, not man- nade. 11: (D4vii) Supports 10 or more nests of Cliff Swallows or Bank Swallows. Nesting site is natural, ot man-made. 12: (D4vii) Regularly supports more than 10,000 roosting Purple Martins in migration. 13: (D4vii) Regularly contains exceptional numbers or diversity of migratory landbirds other than aptors (concentrations refer to seasonal totals rather than those occurring over brief period of time). 14: (D5) Site supports long-term avian research or monitoring efforts. 15: Site provides important, bird-specific educational opportunities. Explain below.						
_11: (D4vii) Supports tot man-made.	s 10 or more nest	s of Cliff Swallow	s or Bank Swa	llows. Nesting s	site is natur	al,
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_12: (D4vii) Regular	ly supports more	e than 10,000 roost	ing Purple Ma	rtins in migration	n.	*
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Criterion 13: (D4vii) Site regularly contains exceptional numbers or diversity of migratory landbirds other than raptors (concentrations refer to seasonal totals rather than those occurring over brief periods of time)

Migratory bird needs must be met during four phases of the year: breeding season, fall migration, wintering, and spring migration; thus, management may be needed during all four phases. The bulk of research and management has focused on the breeding season, although several issues remain unsettled, including the spatial extent of habitat influences on fitness and the importance of habitat on the breeding grounds used after breeding. Although detailed investigations have shed light on the ecology and population dynamics of a few avian species, knowledge is sketchy for most species. Replication of comprehensive studies is needed for multiple species across a range of areas.

Information deficiencies are even greater during the wintering season, when birds require sites that provide security and food resources needed for survival and developing nutrient reserves for spring migration and, possibly, reproduction. Research is needed on many species simply to identify geographic distributions, wintering sites, habitat use, and basic ecology. Studies are complicated, however, by the mobility of birds and by sexual segregation during winter.

The twice-annual migrations are the poorest-understood events in a bird's life. Migration has always been a risky undertaking, with such anthropogenic features as tall buildings, towers, and wind generators adding to the risk. Species such as woodland specialists migrating through eastern North America have numerous options for pausing during migration to replenish nutrients, but some species depend on limited stopover locations, such as wetlands and prairies. The attached eBird Detailed Year Reports for 2006 thru 2013 beginning on page 26 show the numbers and diversity of migratory land birds that have been documented at Woolsey Wet Prairie.

Criterion 14: (D5) Site supports long term avian research or monitoring efforts

Woolsey Wet Prairie (WWP) is a site that provides the ability to collect a unique and significant set of bird population data that is likely to be published, synthesized, and used for scientific purposes. WWP employs a standardized system of monitoring that has consistently resulted in a significant and high quality set of bird population data, that is published on eBird and is scientifically useful for conservation planning purposes.

Due to the unique species of plants and animals that have been observed at the site, the Fayetteville City Council has been reviewing the expansion of the adjacent city-owned land to restore an additional 70 acres of wetland prairie habitat. Furthermore, various departments within the University of Arkansas at Fayetteville, routinely conduct class field trips to the site and ecological studies are planned by various professors. These factors provide a continuing contribution to bird conservation.

Criterion 15: Site provides important, bird-specific educational opportunities

Woolsey Wet Prairie (WWP) has become highly publicized as an excellent birding site for numerous wetland and open country bird species. Travelers from nearby states come to WWP for birding, and the Northwest Arkansas Audubon Society has sponsored field trips to the site, including the annual Christmas Bird Count.

The following websites include information about birding at WWP:

http://ecoarkansas.com/WoolseyMain.html

http://www.arkansas.com/outdoors/birding/birds/!prettyPhoto/2/#!prettyPhoto

http://www.nwarkaudubon.org/

http://birding.aba.org

http://birdingchronicles.weebly.com

The following publications include discussions of birds observed at WWP:

The Birdside Baptist, Joseph C. Neal author 2010

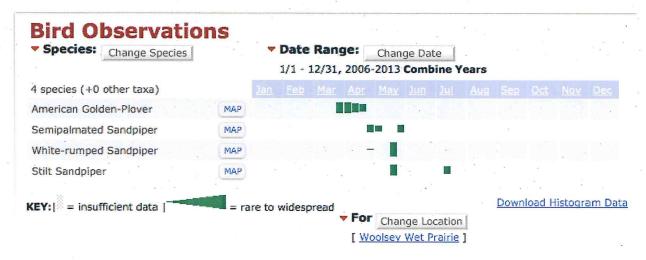
Birds in Northwest Arkansas: An Ecological Perspective, Joseph C. Neal author, published by the Northwest Arkansas Audubon Society 2009

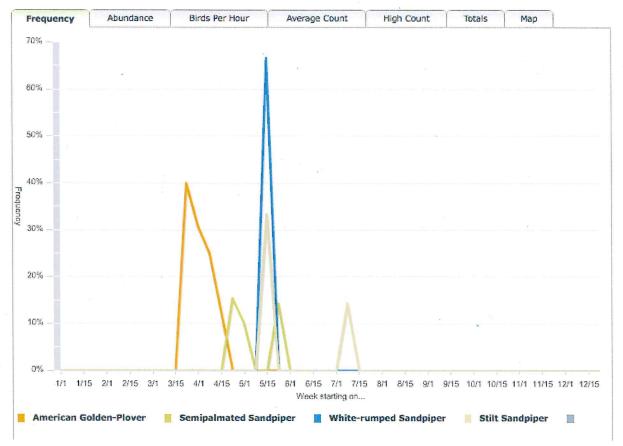
Criterion 16: (A1/B1) Site regularly supports significant populations of one or more bird species considered by Audubon to be of global or national conservation concern (Audubon WatchList)

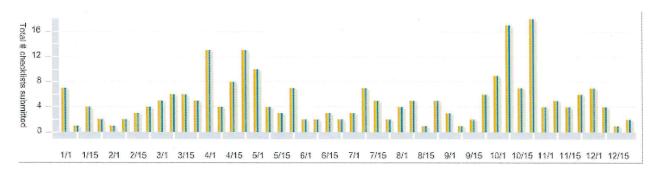
The Audubon Society lists 15 species in Table 3 that are considered WatchList species that are of global or conservation concern. According to eBird data 7 of these 15 species of birds have been recorded consistently at Woolsey Wet Prairie (WWP), with the number of occurrences rising each year. The WatchList species of birds listed in Table 3 (attached and highlighted) shows species that have been recorded on eBird as being found present at WWP since 2006. To date, this includes the American Golden-Plover, Semipalmated Sandpiper, White-rumped Sandpiper, Stilt Sandpiper, Red Headed Woodpecker, Le Conte's Sparrow, and the Painted Bunting. The number of occurrences of each of the species at the site continues to grow with the largest populations of WatchList species being the American Golden-Plover and the Le Conte's Sparrow. The included line graphs generated using eBird data provides documentation of the occurrences of these WatchList species at WWP, numbers that will likely continue to rise in the years to come.

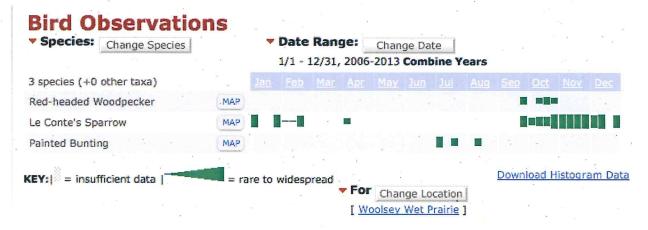
Table 3. WatchList species.

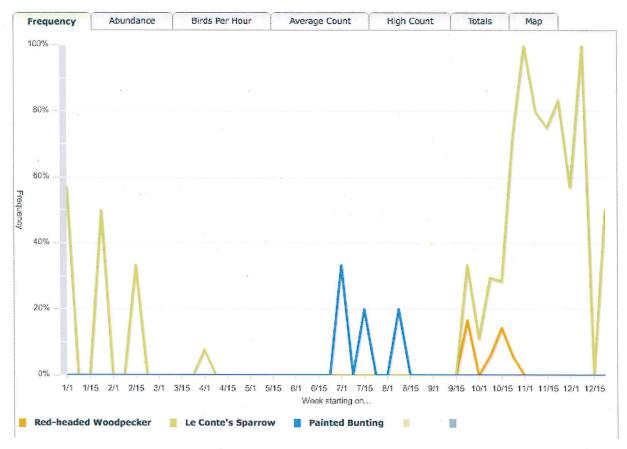
		D 11	
	WatchList	Breeding Threshold	NTo all and I'm
Species	Status	Individuals	Nonbreeding Threshold
American Golden-Ployer	Yellow	marviduais	
Sanderling	Yellow		480 120
Semipalmated Sandpiper	Yellow		480
Western Sandpiper	Yellow		480
White-rumped Sandpiper	Yellow	计算数据数据	480
Stilt Sandpiper	Yellow		480
Red-headed Woodpecker	Yellow	90	90
Olive-sided Flycatcher	Yellow		90
Wood Thrush	Yellow	480	480
Blue-winged Warbler	Yellow	240	240
Prairie Warbler	Yellow	360	360
Prothonotary Warbler	Yellow	360	360
Kentucky Warbler	Yellow	360	360
Le Conte's Sparrow	Yellow	360	360
Painted Bunting	Yellow	90	90

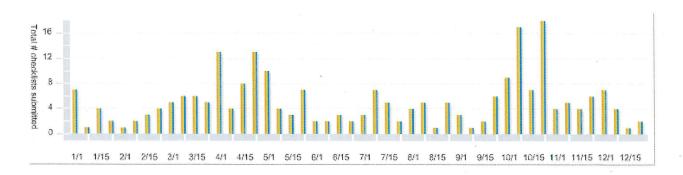












*Why is this site important for Arkansas birds?

Woolsey Wet Prairie (WWP) was established as a wetland mitigation site in the fall of 2006 and in its short 6 1/2 years of existence the site has already provided several state and county birding records and also won several conservation awards making it a very distinguished restoration area. Currently, 397 species of plants and 182 species of birds that have been documented at the 43.8-acre site.

WWP is part of the original prairie of Prairie Township, Fayetteville, Arkansas that extended all the way to the Prairie Grove and Lincoln areas in Washington County, as part of the original 100,000 acres of prairie habitat in Northwest Arkansas. Tall grass prairies once extended from Manitoba to the Texas Coast and eastward into Indiana and covered approximately 150 million acres. The tall grass prairie complex ecosystem was dominated by unique native grasses that can grow to heights of 8 or 9 feet each fall.

Plant ecologists universally agree that today, prairie is the rarest and most fragmented of North American ecosystems, and the one most in danger of being lost completely. After thriving for more than 8,000 years, aided by the restorative effects of drought, bison grazing, lightning fires and deliberate burns set by Native Americans, this diverse natural community was reduced to 2% of its original size by the early 1900's. The invention of the steel mold-board plow was responsible for a swift and amazing transformation between 1830 and 1900. It is difficult to comprehend the well-documented reality that 150 million prairie acres were converted to farmland in a mere 70 years. Even without today's advantage of powerful equipment and technology, it's hard to imagine completely transforming the landscape and ecosystem of the entire North American interior, a quarter of the continent, in the span of a single human lifetime. Today, less than 1% of the once sprawling tall grass prairie survives, as it has been brought to the brink of total destruction. Decades of crop farming, annihilation of bison, cattle grazing, mowing for hay, fire suppression, introduction of non-native plant species, and construction of drainage ditches have contributed to the degradation of the tall grass prairie ecosystem. Such land uses reduced native prairie grasses and allowed invasive plant species; including fescue, ryegrass, velvet grass, bromegrass, ragweed, Japanese honeysuckle, sumac, blackberry, sassafras, and persimmon; to overtake native plant species as community dominants.

At the dawn of tall grass prairie conservation and restoration efforts, Aldo Leopold captured the depth of what has already been lost, with his quote: "What a thousand acres of Silphiums looked like when they tickled the bellies of the buffalo is a question never again to be answered, and perhaps not even asked".

The success of restoration efforts at WWP represents a tiny living laboratory of a once vast ecosystem for present and future generations to see and touch instead reading about prairies in books. We cannot bring back the bison, the greater prairie chickens, or the eastern elk that once roamed this region of Arkansas, but we can restore and maintain an endangered ecosystem that perhaps will be of ecological significance to the avians that depend upon this habitat type. Such examples, are as follows:

➤ June 24, 2008: Bruce Shackleford photographed two female Blue-Winged Teal with 18 young ducklings. According to the Arkansas Audubon Society Arkansas Records Committee this was the 8th breeding record for Arkansas as well as the 1st record for the state of Arkansas of Blue-Winged Teal with more than 1 set of young.

- ▶ December 19, 2010: Andrew Scaboo and Brandon Schmidt photographed a Grasshopper Sparrow during the 2010 50th Annual Fayetteville Christmas Bird Count. Since the conception of the Christmas Bird Count by Dr. Douglas James in 1961, no one had previously reported a siting of a grasshopper sparrow. This was a first for this 50-year event.
- March 11, 2011: A Northern Shrike was first observed by Mike Mlodinow, and photographed by Joe Neal. This is the second record for this bird being observed in the State of Arkansas.
- ➢ April 26, 2011: A purple gallinule was observed by Mike Mlodinow and then again on May 3, 2011, which was the 1st record of the species in the state north of Cleburne County.
- ▶ July 1, 2011: Don Steinkraus observed two Black-Bellied Whistling Ducks at WWP, which was only the 6th record of the species being found in Northwest Arkansas.
- ➤ October 22, 2011: Mike Mlodinow observed a Cassin's Sparrow that was photographed by Joe Neal. This is the second state record for this species.
- ➤ October 2011: A Henslow's sparrow was observed and photographed by Jacque Brown, as was a Spotted Towhee. On the average, only one or two spotted towhees are seen in Northwest Arkansas each year, and are missed in some years
- ➤ December 1, 2011: Mike Mlodinow found a Brewer's sparrow that was photographed by Jacque Brown, David Oakley, and Mitchell Pruitt. This is the first record of this species for Arkansas.
- ➤ December 16, 2012: Andrew Scaboo photographed a Prairie Falcon at WWP, which was the 1st record of the species being recorded in Washington County and also the first record of the species during the Christmas Bird Count.
- April 24, 2013: White Faced Ibises were photographed by Joe Neal and Joan Reynolds.
- ➤ April 25, 2013: Wilson's Phalaropes were observed and photographed by Mitchell Pruitt, Joe Neal and Joan Reynolds.

Another major reason why WWP is an important site for Arkansas birds is due to the recorded presence of 20 of the 36 species of birds listed as Arkansas Bird of Conservation Interest (ABCI) by the Arkansas Audubon, which are the main focus of the Arkansas Important Bird Areas. WWP regularly supports significant breeding, wintering, and migrating populations of several of the ABCI species year in and year out providing critical habitat for these species of conservation concern.

Other than bird observations, other ecologically significant finds at WWP include:

- February 2013: Dr. J.D. Willson photographed a Small Mouth Salamander (*Ambystoma texanum*). This is a very uncommon species of salamander north of the Arkansas River Valley. Their presence is a good sign that the habitat is good for other prairie-associated species like the crawfish frog.
- April 14, 2013: Graham's Crayfish Snake (*Regina grahmii*) was photographed by Dr. J.D. Willson. According to the Arkansas Natural Heritage Commission, this species of snake has a state ranking of "very rare". This species of snake has not been recorded in northwest Arkansas in almost 60 years.

Photographs of interesting vertebrate and plant species can be viewed at:

http://www.ecoarkansas.com/WoolseyMain.html

WWP has also been the recipient of several conservation awards and certifications, as follows:

- ➤ In 2009 the City of Fayetteville became the first ever city to win the Arkansas Wildlife Federation Corporate Conservationist of the Year Award since the inception of the award in 1936. The award is granted for excellence in protecting and managing the wildlife and natural resources in Arkansas.
- WWP was named a finalist in 2009 for the ADEQ ENVY Award for environmental stewardship.
- ➤ In November of 2009, WWP was presented the Illinois River Watershed Partnership Golden Paddle Award, which honors leaders in watershed stewardship and natural resource conservation in the Illinois River Watershed.
- ➤ In February of 2011WWP was designated as a Certified Wildlife Habitat by the National Wildlife Federation.
- ➤ In October of 2011 WWP was given special recognition in the America in Bloom National Turf and Groundcover Award.
- WWP has been designated on eBird,org as a birding hotspot.

The success of WWP has been well documented in local media coverage via newspapers, periodicals, and television programs. In addition to achieving above and beyond the required wetland compensatory mitigation requirements, it has also provided recreation and educational value for the public and academia.

Currently, the City of Fayetteville is planning to expand WWP by an additional 70 to 80 acres. Approximately 30 acres of this expansion will be savanna habitat, which should provide more critical habitat for unique bird species.

IVA. Species Population Data

important (not limited to ABCI species), numbers of birds observed for each relevant unit of time, age/sex composition, data quality, count Each row should represent a count of a species at a site for a given date, season or year. List the species and season(s) for which the site is method used, and source. See Instructions for more details.

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YEAR REPORT: Species Totals

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Report Details

Date range:

Jan 1, 2006 - Dec 31, 2006

2006

Total # of Species: 1

Checklists:

Location(s): Woolsey Wet Prairie

Summary

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006
Number of Species												1
Number of Individuals												1
Number of Checklists												1

Total Number of Birds (sample size)

Species Name		Feb			,							
	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006
Short-eared Owl												1 (1)

YEAR REPORT: Species Totals



Report Details

Date range: Jan 1, 2007 - Dec 31, Species: 17

2007 Total # of Checklists: 4

Location(s): Woolsey Wet Prairie

Summary

			•	,	Jul 2007	_	•		
Number of Species	 2	14			 		1	 	
Number of Individuals	 18	90			 		3	 	
Number of Checklists	 2	1			 		1	 	

Total Number of Birds (sample size)

Species Name	Jan 2007	Feb 2007	Mar 2007	Apr 2007	May 2007	Jun 2007	Jul 2007	Aug 2007	Sep 2007	Oct 2007	Nov 2007	Dec 2007
Red-tailed Hawk			1 (1)									
Wilson's Snipe			1 (1)									
Mourning Dove			3 (1)									
American Kestrel			1 (1)									
Loggerhead Shrike			1 (1)									
Barn Swallow			2 (1)									
Northern Mockingbird			2 (1)									
Brown Thrasher			2 (1)									
European Starling			25 (1)									
American Tree		2										

Sparrow	(1)						
Le Conte's Sparrow	 16 (2)		 	 	 	 	
Swamp Sparrow	 	4 (1)	 	 	 	 	
White-throated Sparrow	 	3 (1)	 	 	 	 	
Northern Cardinal	 	3 (1)	 	 	 	 	
Dickcissel	 		 	 	 3 (1)	 	
Red-winged Blackbird	 	12 (1)	 	 	 	 	
Eastern Meadowlark	 	30 (1)	 	 	 	 	

YEAR REPORT: Species Totals

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Report Details

Date range:	Jan 1, 2008 - Dec 31,	Total # of Species:	105
Date lange:	2008	Total # of Checklists:	42

Location(s): Woolsey Wet Prairie

Summary

		Feb 2008	•	,		Jul 2008	_	•			Dec 2008
Number of Species	1		 63	41	17	33	22		48	25	20
Number of Individuals	1		 167	314	58	263	62		571	148	73
Number of Checklists	1		 6	4	2	5	4		15	3	2

Total Number of Birds (sample size)

Species Name	Jan 2008	Feb 2008	Mar 2008	Apr 2008	May 2008	Jun 2008	Jul 2008	Aug 2008	Sep 2008	Oct 2008	Nov 2008	Dec 2008
Canada Goose				15 (2)	20 (3)							
Gadwall												5 (1)
Mallard										1 (1)	1 (1)	10 (1)
Blue-winged Teal				33 (2)	17 (3)		26 (3)					
Northern Shoveler				2 (1)								
Green-winged Teal				3 (1)								
Northern Bobwhite							5 (3)	8 (1)				
Pied-billed Grebe										1 (1)	1 (1)	
American Bittern				1 (1)						2 (2)		
Least Bittern										10		

							(1)		
Great Blue Heron	 	 1 (1)	1 (1)	1 (1)	4 (4)	2 (2)	 4 (4)		
Great Egret	 	 			1 (1)	1 (1)	 		
Little Blue Heron	 	 		2 (1)			 		
Cattle Egret	 	 3 (1)					 		
Green Heron	 	 1 (1)	3 (2)	3 (2)	19 (5)	9 (2)	 		
Black Vulture	 	 	4 (1)				 2 (1)		
Turkey Vulture	 	 	8 (1)		1 (1)		 7 (3)	4 (1)	1 (1)
Northern Harrier	 	 	1 (1)	1 (1)			 		2 (2)
Sharp-shinned Hawk	 	 					 1 (1)		
Cooper's Hawk	 	 				2 (1)	 1 (1)		
Accipiter sp.	 	 					 2 (2)	1 (1)	
Bald Eagle	 	 					 		1 (1)
Red-tailed Hawk	 	 2 (1)	1 (1)		2 (2)		 8 (4)	1 (1)	2 (1)
Buteo sp.	 	 					 		
hawk sp.	 	 					 		
Sora	 	 2 (2)	1 (1)			1 (1)	 		
American Coot	 	 1 (1)		1 (1)			 		
Killdeer	 	 6 (1)	23 (1)	15 (2)	18 (2)		 21 (3)	3 (1)	
Spotted Sandpiper	 	 1 (1)	21 (3)	2 (2)			 		
Solitary Sandpiper	 	 2 (1)	7 (2)		11 (2)	11 (2)	 		
Greater Yellowlegs	 	 16 (3)	14 (1)				 		
Lesser Yellowlegs	 	 14 (3)	9 (2)		3 (1)		 		
Upland Sandpiper	 	 2 (2)	1 (1)			1 (1)	 		

Least Sandpiper	 	 1 (1)	23 (2)		5 (1)		 		
White-rumped Sandpiper	 	 3 (1)	6 (1)				 		
peep sp.	 	 					 		
Pectoral Sandpiper	 	 15 (2)	22 (3)				 		
Stilt Sandpiper	 	 			1 (1)		 		
Long-billed Dowitcher	 	 1 (1)					 		
Wilson's Snipe	 	 1 (1)				1 (1)	 7 (3)	23 (3)	10 (1)
Rock Pigeon	 	 					 1 (1)		
Eurasian Collared-Dove	 	 1 (1)					 		
Mourning Dove	 	 4 (1)	1 (1)	2 (2)	23 (3)		 23 (6)	4 (1)	
Barred Owl	 	 1 (1)					 		
Chimney Swift	 	 3 (1)	6 (1)		3 (1)		 		
Ruby-throated Hummingbird	 	 			1 (1)		 		
Belted Kingfisher	 	 			1 (1)		 		
Red-bellied Woodpecker	 	 					 2 (2)		
Downy Woodpecker	 	 1 (1)					 		
Northern Flicker	 	 1 (1)					 1 (1)		1 (1)
American Kestrel	 	 	1 (1)	1 (1)	2 (1)	2 (2)	 		1 (1)
Peregrine Falcon	 	 	1 (1)				 		
Eastern Phoebe	 	 					 		
Eastern Kingbird	 	 			2 (2)		 1 (1)		
Scissor-tailed Flycatcher	 	 	1 (1)		6 (1)	1 (1)	 2 (1)		
Loggerhead Shrike	 	 	1 (1)			1 (1)	 3 (3)	2 (2)	2 (1)

Warbling Vireo	 	 1 (1)	1 (1)				 		
Blue Jay	 	 				1 (1)	 4 (4)	2 (1)	
American Crow	 	 	1 (1)			3 (1)	 12 (5)		
Fish Crow	 	 					 		
Northern Rough- winged Swallow	 	 	13 (2)	2 (1)			 		
Purple Martin	 	 	3 (1)		10 (1)		 		
Tree Swallow	 	 					 		
Bank Swallow	 	 	2 (2)				 		
Barn Swallow	 	 	48 (2)		12 (2)	2 (1)	 		
Cliff Swallow	 	 	1 (1)				 		
House Wren	 	 					 		
Sedge Wren	 	 					 11 (4)	3 (1)	1 (1)
Marsh Wren	 	 					 10 (4)	1 (1)	
Carolina Wren	 	 					 		
Blue-gray Gnatcatcher	 	 					 		
Eastern Bluebird	 	 					 1 (1)		
American Robin	 	 	3 (2)		5 (3)		 		
Northern Mockingbird	 	 2 (1)	2 (2)	1 (1)	1 (1)	2 (1)	 1 (1)	1 (1)	
Brown Thrasher	 	 1 (1)		2 (1)	2 (2)		 		
European Starling	 	 	3 (1)	17 (2)	25 (1)		 285 (4)	10 (1)	
Northern Waterthrush	 	 2 (1)					 		
Common Yellowthroat	 	 1 (1)					 4 (2)		
Yellow Warbler	 	 				1 (1)	 		
Yellow-rumped Warbler	 	 					 		

Eastern Towhee		 	2 (1)					 		
Chipping Sparrow		 						 		
Field Sparrow		 						 		
Vesper Sparrow		 						 	5 (3)	
Savannah Sparrow		 	1 (1)	3 (1)				 14 (3)	35 (2)	20 (1)
Grasshopper Sparrow		 				3 (3)	2 (2)	 1 (1)		
Le Conte's Sparrow		 						 8 (3)	12 (3)	2 (1)
Nelson's Sparrow		 						 3 (3)		
Song Sparrow		 						 2 (1)	4 (1)	8 (1)
Lincoln's Sparrow		 						 8 (3)	2 (1)	
Swamp Sparrow		 						 27 (7)	20 (2)	1 (1)
White-throated Sparrow		 						 		
White-crowned Sparrow		 						 2 (1)		
sparrow sp.		 						 7 (3)		
Northern Cardinal		 				1 (1)		 		
Blue Grosbeak		 			1 (1)	2 (2)		 		
Indigo Bunting		 				1 (1)		 		
Dickcissel		 				4 (1)	9 (2)	 		
Bobolink		 		1 (1)				 		
Red-winged Blackbird		 	4 (1)	20 (1)	4 (2)	55 (3)		 25 (4)	5 (1)	1 (1)
Eastern Meadowlark		 	4 (2)	11 (1)	2 (2)	5 (1)		 44 (6)	8 (1)	5 (1)
Common Grackle		 		8 (1)	1 (1)			 		
Great-tailed Grackle	1 (1)	 	12 (2)					 		
Brown-headed				1						

YEAR REPORT: Species Totals

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Report Details

Date range: Jan 1, 2009 - Dec 31, Species: Total # of Species: Total # of Checklists: 86

Location(s): Woolsey Wet Prairie

Summary

	Jan 2009		Mar 2009	Apr 2009	,		Jul 2009		•	Oct 2009		Dec 2009
Number of Species	16	38	36	60	75	38	36	48	46	63	42	38
Number of Individuals	78	408	464	1,705	1,553	281	452	660	444	2,048	774	325
Number of Checklists	2	6	6	16	15	7	6	5	3	15	3	2

Total Number of Birds (sample size)

Species Name	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009
Snow Goose											20 (1)	
Ross's Goose				2 (2)								
Canada Goose		2 (1)	12 (3)	109 (9)	155 (10)	27 (2)	14 (3)	4 (1)	2 (1)	12 (2)	8 (1)	
Wood Duck										1 (1)	1 (1)	
Gadwall	15 (1)	13 (2)	12 (2)	3 (1)						17 (2)	5 (1)	19 (2)
Mallard	25 (1)	13 (2)	5 (2)							16 (6)	15 (1)	37 (2)
Blue-winged Teal			21 (3)	269 (9)	64 (6)				1 (1)	53 (6)		
Northern Shoveler			7 (1)							7 (3)	1 (1)	
Green-winged Teal		2 (1)								6 (2)	1 (1)	
duck sp.									27			

									(1)			
Northern Bobwhite				2 (2)	11 (9)	6 (3)	8 (3)	3 (3)	1 (1)			
Pied-billed Grebe		1 (1)	6 (2)	20 (6)						11 (7)	1 (1)	
American Bittern		1 (1)	4 (4)	10 (8)	3 (3)							
Least Bittern				2 (2)	1 (1)							
Great Blue Heron			3 (2)	2 (2)	4 (4)	3 (3)	2 (1)		2 (2)	10 (9)	4 (3)	2 (2)
Snowy Egret					2 (1)	2 (1)						
Little Blue Heron						5 (1)	1 (1)					
Cattle Egret					1 (1)							
Green Heron				5 (3)	8 (5)	9 (3)	30 (4)	7 (3)	1 (1)			
Yellow-crowned Night-Heron							2 (1)					
Black Vulture						1 (1)						
Turkey Vulture	2 (1)	1 (1)	4 (2)	16 (8)	3 (3)	9 (4)	3 (2)	9 (2)	3 (2)	20 (8)	4 (2)	2 (2)
Northern Harrier	1 (1)			1 (1)	2 (2)					3 (3)	3 (2)	2 (2)
Cooper's Hawk				1 (1)		1 (1)	2 (2)	2 (2)	3 (2)	4 (4)		
Accipiter sp.											1 (1)	
Red-shouldered Hawk							1 (1)		1 (1)			
Swainson's Hawk										1 (1)		
Red-tailed Hawk		6 (4)	2 (2)			1 (1)		2 (2)	5 (3)	18 (10)	6 (3)	6 (2)
Buteo sp.								2 (1)				
Sora				4 (3)	2 (2)				2 (1)	1 (1)		
American Coot	1 (1)	5 (3)	6 (3)	15 (7)	6 (4)					20 (5)	4 (1)	
American Golden- Plover			10 (2)	11 (3)								

Semipalmated Plover	 		1 (1)	24 (6)							
Killdeer	 40 (3)	68 (4)	91 (7)	86 (10)	28 (3)	47 (4)	12 (3)	16 (3)	12 (4)	56 (2)	
Spotted Sandpiper	 		11 (4)	54 (8)		1 (1)					
Solitary Sandpiper	 		31 (7)	45 (9)		3 (3)	8 (2)				
Greater Yellowlegs	 2 (2)	11 (3)	63 (8)	6 (4)							
Willet	 			3 (3)							
Lesser Yellowlegs	 	4 (2)	60 (9)	75 (6)							
Upland Sandpiper	 			1 (1)		4 (2)					
Semipalmated Sandpiper	 			3 (2)							
Least Sandpiper	 		15 (6)	73 (8)							
White-rumped Sandpiper	 			2 (1)							
Baird's Sandpiper	 		3 (3)	3 (1)							
peep sp.	 	7 (3)	1 (1)	4 (3)							
Pectoral Sandpiper	 	12 (2)	75 (8)	66 (6)							
Dunlin	 			6 (4)							
Stilt Sandpiper	 			1 (1)							
Long-billed Dowitcher	 		1 (1)	1 (1)							
Short- billed/Long-billed Dowitcher	 			6 (2)							
Wilson's Snipe	 86 (5)	66 (4)	92 (7)	11 (5)					10 (5)	13 (2)	3 (2)
Wilson's Phalarope	 			14 (5)							
Ring-billed Gull	 									3 (1)	
Rock Pigeon	 						3 (2)		2 (1)	10 (1)	12 (1)

Eurasian Collared-Dove					1 (1)					1 (1)		
Mourning Dove	1 (1)	1 (1)	6 (3)	11 (5)	25 (8)	8 (3)	15 (4)	54 (3)	19 (3)	58 (10)	3 (2)	10 (2)
Yellow-billed Cuckoo						1 (1)	1 (1)	1 (1)				
Great Horned Owl						3 (1)					1 (1)	2 (1)
Common Nighthawk					3 (1)			1 (1)				
Chimney Swift				2 (1)	42 (6)	1 (1)	5 (2)	1 (1)	1 (1)			
Ruby-throated Hummingbird								2 (2)				
Belted Kingfisher									1 (1)	2 (2)		
Red-headed Woodpecker										1 (1)		
Red-bellied Woodpecker		1 (1)	1 (1)	1 (1)		1 (1)			2 (2)	1 (1)		1 (1)
Yellow-bellied Sapsucker										1 (1)		
Downy Woodpecker	1 (1)				1 (1)				1 (1)		3 (2)	3 (2)
Hairy Woodpecker												1 (1)
Northern Flicker				2 (2)	1 (1)					2 (2)	1 (1)	
American Kestrel		1 (1)	1 (1)	1 (1)				6 (3)	3 (2)	14 (9)	5 (3)	4 (2)
Peregrine Falcon				1 (1)						2 (2)		
Willow Flycatcher								1 (1)				
Empidonax sp.					1 (1)			1 (1)	2 (1)			
Eastern Phoebe					1 (1)	1 (1)		3 (2)	2 (2)	1 (1)		
Eastern Kingbird				2 (2)	19 (9)	7 (3)	5 (3)	4 (3)				
Scissor-tailed Flycatcher				7 (5)	24 (9)	12 (3)	4 (3)	8 (4)	1 (1)	50 (6)		
Loggerhead Shrike		4 (3)	3 (3)	1 (1)	5 (5)	2 (2)	1 (1)	2 (2)	1 (1)	1 (1)	2 (1)	1 (1)
		4		3	2	8		3	2	11		1

Blue Jay		(2)		(2)	(1)	(2)		(3)	(1)	(2)		(1)
American Crow	7 (1)	10 (2)	11 (3)	3 (2)	1 (1)	2 (1)	3 (2)	8 (3)	10 (2)	32 (8)	23 (2)	8 (2)
Fish Crow				177 (4)	17 (4)			3 (1)				
crow sp.					7 (2)	3 (1)	2 (1)					
Horned Lark				1 (1)								
Northern Rough- winged Swallow			2 (1)	31 (6)	23 (10)	3 (2)	2 (1)					
Purple Martin					17 (7)		2 (1)	7 (1)				
Tree Swallow				3 (1)	8 (2)							
Bank Swallow					1 (1)							
Barn Swallow			2 (1)	33 (7)	59 (11)	10 (3)	16 (3)	11 (3)		2 (1)		
Cliff Swallow					20 (1)							
swallow sp.										5 (1)		
Carolina Chickadee		2 (2)						1 (1)				1 (1)
Tufted Titmouse		2 (1)										4 (1)
White-breasted Nuthatch												1 (1)
House Wren								2 (2)	3 (1)			
Sedge Wren	2 (1)								6 (2)	21 (8)	16 (2)	4 (2)
Marsh Wren					5 (3)				6 (1)	7 (3)	2 (1)	2 (2)
Carolina Wren	1 (1)	2 (2)						1 (1)				2 (2)
Blue-gray Gnatcatcher								1 (1)	1 (1)			
Eastern Bluebird		2 (1)	2 (1)	1 (1)	2 (1)			5 (2)	2 (1)	61 (8)	2 (1)	2 (1)
American Robin		5 (1)	35 (3)	18 (6)	35 (9)	2 (1)	3 (2)	3 (2)	2 (1)	29 (7)	2 (1)	
Northern Mockingbird	1 (1)	1 (1)	2 (2)	5 (5)	11 (9)	5 (3)	8 (4)	5 (3)	4 (2)	8 (4)	1 (1)	2 (2)

Brown Thrasher					2 (1)	2 (1)	1 (1)	6 (2)	1 (1)			
European Starling	5 (1)		15 (1)	20 (4)	19 (4)	36 (3)	10 (1)	121 (2)	10 (1)	451 (10)	17 (2)	58 (2)
American Pipit				2 (1)								
Lapland Longspur		1 (1)										
Orange-crowned Warbler										1 (1)		
Nashville Warbler										1 (1)		
Common Yellowthroat					3 (3)			1 (1)	4 (3)	3 (2)		
Yellow Warbler					4 (4)			2 (2)				
Yellow-rumped Warbler				1 (1)						11 (3)		
Wilson's Warbler									1 (1)			
American Tree Sparrow	1 (1)											
Chipping Sparrow										4 (1)		
Clay-colored Sparrow										2 (2)		
Field Sparrow									2 (1)	14 (7)	3 (2)	6 (2)
Vesper Sparrow										2 (2)		
Lark Sparrow				14 (2)	1 (1)			6 (2)				
Savannah Sparrow		80 (3)	40 (3)	200 (8)	63 (6)				1 (1)	239 (9)	29 (3)	9 (2)
Grasshopper Sparrow					2 (1)					2 (2)		
Le Conte's Sparrow		3 (1)							1 (1)	40 (7)	4 (2)	3 (2)
Nelson's Sparrow										3 (3)		
Song Sparrow	4 (1)	16 (2)	1 (1)	3 (2)						12 (8)	17 (3)	20 (2)
Lincoln's Sparrow					1 (1)					14 (7)		
		17	1	4					3	72	35	45

Swamp Sparrow White-throated		(2)	(1)	(3)					(2)	(8) 9	(2)	(2) 4
Sparrow White-crowned Sparrow		10 (1)								(4) 36 (6)	12 (3)	(2) 8 (2)
Dark-eyed Junco	3 (1)	7 (2)										
sparrow sp.			35 (1)						1 (1)	4 (2)		
Northern Cardinal		2 (1)	2 (2)	1 (1)	4 (3)	2 (1)	4 (3)	2 (1)	1 (1)	2 (2)	1 (1)	3 (2)
Blue Grosbeak						1 (1)	5 (2)	5 (2)	2 (1)			
Indigo Bunting						1 (1)	4 (2)	14 (3)	6 (3)			
Dickcissel					9 (4)	12 (3)	30 (4)	30 (3)	5 (1)			
Bobolink					2 (1)							
Red-winged Blackbird		39 (2)	30 (3)	209 (8)	290 (10)	40 (3)	170 (4)	270 (3)	255 (3)	497 (10)	357 (3)	8 (2)
_	 8 (1)											
Blackbird Eastern		(2) 26	(3) 15	(8) 27	(10) 27	(3) 10	(4) 36	(3) 12	(3) 18	(10) 91	(3) 71	(2) 23
Blackbird Eastern Meadowlark Yellow-headed	(1)	(2) 26	(3) 15	(8) 27 (5) 2	(10) 27 (8)	(3) 10	(4) 36	(3) 12	(3) 18	(10) 91	(3) 71	(2) 23
Blackbird Eastern Meadowlark Yellow-headed Blackbird	(1)	(2) 26	(3) 15	(8) 27 (5) 2	(10) 27 (8)	(3) 10	(4) 36	(3) 12	(3) 18	(10) 91	(3) 71 (3) 3	(2) 23 (2) 4
Blackbird Eastern Meadowlark Yellow-headed Blackbird Rusty Blackbird	(1)	(2) 26	(3) 15	(8) 27 (5) 2 (2) 3	(10) 27 (8) 48	(3) 10 (3) 12	(4) 36 (4) 6	(3) 12 (2) 1	(3) 18	(10) 91	(3) 71 (3) 3	(2) 23 (2) 4
Blackbird Eastern Meadowlark Yellow-headed Blackbird Rusty Blackbird Common Grackle Great-tailed	(1)	(2) 26	(3) 15	(8) 27 (5) 2 (2) 3	(10) 27 (8) 48	(3) 10 (3) 12 (3) 3	(4) 36 (4) 6 (2)	(3) 12 (2) 1	(3) 18	(10) 91	(3) 71 (3) 3	(2) 23 (2) 4
Blackbird Eastern Meadowlark Yellow-headed Blackbird Rusty Blackbird Common Grackle Great-tailed Grackle Brown-headed	(1)	(2) 26	(3) 15	(8) 27 (5) 2 (2) 3	(10) 27 (8) 48	(3) 10 (3) 12 (3) 3 (3)	(4) 36 (4) 6 (2) 1	(3) 12 (2) 1	(3) 18	(10) 91	(3) 71 (3) 3	(2) 23 (2) 4
Blackbird Eastern Meadowlark Yellow-headed Blackbird Rusty Blackbird Common Grackle Great-tailed Grackle Brown-headed Cowbird	(1)	(2) 26	(3) 15	(8) 27 (5) 2 (2) 3	(10) 27 (8) 48	(3) 10 (3) 12 (3) 3 (3)	(4) 36 (4) 6 (2) 1	(3) 12 (2) 1	(3) 18 (3) 	(10) 91	(3) 71 (3) 3	(2) 23 (2) 4

YEAR REPORT: High Count



Report Details

Date range: Jan 1, 2010 - Dec 31, Species: Total # of Species: Total # of Checklists: 46

Location(s): Woolsey Wet Prairie

Summary

	Jan 2010			•	,		Jul 2010	_	•		Nov 2010	Dec 2010
Number of Species	43	36	29	40	42	25	46	39	26	73	43	2
Number of Individuals	1,292	533	281	294	218	86	1,103	721	366	2,548	1,839	187
Number of Checklists	14	2	2	2	2	1	4	3	3	10	2	1

Highest Count for a Species (sample size)

Species Name	Jan 2010	Feb 2010	Mar 2010	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010
Canada Goose	50 (6)	25 (2)	10 (1)	15 (2)	10 (1)		1 (1)			7 (2)		
Wood Duck								4 (2)				
Gadwall	40 (1)	30 (1)	8 (1)								4 (1)	
Mallard	32 (6)	125 (1)	8 (1)							1 (1)	2 (1)	
Blue-winged Teal				5 (2)	2 (1)							
Northern Shoveler	1 (5)	25 (1)										
Northern Pintail		2 (1)										
Green-winged Teal	4 (5)	10 (1)										
duck sp.	100 (2)	X (1)								20 (1)		
Northern				6	2	3	4	30	25	6		

Bobwhite				(1)	(2)	(1)	(4)	(3)	(2)	(3)		
Pied-billed Grebe										2 (3)		
Great Blue Heron	1 (2)	1 (1)		2 (1)	1 (1)	1 (1)	1 (1)		1 (1)	2 (6)		
Green Heron					2 (1)	2 (1)	3 (2)	2 (2)				
Black Vulture					1 (1)		2 (1)					
Turkey Vulture	4 (7)	2 (2)	1 (1)	2 (2)	5 (2)	2 (1)	4 (4)	2 (3)	2 (2)	3 (9)	10 (1)	
Northern Harrier	9 (9)	3 (2)								1 (2)	1 (1)	
Cooper's Hawk	1 (1)		1 (1)					1 (2)		1 (5)	2 (2)	
Sharp- shinned/Cooper's Hawk	1 (1)											
Accipiter sp.	1 (3)										1 (1)	
Bald Eagle	2 (1)											
Red-shouldered Hawk		3 (1)								1 (1)		
Swainson's Hawk									2 (1)			
Red-tailed Hawk	4 (9)	1 (1)	1 (1)	1 (1)	1 (1)	1 (1)	2 (4)	1 (2)	1 (2)	2 (7)	2 (2)	
Buteo sp.										1 (2)		
Sora									3 (1)	1 (1)		
Killdeer	1 (1)	8 (1)	4 (1)	8 (2)	10 (2)	5 (1)	6 (4)	4 (2)	4 (2)	3 (8)	2 (2)	
Spotted Sandpiper				1 (1)								
Solitary Sandpiper				4 (2)	2 (1)		1 (1)	1 (1)				
Lesser Yellowlegs					1 (1)							
Greater/Lesser Yellowlegs				1 (1)								
Upland Sandpiper				6 (2)								
Pectoral				1								

Sandpiper				(1)								
Wilson's Snipe	12 (7)	25 (1)	27 (1)	8 (1)	1 (1)					3 (3)		
Rock Pigeon	4 (5)			15 (1)	5 (2)		4 (1)	3 (1)		10 (4)	15 (1)	
Mourning Dove	4 (2)	6 (1)	2 (2)	2 (2)	2 (1)		15 (4)	5 (3)	6 (2)	20 (9)	50 (2)	
Yellow-billed Cuckoo					2 (1)	2 (1)		1 (1)				
Great Horned Owl							1 (2)		1 (1)	1 (1)		
Short-eared Owl	6 (5)		1 (1)									
owl sp.										1 (1)		
Common Nighthawk					1 (1)							
Chimney Swift				2 (1)	1 (1)		3 (3)	3 (2)		32 (2)		
Belted Kingfisher					1 (1)			1 (1)		1 (2)	1 (1)	
Red-bellied Woodpecker					1 (1)		15 (2)			2 (7)	1 (2)	
Yellow-bellied Sapsucker										1 (1)	2 (1)	
Downy Woodpecker							1 (1)		1 (1)	1 (5)	1 (2)	
Northern Flicker	3 (6)	3 (2)	2 (1)	2 (1)						5 (6)	2 (1)	
Pileated Woodpecker										1 (1)		
American Kestrel	2 (8)	5 (2)	1 (1)	1 (1)	2 (2)		2 (2)	2 (1)		1 (5)	2 (2)	
Willow Flycatcher								1 (2)				
Empidonax sp.								1 (1)				
Eastern Phoebe				1 (1)			3 (2)			4 (6)		
Eastern Kingbird				2 (1)	3 (2)	2 (1)	2 (4)	3 (3)				
Scissor-tailed Flycatcher				4 (2)	2 (2)	10 (1)	6 (4)	4 (3)	3 (2)	6 (6)		
Loggerhead Shrike				1 (1)	2 (2)							

White-eyed Vireo										1 (1)		
Bell's Vireo									1 (1)			
Blue Jay		2 (1)	1 (1)	1 (2)	1 (1)		2 (3)			5 (7)	2 (2)	
American Crow	6 (7)	5 (2)	4 (2)	1 (1)	2 (1)		2 (4)	1 (1)	X (2)	9 (9)	4 (2)	
Fish Crow				2 (2)	1 (1)			2 (1)				
crow sp.					5 (1)	X (1)						
Horned Lark										3 (1)		
Northern Rough- winged Swallow				2 (2)	4 (2)	1 (1)				2 (1)		
Purple Martin				5 (1)	6 (2)	5 (1)	6 (3)					
Tree Swallow				1 (1)								
Barn Swallow				2 (2)	4 (2)	3 (1)	5 (4)	3 (3)		1 (1)		
swallow sp.							1 (1)					
Carolina Chickadee	1 (4)						1 (1)			1 (1)		
Tufted Titmouse			1 (1)									
House Wren								1 (1)	1 (1)	2 (4)		
Sedge Wren									1 (1)	4 (6)	2 (2)	
Marsh Wren										5 (6)		
Carolina Wren	1 (4)		3 (2)				2 (3)	1 (2)		2 (7)	3 (2)	
Blue-gray Gnatcatcher								1 (2)				
Eastern Bluebird	2 (6)	2 (1)		2 (1)	2 (1)	2 (1)	3 (4)	2 (3)		12 (7)	3 (2)	
American Robin	24 (6)	75 (2)	70 (1)	6 (2)	6 (1)	4 (1)	5 (4)	3 (2)	6 (1)	30 (6)	5 (2)	
Northern Mockingbird	1 (1)	2 (1)		2 (2)	1 (2)	2 (1)	3 (4)	1 (3)	1 (1)	5 (9)	4 (2)	
Brown Thrasher					1		4	1		1		

					(2)		(3)	(1)		(1)		
European Starling	13 (8)	15 (2)	11 (2)	10 (1)	10 (2)	5 (1)	20 (4)	40 (1)	15 (1)	200 (9)	40 (2)	
American Pipit	6 (2)										2 (2)	
Cedar Waxwing							1 (1)					
longspur sp.											1 (1)	
Common Yellowthroat						2 (1)	2 (4)	2 (3)	8 (1)	10 (4)		
Yellow Warbler								3 (3)				
Palm Warbler				1 (1)						1 (1)		
Yellow-rumped Warbler			1 (1)							1 (4)		
Wilson's Warbler									1 (1)			
warbler sp.										1 (1)		
American Tree Sparrow	110 (8)	2 (1)	2 (1)									
Chipping Sparrow										8 (1)		
Field Sparrow	2 (6)	2 (2)	2 (1)							8 (2)	3 (2)	
Vesper Sparrow										1 (3)		
Lark Sparrow							1 (1)					
Savannah Sparrow	35 (8)	8 (1)	40 (1)	20 (2)						60 (8)	110 (2)	
Grasshopper Sparrow							1 (1)			3 (2)		
Le Conte's Sparrow										9 (2)	21 (2)	
Fox Sparrow										1 (1)	1 (1)	
Song Sparrow	35 (9)	15 (1)	7 (2)	1 (2)						20 (3)	70 (2)	117 (1)
Lincoln's Sparrow										6 (6)	2 (2)	
Swamp Sparrow	10 (7)	5 (1)								20 (6)	80 (2)	70 (1)

White-throated Sparrow	2 (1)	3 (1)								5 (3)	2 (2)	
Harris's Sparrow		1 (1)										
White-crowned Sparrow	20 (2)		2 (1)							8 (7)	20 (2)	
Dark-eyed Junco	20 (2)	3 (2)	8 (2)						1 (1)	1 (1)	2 (1)	
sparrow sp.		2 (1)			1 (1)							
Northern Cardinal	1 (1)	1 (2)	3 (1)	1 (2)	2 (1)	2 (1)	3 (4)	2 (3)	2 (1)	3 (7)	3 (2)	
Blue Grosbeak					2 (1)		2 (3)	5 (3)		1 (2)		
Indigo Bunting						1 (1)	3 (4)	3 (2)	8 (2)	5 (4)		
Painted Bunting							1 (2)	1 (1)				
Dickcissel					5 (1)	8 (1)	62 (4)	40 (3)	4 (1)	2 (2)		
					(-)	(-)	(')	(-)	(-)	(-)		
Red-winged Blackbird	16 (7)	45 (2)	30 (1)	30 (2)	25 (2)	10 (1)	260 (4)	200 (3)	200 (2)	500 (9)	50 (2)	
_					25	10	260	200	200	500		
Blackbird Eastern	(7) 50	(2) 15	(1) 15	(2) 15	25 (2) 10	10 (1) 6	260 (4) 20	200 (3) 10	200 (2) 2	500 (9) 30	(2) 20	
Blackbird Eastern Meadowlark Brewer's	(7) 50	(2) 15 (2) 1	(1) 15	(2) 15	25 (2) 10	10 (1) 6	260 (4) 20	200 (3) 10	200 (2) 2	500 (9) 30	(2) 20	
Blackbird Eastern Meadowlark Brewer's Blackbird	(7) 50	(2) 15 (2) 1	(1) 15 (1) 3	(2) 15 (2) 10	25 (2) 10 (2) 20	10 (1) 6 (1) 	260 (4) 20 (4) 2	200 (3) 10	200 (2) 2	500 (9) 30 (8) 	(2) 20 (2) 300	
Blackbird Eastern Meadowlark Brewer's Blackbird Common Grackle Brown-headed	(7) 50 (7) 1	(2) 15 (2) 1	(1) 15 (1) 3	(2) 15 (2) 10	25 (2) 10 (2) 20	10 (1) 6 (1) 	260 (4) 20 (4) 2 (2) 1	200 (3) 10	200 (2) 2	500 (9) 30 (8) 30 (2) 2	(2) 20 (2) 300	
Blackbird Eastern Meadowlark Brewer's Blackbird Common Grackle Brown-headed Cowbird	(7) 50 (7) 1	(2) 15 (2) 1	(1) 15 (1) 3	(2) 15 (2) 10	25 (2) 10 (2) 20	10 (1) 6 (1) 6 (1) 1	260 (4) 20 (4) 2 (2) 1 (2)	200 (3) 10	200 (2) 2	500 (9) 30 (8) 30 (2) 2	(2) 20 (2) 300	
Blackbird Eastern Meadowlark Brewer's Blackbird Common Grackle Brown-headed Cowbird Orchard Oriole	(7) 50 (7) 1 (5) 10	(2) 15 (2) 1	(1) 15 (1) 3	(2) 15 (2) 10	25 (2) 10 (2) 20	10 (1) 6 (1) 6 (1) 1	260 (4) 20 (4) 2 (2) 1 (2)	200 (3) 10	200 (2) 2	500 (9) 30 (8) 30 (2) 2	(2) 20 (2) 300 (1) 500	
Blackbird Eastern Meadowlark Brewer's Blackbird Common Grackle Brown-headed Cowbird Orchard Oriole blackbird sp.	(7) 50 (7) 1 (5) 10	(2) 15 (2) 1	(1) 15 (1) 3	(2) 15 (2) 10	25 (2) 10 (2) 20	10 (1) 6 (1) 6 (1) 1	260 (4) 20 (4) 2 (2) 1 (2)	200 (3) 10	200 (2) 2	500 (9) 30 (8) 30 (2) 2 (1) 2	(2) 20 (2) 300 (1) 500 (2) 5	

YEAR REPORT: Species Totals

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Report Details

Date range:	Jan 1, 2011 - Dec 31,	Total # of Species:	158
Date range.	2011	Total # of Checklists:	92

Location(s): Woolsey Wet Prairie

Summary

				•	,		Jul 2011	_	•			Dec 2011
Number of Species	39	23	68	89	73	35	49	56	53	77	56	53
Number of Individuals	1,459	440	2,057	1,595	908	372	1,247	1,339	602	2,947	2,194	1,494
Number of Checklists	3	2	17	5	6	2	5	8	6	16	10	12

Total Number of Birds (sample size)

Species Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Species Name	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Black-bellied Whistling-Duck						4 (2)						
Snow Goose												200 (1)
Canada Goose			113 (11)	46 (4)	57 (3)				5 (2)		1 (1)	13 (1)
Gadwall			77 (4)							8 (2)	64 (2)	2 (1)
Mallard		10 (1)	81 (6)	11 (4)	3 (2)						16 (2)	6 (4)
Blue-winged Teal			22 (3)	93 (4)	7 (1)							
Northern Shoveler				3 (3)								
Green-winged Teal			2 (2)	4 (2)							4 (1)	5 (1)
Hooded Merganser				1 (1)								
duck sp.			4								1	

			(2)								(1)	
Northern Bobwhite			2 (1)	5 (2)	6 (3)	1 (1)	13 (4)	26 (3)	26 (3)	8 (2)	10 (1)	8 (1)
Pied-billed Grebe			4 (4)	4 (4)	1 (1)							
Double-crested Cormorant				120 (1)								
American White Pelican												1 (1)
American Bittern			9 (5)	6 (4)	3 (2)							
Least Bittern					1 (1)							
Great Blue Heron	2 (2)	1 (1)	3 (3)	3 (3)	3 (3)	1 (1)	3 (3)	3 (3)	1 (1)	4 (4)	3 (3)	2 (2)
Great Egret					2 (1)							
Green Heron				1 (1)	11 (5)	3 (1)	5 (4)	10 (5)				
Yellow-crowned Night-Heron				1 (1)	1 (1)							
Black Vulture	13 (3)	2 (1)	3 (1)	1 (1)					1 (1)		9 (1)	2 (1)
Turkey Vulture	29 (3)	2 (1)	42 (9)	18 (4)	14 (4)	4 (1)	24 (4)	18 (7)	15 (4)	73 (9)	25 (6)	22 (8)
Osprey									1 (1)			
Northern Harrier	1 (1)	2 (1)	2 (2)	2 (2)							3 (3)	5 (4)
Sharp-shinned Hawk		1 (1)		1 (1)						3 (3)	4 (4)	
Cooper's Hawk		1 (1)	6 (6)	1 (1)			1 (1)	4 (4)	1 (1)	4 (4)	3 (2)	2 (2)
Accipiter sp.										1 (1)		
Bald Eagle	1 (1)			1 (1)							1 (1)	
Red-shouldered Hawk	5 (3)		9 (6)	6 (4)	1 (1)				2 (2)	1 (1)		
Red-tailed Hawk	3 (3)	1 (1)	18 (12)	7 (4)	8 (5)	1 (1)	3 (2)	8 (5)	6 (4)	14 (8)	9 (5)	12 (8)
Buteo sp.										1 (1)		
Sora				5 (3)	1 (1)				1 (1)			

Purple Gallinule		 	1 (1)	1 (1)							
American Coot		 7 (7)	6 (3)	4 (1)							
American Golden-Plover		 	30 (1)								
Killdeer		 39 (8)	13 (4)	6 (4)	7 (1)	8 (4)	20 (6)	6 (4)	13 (9)	12 (4)	10 (8)
Spotted Sandpiper		 	2 (1)								
Solitary Sandpiper		 3 (3)	26 (3)	10 (2)			1 (1)				
Greater Yellowlegs		 	6 (3)								
Lesser Yellowlegs		 4 (2)	20 (3)	1 (1)							
Upland Sandpiper		 		2 (1)			8 (4)	13 (4)			
Least Sandpiper		 		4 (1)							
Pectoral Sandpiper		 4 (2)		3 (1)							
Wilson's Snipe		 49 (9)	40 (4)	1 (1)						3 (3)	1 (1)
Rock Pigeon		 					9 (3)	7 (2)	14 (5)		2 (1)
Eurasian Collared-Dove		 		2 (1)			10 (4)	4 (2)			
Mourning Dove	1 (1)	 9 (5)	7 (4)	13 (4)	38 (1)	191 (4)	145 (7)	51 (4)	184 (10)	99 (5)	29 (8)
Yellow-billed Cuckoo		 		2 (2)	2 (1)	2 (2)					
Great Horned Owl		 2 (1)		1 (1)					2 (1)		
owl sp.		 					1 (1)		2 (1)		
Chimney Swift		 	11 (2)	10 (4)		2 (1)	9 (4)		105 (1)		
Ruby-throated Hummingbird		 	1 (1)	1 (1)		9 (4)	20 (7)				
Belted Kingfisher		 	2 (2)								
Red-headed Woodpecker		 							2 (2)		
Red-bellied	3	 7	3			3	4	2	11	4	3

Woodpecker	(3)		(7)	(3)			(3)	(3)	(2)	(10)	(3)	(3)
Yellow-bellied Sapsucker										3 (2)		
Downy Woodpecker			14 (5)	3 (3)			1 (1)	2 (2)	8 (4)	7 (6)		3 (2)
Hairy Woodpecker										1 (1)		
Downy/Hairy Woodpecker										1 (1)		
Northern Flicker	2 (2)	2 (1)	1 (1)	6 (2)			4 (2)	2 (2)	1 (1)	5 (2)	1 (1)	1 (1)
Pileated Woodpecker								1 (1)				1 (1)
American Kestrel	2 (2)		4 (4)	5 (3)	3 (2)	2 (1)	4 (4)	8 (5)	3 (2)	7 (6)	5 (5)	5 (4)
Merlin				1 (1)						2 (2)		
Eastern Wood- Pewee									2 (1)			
Alder Flycatcher								4 (4)				
Willow Flycatcher					1 (1)							
Least Flycatcher									1 (1)			
Empidonax sp.					1 (1)			7 (4)	1 (1)			
Eastern Phoebe	1 (1)		7 (5)	2 (1)	2 (2)	1 (1)	7 (3)	3 (3)	6 (4)	7 (6)		1 (1)
Great Crested Flycatcher							2 (2)					
Eastern Kingbird				1 (1)	17 (5)	4 (1)	8 (4)	9 (4)	3 (2)			
Scissor-tailed Flycatcher				6 (2)	13 (3)	5 (1)	18 (4)	42 (7)	28 (4)	35 (10)		
Loggerhead Shrike								1 (1)	1 (1)			
Northern Shrike			4 (4)									
shrike sp.			1 (1)									
Bell's Vireo							2 (2)	2 (2)				
Warbling Vireo				1 (1)								

Red-eyed Vireo					1 (1)							
Blue Jay	3 (3)	1 (1)	8 (8)	5 (4)	2 (2)	1 (1)	6 (4)	8 (7)	9 (4)	60 (11)	12 (6)	10 (4)
American Crow	7 (3)	2 (1)	39 (11)	7 (4)	5 (4)	2 (1)	19 (4)	14 (5)	15 (4)	113 (11)	31 (5)	40 (9)
Fish Crow			4 (2)	2 (2)	2 (2)	2 (1)		4 (1)		1 (1)		
crow sp.				2 (1)								
Northern Rough- winged Swallow			7 (2)	20 (4)	6 (2)	1 (1)	1 (1)			1 (1)		
Purple Martin				6 (3)	5 (4)	3 (1)	10 (3)	9 (4)				
Tree Swallow				6 (2)								
Bank Swallow				1 (1)								
Barn Swallow			1 (1)	19 (4)	39 (5)	4 (1)	14 (4)	13 (5)	3 (1)	3 (1)		
Cliff Swallow				1 (1)			1 (1)		1 (1)			
Carolina Chickadee	6 (3)		4 (4)	3 (3)	1 (1)		2 (2)	3 (3)	4 (4)	6 (4)	1 (1)	1 (1)
Tufted Titmouse			6 (6)	1 (1)							1 (1)	
White-breasted Nuthatch	1 (1)									1 (1)		
House Wren	3 (3)			3 (2)	2 (2)		1 (1)	8 (6)	1 (1)	18 (8)		
Sedge Wren				1 (1)	1 (1)					9 (5)	1 (1)	
Marsh Wren				1 (1)	1 (1)				3 (2)	9 (6)		
Carolina Wren	6 (3)		1 (1)	1 (1)	1 (1)	1 (1)	3 (2)	7 (5)		1 (1)	2 (2)	2 (1)
Blue-gray Gnatcatcher				1 (1)	1 (1)			4 (4)	6 (2)			
Eastern Bluebird	15 (3)		10 (6)	3 (3)	5 (3)		6 (3)	8 (4)	39 (4)	35 (10)	14 (5)	33 (6)
American Robin		2 (1)	126 (10)	83 (4)	28 (4)	4 (1)	21 (4)	54 (5)	20 (3)	29 (6)	34 (5)	
Gray Catbird					1 (1)				2 (2)			
Northern	19		28	8	15	2	11	25	6	33	15	19

Mockingbird	(3)		(10)	(4)	(4)	(1)	(4)	(7)	(4)	(11)	(5)	(7)
Brown Thrasher			5 (3)	11 (4)	18 (4)	4 (1)	8 (4)	3 (3)	3 (2)	3 (2)	4 (4)	
European Starling	76 (3)	4 (1)	489 (10)	78 (4)	40 (3)	43 (1)	106 (4)	242 (7)	140 (4)	1,071 (10)	135 (5)	150 (7)
American Pipit			2 (1)								9 (2)	
Cedar Waxwing									60 (2)		15 (2)	
Lapland Longspur											33 (3)	4 (2)
Louisiana Waterthrush								1 (1)				
Northern Waterthrush				1 (1)	1 (1)							
Black-and-white Warbler									1 (1)			
Orange-crowned Warbler										1 (1)		
Nashville Warbler										1 (1)		
Common Yellowthroat				2 (1)	12 (3)	2 (1)	8 (4)	3 (2)	9 (3)	13 (5)		
Northern Parula									1 (1)			
Yellow Warbler				1 (1)	4 (4)			11 (6)				
Palm Warbler				1 (1)						4 (3)		
Pine Warbler										1 (1)		
Yellow-rumped Warbler	3 (3)		7 (6)	5 (3)						5 (4)		5 (2)
Wilson's Warbler					1 (1)					1 (1)		
Spotted Towhee										3 (3)		
Eastern Towhee										1 (1)		
Cassin's Sparrow										2 (2)		
American Tree Sparrow	13 (1)	270 (2)	7 (3)								4 (3)	31 (10)
Chipping Sparrow			1 (1)				1 (1)	1 (1)		5 (3)		

Clay-colored Sparrow				4 (1)					2 (2)			
Brewer's Sparrow												10 (10)
Field Sparrow	3 (3)		4 (3)	5 (2)			2 (1)		2 (1)	12 (5)	6 (2)	4 (3)
Vesper Sparrow			2 (2)	1 (1)						6 (3)		
Lark Sparrow					1 (1)							
Savannah Sparrow	461 (3)	12 (1)	189 (6)	325 (4)	30 (2)					216 (11)	256 (6)	280 (10)
Grasshopper Sparrow	2 (2)			1 (1)						8 (5)		
Henslow's Sparrow										6 (3)		
Le Conte's Sparrow	10 (3)									8 (5)	16 (5)	14 (9)
Nelson's Sparrow										2 (2)		
Fox Sparrow											6 (1)	
Song Sparrow	241 (3)	42 (1)	89 (10)	12 (2)						49 (6)	120 (6)	162 (10)
Lincoln's Sparrow			2 (1)	37 (4)	6 (2)					86 (10)	4 (2)	2 (2)
Swamp Sparrow	81 (3)	23 (1)	32 (6)	58 (4)						55 (11)	25 (4)	17 (5)
White-throated Sparrow	5 (3)		5 (4)	6 (2)	1 (1)					24 (7)	4 (2)	11 (3)
Harris's Sparrow	6 (2)										4 (1)	2 (2)
White-crowned Sparrow	52 (3)	5 (1)	49 (11)	30 (4)						56 (8)	61 (5)	101 (8)
Dark-eyed Junco	75 (3)	1 (1)	6 (3)							7 (2)	21 (3)	13 (3)
sparrow sp.			25 (1)									
Summer Tanager									2 (2)			
Northern Cardinal	9 (3)	1 (1)	35 (11)	30 (4)	20 (4)	4 (1)	16 (4)	29 (7)	21 (4)	36 (10)	14 (4)	25 (3)
Blue Grosbeak					3 (3)	1 (1)	11 (4)	25 (7)				

Indigo Bunting					1 (1)	1 (1)	12 (4)	20 (7)	6 (2)	74 (4)		
Dickcissel					(1) 21 (4)	55 (1)	224 (4)	251 (7)	13 (4)	7 (4)		
Red-winged Blackbird	124 (3)	50 (1)	154 (12)	141 (4)	235 (5)	116 (1)	330 (4)	85 (7)		150 (7)	222 (4)	38 (2)
Eastern Meadowlark	91 (3)	2 (1)	67 (12)	28 (4)	32 (4)	11 (1)	83 (4)	74 (7)	30 (4)	136 (10)	63 (4)	72 (8)
Western Meadowlark										1 (1)	2 (1)	2 (2)
Eastern/Western Meadowlark											4 (1)	
Rusty Blackbird			39 (3)	29 (2)							3 (2)	1 (1)
Common Grackle	70 (1)	3 (1)	10 (2)	15 (4)	125 (4)	33 (1)	12 (3)			10 (7)	550 (2)	31 (4)
Great-tailed Grackle				1 (1)			2 (2)					
Brown-headed Cowbird			40 (1)	64 (2)	11 (3)	6 (1)	11 (3)	3 (2)		36 (4)	103 (2)	
Orchard Oriole					1 (1)	1 (1)	5 (2)	1 (1)				
blackbird sp.								30 (1)				
House Finch	8 (2)		6 (4)				5 (1)	9 (5)	1 (1)	13 (5)	60 (5)	19 (7)
American Goldfinch	6 (3)		6 (3)	2 (2)	12 (3)	2 (1)	6 (4)	17 (7)	6 (2)	1 (1)	62 (5)	59 (7)

YEAR REPORT: Species Totals

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Report Details

Date range: Jan 1, 2012 - Dec 31, Species: Total # of Species: 41

Total # of Species: 41

Location(s): Woolsey Wet Prairie

Summary

	Jan 2012	Feb 2012		•	•		_	•	Oct 2012		
Number of Species		38	28	57	54	 		42	64	43	31
Number of Individuals		1,078	139	707	609	 		408	4,643	858	343
Number of Checklists		2	3	5	2	 		4	13	7	5

Total Number of Birds (sample size)

Species Name	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Jul 2012	Aug 2012	Sep 2012	Oct 2012	Nov 2012	Dec 2012
Canada Goose		20 (2)	14 (1)	25 (2)	2 (2)					18 (5)		
Mallard		123 (2)										
Blue-winged Teal				20 (2)								
Northern Shoveler										20 (1)		
Northern Bobwhite		7 (2)		1 (1)	4 (2)				2 (1)			
Pied-billed Grebe			1 (1)	1 (1)								
American Bittern			1 (1)	4 (3)								
Great Blue Heron				2 (2)	4 (2)					3 (3)	1 (1)	1 (1)
Great Egret				1 (1)								
Little Blue Heron					1							

				(1)					
Green Heron	 		2 (2)	5 (2)	 	 			
Turkey Vulture	 20 (2)	1 (1)	7 (2)	3 (1)	 	 2 (1)	37 (8)	4 (4)	7 (5)
Northern Harrier	 2 (2)	1 (1)			 	 1 (1)	5 (5)	6 (5)	2 (2)
Sharp-shinned Hawk	 				 	 	3 (1)		
Cooper's Hawk	 	1 (1)	1 (1)	1 (1)	 	 	6 (5)		
Sharp- shinned/Cooper's Hawk	 				 	 	3 (3)		
Bald Eagle	 				 	 		1 (1)	
Red-shouldered Hawk	 	1 (1)	1 (1)	1 (1)	 	 	1 (1)		
Red-tailed Hawk	 5 (2)		2 (1)		 	 5 (3)	14 (10)	7 (6)	9 (8)
Sora	 		1 (1)		 	 5 (3)	4 (2)		
American Coot	 		1 (1)		 	 			
Killdeer	 5 (2)	22 (1)	24 (3)	3 (2)	 	 11 (4)	12 (7)		
Solitary Sandpiper	 	9 (1)	27 (3)	5 (1)	 	 			
Greater Yellowlegs	 		3 (2)		 	 	1 (1)		
Lesser Yellowlegs	 		1 (1)	4 (1)	 	 			
Least Sandpiper	 			1 (1)	 	 2 (2)			
peep sp.	 		15 (1)		 	 			
Pectoral Sandpiper	 		2 (2)		 	 			
Wilson's Snipe	 2 (1)		38 (3)		 	 2 (2)	3 (2)		
Eurasian Collared-Dove	 				 	 	4 (1)		2 (1)
Mourning Dove	 3 (2)	2 (1)	5 (2)	17 (2)	 	 15 (4)	192 (12)	45 (4)	42 (1)
Great Horned				1					

Owl	 			(1)	 	 			
Chimney Swift	 			3 (2)	 	 			
Red-headed Woodpecker	 				 	 1 (1)			
Red-bellied Woodpecker	 1 (1)		1 (1)	1 (1)	 	 4 (4)	3 (3)	1 (1)	2 (1)
Yellow-bellied Sapsucker	 				 	 		1 (1)	
Downy Woodpecker	 2 (1)			1 (1)	 	 5 (4)	6 (6)	4 (3)	2 (2)
Hairy Woodpecker	 1 (1)				 	 			
Northern Flicker	 		1 (1)		 	 6 (4)	8 (6)	1 (1)	3 (2)
American Kestrel	 3 (2)		2 (1)	1 (1)	 	 8 (4)		4 (4)	4 (2)
Merlin	 				 	 	1 (1)		
Empidonax sp.	 			1 (1)	 	 			
Eastern Phoebe	 2 (1)		1 (1)	3 (2)	 	 	1 (1)		
Eastern Kingbird	 		1 (1)	3 (1)	 	 			
Scissor-tailed Flycatcher	 		4 (2)	14 (2)	 	 15 (4)	48 (10)		
Loggerhead Shrike	 				 	 		3 (3)	2 (2)
Blue Jay	 4 (2)	2 (1)	1 (1)	3 (2)	 	 7 (3)	46 (11)	8 (4)	7 (5)
American Crow	 8 (2)	2 (1)	4 (3)	2 (2)	 	 21 (4)	67 (12)	29 (4)	17 (5)
Fish Crow	 			4 (1)	 	 	4 (2)		
crow sp.	 		1 (1)		 	 			
Northern Rough- winged Swallow	 		4 (2)	1 (1)	 	 	6 (2)		
Purple Martin	 			1 (1)	 	 			
Barn Swallow	 		10 (3)	5 (2)	 	 	10 (3)		
Carolina Chickadee	 1 (1)	2 (1)	1 (1)	1 (1)	 	 	7 (3)	5 (2)	

Tufted Titmouse	 3 (2)		1 (1)		 	 	5 (1)	2 (1)	
White-breasted Nuthatch	 				 	 		1 (1)	
Brown Creeper	 				 	 		1 (1)	
House Wren	 			2 (1)	 	 6 (4)	2 (2)		
Sedge Wren	 				 	 14 (4)	38 (10)		
Marsh Wren	 				 	 10 (4)	53 (9)		
Carolina Wren	 2 (2)	1 (1)	1 (1)	1 (1)	 	 1 (1)	2 (2)	3 (1)	1 (1)
Ruby-crowned Kinglet	 				 	 1 (1)			
Eastern Bluebird	 3 (1)		1 (1)	4 (1)	 	 6 (3)	27 (5)	7 (2)	6 (3)
American Robin	 15 (1)	15 (1)	17 (3)	11 (2)	 	 	7 (1)	26 (2)	
Gray Catbird	 				 	 1 (1)			
Northern Mockingbird	 6 (2)	6 (1)	12 (3)	11 (2)	 	 5 (3)	21 (7)	16 (5)	9 (2)
Brown Thrasher	 	3 (1)	7 (3)	12 (2)	 	 1 (1)			
European Starling	 125 (2)	5 (1)	63 (2)	45 (2)	 	 50 (2)	2,458 (8)	122 (3)	1 (1)
American Pipit	 				 	 			3 (3)
Cedar Waxwing	 				 	 		1 (1)	
Orange-crowned Warbler	 		1 (1)		 	 			
Nashville Warbler	 				 	 3 (2)	2 (2)		
Common Yellowthroat	 		2 (1)	4 (2)	 	 20 (4)	7 (3)		
Northern Parula	 		1 (1)		 	 			
Palm Warbler	 				 	 8 (4)	4 (2)		
Yellow-rumped Warbler	 	1 (1)			 	 2 (2)	2 (1)	1 (1)	
Yellow-breasted	 			1	 	 			

Chat				(1)					
Eastern Towhee	 1 (1)				 	 			
American Tree Sparrow	 2 (1)				 	 		9 (1)	
Chipping Sparrow	 		1 (1)		 	 		1 (1)	
Clay-colored Sparrow	 		1 (1)		 	 3 (2)	9 (5)		
Brewer's Sparrow	 1 (1)				 	 			
Field Sparrow	 2 (1)	1 (1)			 	 	3 (3)	12 (3)	1 (1)
Vesper Sparrow	 				 	 	2 (2)		
Savannah Sparrow	 64 (2)	5 (1)	18 (2)	1 (1)	 	 2 (2)	335 (12)	106 (6)	9 (5)
Grasshopper Sparrow	 				 	 	4 (4)	1 (1)	
Le Conte's Sparrow	 				 	 2 (2)	17 (5)	29 (6)	
Nelson's Sparrow	 				 	 	6 (4)		
Song Sparrow	 22 (2)	3 (1)			 	 	36 (11)	86 (6)	36 (2)
Lincoln's Sparrow	 		3 (2)	1 (1)	 	 10 (4)	48 (11)	2 (1)	
Swamp Sparrow	 2 (2)		1 (1)		 	 	108 (13)	54 (6)	4 (1)
White-throated Sparrow	 3 (1)		2 (1)		 	 	3 (2)	3 (2)	1 (1)
Harris's Sparrow	 				 	 		7 (4)	2 (1)
White-crowned Sparrow	 12 (2)		2 (2)		 	 	16 (4)	41 (4)	16 (2)
Dark-eyed Junco	 13 (2)				 	 		8 (3)	37 (2)
Summer Tanager	 			1 (1)	 	 			
Northern Cardinal	 12 (2)	11 (1)	18 (3)	13 (2)	 	 10 (4)	19 (7)	10 (3)	12 (2)
Blue Grosbeak	 			3 (2)	 	 			
Indigo Bunting	 			2 (1)	 	 25 (4)	7 (3)		

Dickcissel	 			111 (2)	 	 			
Bobolink	 				 	 	2 (2)		
Red-winged Blackbird	 37 (2)	13 (1)	180 (3)	165 (2)	 	 75 (2)	180 (7)	93 (5)	43 (2)
Eastern Meadowlark	 42 (2)	13 (1)	27 (3)	35 (2)	 	 31 (2)	168 (12)	28 (5)	49 (5)
Western Meadowlark	 				 	 	1 (1)		
Brewer's Blackbird	 	1 (1)			 	 			
Common Grackle	 500 (1)	1 (1)	127 (3)	70 (2)	 	 10 (1)	2 (1)		
Great-tailed Grackle	 	1 (1)	4 (2)	7 (2)	 	 			
Brown-headed Cowbird	 2 (1)		2 (1)	4 (2)	 	 			
Orchard Oriole	 			2 (1)	 	 			
Baltimore Oriole	 			2 (1)	 	 			
blackbird sp.	 				 	 	500 (1)		
House Finch	 			2 (1)	 	 	12 (3)	39 (3)	11 (2)
Pine Siskin	 				 	 	4 (1)		
American Goldfinch	 			3 (2)	 	 		29 (4)	2 (1)

YEAR REPORT: Species Totals



Report Details

Date range:	Jan 1, 2013 - Dec 31,	Total # of Species:	90
Date lange.	2013	Total # of Checklists:	21

Location(s): Woolsey Wet Prairie

Summary

	Jan 2013	Mar 2013	Apr 2013	,	Jul 2013	_	•		Dec 2013
Number of Species	33	 5	75	54	 			 	
Number of Individuals	295	 46	4,009	416	 			 	
Number of Checklists	4	 1	14	2	 			 	

Total Number of Birds (sample size)

Species Name	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sep 2013	Oct 2013	Nov 2013	Dec 2013	
Canada Goose	6 (2)			43 (12)	6 (1)								
Gadwall				3 (1)									
Mallard				13 (7)	19 (1)								
Blue-winged Teal				288 (13)	5 (1)								
Green-winged Teal				17 (2)									
Pied-billed Grebe				1 (1)									
Great Blue Heron				1 (1)	1 (1)								
Little Blue Heron				2 (1)									
Green Heron					4 (2)								
White-faced Ibis				16									

			(2)					
Black Vulture		 	1 (1)		 	 	 	
Turkey Vulture	1 (1)	 	18 (7)	4 (2)	 	 	 	
Northern Harrier	2 (2)	 			 	 	 	
Sharp-shinned Hawk	1 (1)	 	1 (1)		 	 	 	
Cooper's Hawk	1 (1)	 	1 (1)		 	 	 	
Broad-winged Hawk		 	1 (1)		 	 	 	
Red-tailed Hawk	4 (3)	 	6 (6)	1 (1)	 	 	 	
Sora		 	1 (1)	1 (1)	 	 	 	
Black-bellied Plover		 	1 (1)		 	 	 	
American Golden- Plover		 	3 (1)		 	 	 	
Semipalmated Plover		 	4 (2)		 	 	 	
Killdeer		 12 (1)	136 (13)	8 (2)	 	 	 	
Spotted Sandpiper		 	7 (3)	4 (1)	 	 	 	
Solitary Sandpiper		 	72 (14)	1 (1)	 	 	 	
Greater Yellowlegs		 	99 (12)	1 (1)	 	 	 	
Lesser Yellowlegs		 	97 (13)	5 (1)	 	 	 	
Upland Sandpiper		 	19 (6)		 	 	 	
Semipalmated Sandpiper		 	12 (2)		 	 	 	
Least Sandpiper		 	10 (2)	23 (1)	 	 	 	
Baird's Sandpiper		 	2 (1)		 	 	 	
Pectoral Sandpiper		 	34 (6)		 	 	 	
Wilson's Snipe		 2 (1)	268 (14)		 	 	 	

Wilson's Phalarope		 	24 (3)	8 (1)	 	 	 	
Rock Pigeon		 	13 (6)		 	 	 	
Mourning Dove	5 (2)	 	21 (9)	11 (2)	 	 	 	
Yellow-billed Cuckoo		 		1 (1)	 	 	 	
Great Horned Owl		 	1 (1)	1 (1)	 	 	 	
Chimney Swift		 		3 (1)	 	 	 	
Red-bellied Woodpecker	2 (1)	 	2 (2)	2 (1)	 	 	 	
Downy Woodpecker	4 (3)	 	4 (3)		 	 	 	
Northern Flicker	1 (1)	 	37 (9)	1 (1)	 	 	 	
American Kestrel		 	1 (1)	2 (2)	 	 	 	
Empidonax sp.		 		1 (1)	 	 	 	
Eastern Phoebe		 	3 (3)	2 (2)	 	 	 	
Eastern Kingbird		 	3 (3)	6 (2)	 	 	 	
Scissor-tailed Flycatcher		 	15 (6)	7 (2)	 	 	 	
Loggerhead Shrike	1 (1)	 			 	 	 	
Blue Jay	9 (1)	 	4 (2)	1 (1)	 	 	 	
American Crow	3 (2)	 	9 (6)		 	 	 	
Fish Crow		 	18 (7)	1 (1)	 	 	 	
crow sp.		 		3 (1)	 	 	 	
Northern Rough- winged Swallow		 	4 (2)	1 (1)	 	 	 	
Purple Martin		 	8 (1)	2 (1)	 	 	 	
Barn Swallow		 	17 (8)	3 (2)	 	 	 	
Carolina	2	 	4	2	 	 	 	

Chickadee	(1)		(2)	(2)				
Tufted Titmouse	2 (1)	 	5 (4)	2 (2)	 	 	 	
House Wren		 	1 (1)	1 (1)	 	 	 	
Carolina Wren	1 (1)	 	3 (2)	5 (2)	 	 	 	
Blue-gray Gnatcatcher		 	3 (2)		 	 	 	
Eastern Bluebird		 	10 (7)	2 (1)	 	 	 	
American Robin	5 (1)	 	219 (10)	15 (2)	 	 	 	
Gray Catbird		 		1 (1)	 	 	 	
Northern Mockingbird	11 (4)	 	24 (11)	8 (2)	 	 	 	
Brown Thrasher		 	17 (10)	8 (2)	 	 	 	
European Starling	14 (2)	 	339 (9)	8 (2)	 	 	 	
Common Yellowthroat		 		2 (2)	 	 	 	
Yellow-rumped Warbler		 	6 (2)		 	 	 	
Eastern Towhee		 		1 (1)	 	 	 	
American Tree Sparrow	1 (1)	 			 	 	 	
Field Sparrow	3 (2)	 	11 (2)		 	 	 	
Vesper Sparrow		 	6 (4)		 	 	 	
Savannah Sparrow	12 (2)	 	312 (12)	11 (1)	 	 	 	
Le Conte's Sparrow	6 (2)	 	1 (1)		 	 	 	
Song Sparrow	85 (4)	 	35 (8)		 	 	 	
Lincoln's Sparrow		 	1 (1)		 	 	 	
Swamp Sparrow	19 (3)	 	14 (3)		 	 	 	
White-throated Sparrow	15 (1)	 	6 (2)		 	 	 	

White-crowned Sparrow	30 (3)	 	11 (5)	1 (1)	 	 	 	
Dark-eyed Junco	1 (1)	 			 	 	 	
Northern Cardinal	8 (2)	 	31 (10)	10 (2)	 	 	 	
Indigo Bunting		 		2 (2)	 	 	 	
Dickcissel		 	1 (1)	23 (2)	 	 	 	
Bobolink		 		14 (1)	 	 	 	
Red-winged Blackbird	24 (3)	 1 (1)	890 (13)	80 (2)	 	 	 	
Eastern Meadowlark	9 (3)	 	106 (13)	24 (2)	 	 	 	
Rusty Blackbird		 	26 (6)		 	 	 	
Common Grackle		 30 (1)	268 (12)	54 (2)	 	 	 	
Brown-headed Cowbird		 1 (1)	295 (2)		 	 	 	
House Finch	4 (2)	 	3 (2)		 	 	 	
American Goldfinch	3 (1)	 		3 (2)	 	 	 	

IVB. Source Details

Detail the sources of data noted in the	Species List and Population D	ata" (IVA) section above.
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V. Habitat

Define habitat composition of the site.	Estimate the perce	ent (%) of the total	area that is made up	of the
following general habitat types (must r	ot exceed 100%).	You must provide	e more <u>detail</u> below.	

Natural Lake (oxbow, meander scar) 1% Open Water (natural, artificial, specify) Sandbar Shrub-scrub 36% Prairie Glade Riverfront Forest (sycamore, etc.) Swamp (cypress/tupelo/mixed) Canebrake 48% Marsh / Emergent (non-forest) Wetland Bottomland Hardwood Forest Habitat Description: Describe the habitat in as much of species/communities, topography, soils, climate, hydroscape.	
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VI. Land Define how the land is used at the site. Estimate the p by each of the selected land uses (must not exceed 100	ercent (%) of the total usage that is characterized
Agriculture/Livestock	Urban/Industry
Fisheries/Aquaculture	Water Management
Forestry	Agriculture
Hunting	Other 1 (specify)
Military	Other 2 (specify)
7.5% Nature conservation/Research	Other 3 (specify)
25%. Tourism/Recreation	
Land Use Description: Describe the land use in as mu	ich detail as possible.
*	
	*

Habitat Description:

A mosaic of habitat types constitutes Woolsey Wet Prairie (WWP) including: wet meadow prairie wetlands, marsh, open water, mudflats, forested wetlands, and upland tall grass prairie. Tall grass prairies are open grasslands with scattered forbs, shrubs and trees that exhibit a gradation in community species composition related to the degree of soil moisture. There are different plant species found on upland mounds than within wetland depressions, as well as unique plant communities within transition zones between upland mounds and wetland depressions.

WWP is a remnant of a tall grass prairie that is a part of the original Osage Prairie on the Springfield Plateau west of the White River/Illinois River Divide. Soils are Taloka complex mounded, which are composed of shallow depressions of sandy loam that are underlain by a fragi-pan of impervious clay. The depressions retain water for extended periods after rainfall, providing a competitive edge for grasses over trees and producing wetland prairie habitat. Prairie mounds or "pimples" scattered throughout area are small hummocks five to fifteen feet in diameter and one to four feet in elevation. The average annual temperature in Fayetteville is 58° F and the average annual rainfall amount is 46 inches.

Modifications to the existing hydrology at the site have been achieved via the construction of low elevation perimeter earthen berms designed to provide a mechanism for water retention. Spillways with stop logs or risers have been constructed within the earthen berms in order to provide the ability to both hold and release water, as needed. Construction of the earthen berms resulted in two cells (W-1 and W-2) within the west mitigation site, and five cells (E-1 through E-5) within the east mitigation site. Currently, all stop logs at the water level control structures are set for maximum water retention in the wetland cells. They will be maintained at these settings in order to maintain optimal inundation in the wetland cells as the weather will allow, as the water levels in the cells is largely dependent upon the amount of rainfall received. One of the management goals at WWP is to restore a portion of the mudflat habitat via control of smartweed through management of hydrology. Management of hydrology is an important tool in vegetation community diversity optimization because plant zonation occurs along water depth and soil saturation gradients. Consequently, variations in water depth and degree of soil saturation lead to variations in species composition. The timing and frequency of flooding and drawdowns are also among the most important filters in species assemblages. Inundation causes physical disturbances, removal of litter, transport of sediments and nutrient availability and an increased dispersal of seeds. As for the management of hydrology, the major emphasis will be to recreate natural hydrological regimes in a manner to limit productivity of any single species from becoming excessively high, while at the same time, enriching biodiversity. The strategy for management of hydrology has not only included considerations for the volume of water retained, but also the time of the year water is retained. It is vital to retain water during the growing season in order to maintain areas of soil saturation and/or inundation to support desirable wetland vegetation.

One of the main goals at WWP was to restore the native habitat back to its original form as much as possible. Due to years of farming and cattle grazing, the site was severely degraded from its natural tall grass prairie state. Restoration tools for "bringing back the prairie ecosystem of the past" include preservation of the microtopography (mounds and depressions), construction of earthen berms as hydrological controls to offset man-made drainage ditches and the original construction of Broyles Road, herbicides, and controlled burning to simulate pre-settlement natural environmental conditions. This is a step-by-step cause and effect process, called

"adaptive management" whereby each tool is not employed until after reviewing the results of the previous tool(s). Drainage ditches reduced the original wet prairie acreage, and decades of fire suppression, introduction of non-native invasive plants, overgrazing, and over-haying created a severely degraded prairie remnant. When WWP was first created there were only 47 species of plants present at the site. Through the use of adaptive management strategies, 397 species of plants have been documented at the site, including 9 species that are tracked as species of concern by the Arkansas Natural Heritage Commission.

Table 3. Habitat Type Relative Abundance At Woolsey Wet Prairie.

Habitat Type	Acreage	% of site
Upland Prairie Mounds	11.48	26.2
Upland Earthen Berms	4.39	10
Prairie Wet Meadow	19.92	45.5
Prairie Marsh/Mudflat	5.91	13.5
Open Water	0.5	1.1
Willow/Green Ash Stands	1.6	3.7
TOTAL	43.8	100%

Land Use Description:

Woolsey Wet Prairie (WWP) was established by the City of Fayetteville in 2006 as part of wetland compensatory mitigation requirements under Section 404 Permit 14207 issued by the U.S. Army Corps of Engineers Little Rock District. The 43.8-acre mitigation site was constructed to offset the permanent alteration of 9.88 acres of wetlands from construction of the City's Wastewater Systems Improvement Project. WWP is permanently protected by a deed-restricted covenant in perpetuity as a wetland mitigation site.

Currently, 100% of WWP is used specifically as a tall grass wet prairie restoration area. In 2006 all haying and cattle grazing operations at WWP were ceased and the site is now strictly managed to promote ecological diversity. WWP is open to the public year round and is easily accessed at the entrance to the West Side Wastewater Treatment facility located at 15 North Broyles Road.

Many people come to WWP to walk the trails along the berms, take photographs of the numerous wildflower and bird species, and/or conduct research at the site. WWP has also provided many educational opportunities for students at both the undergraduate and graduate levels allowing them the opportunity to get a hands on educational experience in the field. As of April 2013, 397 species of plants have been observed at the site, and according to eBird, 182 different species of birds have been recorded there from 2006 to present, providing excellent opportunities to both botanists and birders alike.

VII. Threats and Conservation

Define the threats to the site (habitat or birds). Indicate to what extent the threat affects the site, using a scale from 1 to 10, one being the least significant. If not applicable to site, leave blank.

Threat	Threat Level (1-10)
Agriculture (e.g. grazing, haying, conversion, pesticides, runoff)	
Aquaculture/Fisheries (e.g. persecution of waterbirds)	
Disease (of birds, of trees)	
Disturbance to birds (e.g. foot traffic, vehicles, boats)	
Drainage	
Dredging	
Industrialization/Urbanization (e.g. commercial development, roads)	-
Habitat fragmentation	
Forest management (e.g. thinning, deforestation, selective logging)	
Non-native species	7
Cowbird parasitism	
Predation (by native species)	l
Natural events (e.g. fire, flood, drought, habitat succession)	l
Off-road vehicles	8
Unsustainable exploitation of birds (e.g. depredation permits, illegal killing)	
Water diversions (e.g. channelization, sedimentation)	
Other (specify)	
Other (specify)	
Other (specify)	e

Water diversions (e.g. channelization, sedimentation)	
Other (specify)	
Other (specify)	
Other (specify)	
Threat Description: Describe the threats to the birds and habitats in as much de	etail as possible.
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Describe any conservation measures taken, in progress, or proposed.	
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Threat Description:

Biodiversity threats to prairie ecosystems in this region of Arkansas include habitat fragmentation and loss, current grazing practices, fire suppression, invasive plant species such as sericea lespedeza and tall fescue, and stream degradation due to land management practices and soil erosion.

The category of Predation (by native species) was assigned a threat level of 1. As with any natural landscape or habitat setting there will typically be a degree of natural predation take place. There is no evidence to support that Woolsey Wet Prairie (WWP) has an atypical occurrence of natural predation than any other similar site or habitat type. Coyotes, bobcats, raccoons, skunks, possums, and raptors are present at WWP that undoubtedly account for some level of predation, but not to an extent that any species of bird that visits the site is at an elevated level of danger than at any other site.

The category of Disturbance to Birds (e.g. foot traffic, vehicles, boats) was assigned a threat level of 1. Pedestrian foot traffic by visitors at WWP is limited to areas on the earthen berms that surround the wetland cells; therefore, disturbance to birds is minimal. There are also numerous signs all around the perimeter of WWP stating that there shall be no hunting, no disturbance, no vehicles, ATVs, or motorcycles, no dogs, and that foot traffic is limited to the pathways along the earthen berms. In this way the foot traffic has minimal affect upon the birds whatsoever so birders and photographers alike have the opportunity to view the birds interacting within their natural environments unimpeded.

The category of Natural Events (e.g. fire, flood, drought, habitat succession) was assigned a threat level of 1. Natural events that occur on the site such as droughts and floods are Acts of God and we as managers have no say so in the matter whether we like it or not. The bright side is that at WWP neither of these natural events pose any direct danger or threat to the wellbeing of site at all, in fact the site being a wetland mitigation area with wetland cells is actually designed to flood in periods of abundant rainfall, and also to hold back as much water as is available during times of drought. Neither the flooding nor the drought poses any direct threats to the species of birds that inhabit the site at all. A prescribed burn is conducted at WWP once annually during the late winter early spring period prior to the time when most birds will be nesting. A site survey is always conducted prior to the burn and if any early nesters are found the area is flagged off and the burn crew is instructed to avoid burning in those areas. The fire is never a direct threat to bird species as the birds in the area have the instincts and ability to fly away from the area during the burn. Many of the raptor species in particular seem to enjoy the burns immensely as they circle high above on the lookout for the numerous small rodent species trying to escape the blaze. The birds always return quickly after the burn has been completed and once all of the new growth in the area begins to take place a few weeks after the burn the birding can be excellent. The burn also really opens up the mudflat areas just in time for the numerous species of shorebirds to begin migrating through and stopping by to take a look, which has lead to some really unique and interesting occurrences at WWP. A brief description of the abundance of birds observed at WWP by Joseph C, Neal on the day after the 2011 prescribed burn can be found at http://northwestarkansasaudubonsociety.blogspot.com/2011_03_01_archive.html. Fire, as an adaptive management tool, discourages plant succession and maintains the prairie/marsh habitat. A YouTube video detailing the prescribed burn that took place at WWP during the spring of 2012 and discussing prescribed burning at WWP from a management standpoint can be found at http://www.youtube.com/watch?v=OcDj-fH9kks.

Another potential short-term disturbance to birds is spot spraying of non-native plant species by a herbicide contractor. This typically occurs from May to October on a weekly to biweekly basis, and is done with a backpack sprayer. There is an overall net benefit to bird habitat by reducing the density of non-native species.

Conservation Measures Implemented:

To mitigate threats to Woolsey Wet Prairie (WWP), the City of Fayetteville has deed restricted the site in perpetuity as part of compensatory mitigation requirements for environmental impacts to wetlands and wildlife habitat as a result of the wastewater project, and may not be converted to another use.

Prohibited activities on the Property may include, but are not limited to: clearing, logging, bush hogging, mowing, spraying with herbicides, filling, leveling, draining, dumping, construction of any structure and any other activity that would adversely impact the targeted natural state, or use, of the Property for compensatory mitigation, and as wildlife habitat; unless the activity is necessary to enhance wildlife habitat or for wetland/upland buffer area enhancement. This specific deed-restriction, however, does not prohibit or preclude the use of bush hogging; mowing; spraying with herbicides to control invasive, non-native, and undesirable plant species; controlled burning; selective cutting and/or spraying with herbicides to control woody plant species within vegetational zones designated for upland prairie, wet meadow, marsh, and/or open water habitats; hydrological control and management; construction of structures, or any other upland/wet prairie management tools necessary to enhance and maintain the biological integrity of the site to meet targeted wetland compensatory mitigation goals.

Public access is restricted to pedestrian foot-traffic only on earthen berms that surround wetland cells, for wet prairie plant community and wildlife observation and viewing, educational, and recreational purposes that would be conducted in a manner to not adversely impact the targeted natural state, or use, of the Property for compensatory mitigation, and as wildlife habitat. Restrictions for use by the public shall prohibit access by any motorized vehicle or bicycle; any access within wetland cells; access by dogs (even on leashes) or other pets; tampering or adjusting water level retention structures; littering; hunting; collection of any plant or animal specimens; or the removal or destruction of any natural or man-made feature located at the mitigation site.

Prohibited activities on the Property do not include access to wetland cells within the Property by parties and/or entities approved by the City of Fayetteville and the Little Rock District U.S. Army Corps of Engineers for the purpose of academic endeavors, wet prairie ecological research, and/or wet prairie monitoring and management that would be conducted in a manner to not adversely impact the targeted natural state, or use, of the Property for compensatory mitigation, and as wildlife habitat.

Farelleville

WETLAND MITIGATION SITE

NO DISTURBANCE NO HUNTING

NO DUMPING/LITTERING
NO DOGS

FOOT TRAFFIC RESTRICTED TO PATHWAYS ON BERMS VIOLATORS WILL BE PROSECUTED

FOR QUESTIONS, CALL

ECO, INC. 501-765-9009

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Restoration Measures Implemented:

Adaptive management techniques implemented at Woolsey Wet Prairie (WWP) for ecological restoration have included:

- Prescribed burning
- > Herbicide applications
- ► Hand pulling invasive plants
- Weed-eating invasive plant seed heads

These activities are discussed in detail within the six annual monitoring reports that can be viewed at:

http://www.ecoarkansas.com/WoolseyMonitoringReports.html

Adaptive management for ecological restoration requires an ongoing commitment to maintain the prairie/marsh habitat that is beneficial to grassland bird species. A good measure of the success of efforts to restore biodiversity is to track species. Prior to ecological restoration efforts, WWP was a highly degraded tall fescue pasture with approximately 50 plant species in 2005. As of April 2013, 397 plant species have been observed at the site, nine of which are species that are tracked as species of concern by the Arkansas Natural Heritage Commission. The habitat restoration can be credited with the resulting rare and unusual birds that now use WWP.

List of Local Groups and/or Individuals with Interest in the Site:

Brandon Schmidt 1220 Ellis Ave Fayetteville, AR 72701 (479) 283-1661 brandonschmidt2@gmail.com	Northwest Arkansas Audubon Society P.O. Box 4751 Fayetteville, AR 72701 president@nwarkaudubon.org	Mitchell Pruitt (870) 882-2397 mlpruitt24@yahoo.com
Bruce Shackleford 17724 I-30 Suite 5A Benton, AR 72019 (501) 765-9009 bruceshackleford@aristotle.net	Seth Pickens 17724 I-30 Suite 5A Benton, AR 72019 (501) 315-9009 seth@ecoarkansas.com	Carol Joan Patterson P.O. Box 255 Goshen, AR 72735 (479) 442-7869 joanie.patterson@yahoo.com
Joe Neal 145 E. Cleburn Street Fayetteville, AR 72701 (479) 521-1858 joecneal@att.net	Andrew Scaboo University of Missouri Division of Plant Sciences 1-31 Agri Building Columbia, MO 65211 (573) 882-3462 scabooa@missouri.edu	

Appendix I Site Maps

Woolsey Wet Prairie Site Location Map

