

Office of
**CONSERVATION
INVESTMENT**



Office of Conservation Investment
U.S. Fish and Wildlife Service

**OK T-113-R-2 Conservation Collaboration, Population
Monitoring, and Data Management for Species of Greatest
Conservation Need in Oklahoma**

Performance Report Approval Status:

Final Approved

Recipient:

OKLAHOMA DEPARTMENT OF WILDLIFE

Recipient Grant ID:

Federal Award Number:

F22AF02644

Funding Program(s) Name:

SWG Implementation

Federal Award Start and End Date:

Oct 01, 2022 to Sep 30, 2025

Performance Reporting Period:

Oct 01, 2024 to Sep 30, 2025

Federal Award Recipient Contact(s):

Andrea Crews

Federal Award Specialist(s):

Joshua Cocke

TRACS Group

Oklahoma Department of Wildlife Conservation

Type of Performance Report:

Final Performance Report

Public Description:

This grant provides the resources needed for the management of species of greatest conservation need in Oklahoma through administrative activities and biological surveys. Administrative activities include coordination, collaboration, data-sharing and the

Final Performance Report - OK T-113-R-2 Conservation Collaboration, Population Monitoring, and Data Management for Species of Greatest Conse...

development of conservation assessments and strategies with other states wildlife agencies, the U.S. Fish and Wildlife Service, academic and non-governmental organizations that share an interest in the conservation of species of greatest conservation need. Field activities include planning, coordination and conducting biological surveys to collect information regarding the distribution, status, and ecological needs of SGCN. All of these activities are carried out with the goal of enhancing the status of uncommon or declining species and maintaining them as self-sustaining populations.

Federal Award Accomplishments				
Strategy	Proposed Objective	Activity	Unit of Measure - Proposed	Unit of Measure - Reported
Outreach/ Communication	Produce products	Digital products	3 Products	14 Products
Research, Survey, Data Collection and Analysis	Create or manage databases	Information technology and management	1 Databases	3 Databases
Research, Survey, Data Collection and Analysis	Conduct investigations (legacy)	Fish and wildlife species data acquisition and analysis (legacy)	7 Investigations	17 Investigations
Stakeholder Involvement	Engage organizations	Organizational engagement	9 Organizations	25 Organizations

Table of Contents - Project Statements

OK T-113-R-2 Conservation Collaboration, Population Monitoring, and Data Management for Species of Greatest Conservation Need in Oklahoma 5
Appendix 17

Project Statement: OK T-113-R-2 Conservation Collaboration, Population Monitoring, and Data Management for Species of Greatest Conservation Need in Oklahoma

Project Statement Approval Status: Final Approved

Objective Name: Objective 1

Strategy: Stakeholder Involvement

Proposed Objective: Engage organizations

Pertains to R3: No

Activity Performed: Organizational engagement

of Organizations: 9

Geographic Location:

- General Location: Oklahoma
- Includes Marine Federal Waters: No
- Detailed Location:
- Location Description:

The geographic area for this grant is statewide because its administrative and field activities may occur in any and all of the 77 Oklahoma counties – Adair, Alfalfa, Atoka, Beaver, Beckham, Blaine, Bryan, Caddo, Canadian, Carter, Cherokee, Choctaw, Cimarron, Cleveland, Coal, Comanche, Cotton, Craig, Creek, Custer, Delaware, Dewey, Ellis, Garfield, Garvin, Grady, Grant, Greer, Harmon, Harper, Haskell, Hughes, Jackson, Jefferson, Johnston, Kay, Kingfisher, Kiowa, Latimer, LeFlore, Lincoln, Logan, Love, Major, Marshall, Mayes, McClain, McCurtain, McIntosh, Murray, Muskogee, Noble, Nowata, Okfuskee, Oklahoma, Okmulgee, Osage, Ottawa, Pawnee, Payne, Pittsburg, Pontotoc, Pottawatomie, Pushmataha, Roger Mills, Rogers, Seminole, Sequoyah, Stephens, Texas, Tillman, Tulsa, Wagoner, Washington, Washita, Woods, and Woodward counties. Most of the administrative activities with our conservation partners will occur in the ODWC offices in Oklahoma City and in cities including Tulsa, Stillwater, and Norman where many of our partner organizations are based.

Activity Report Comments

The activities associated with this grant objective are discussed in the attached Final Performance Report.

* Totals to date represents a cumulative total of all periods of performance and may exceed the objective.

Objective Report	
Period of Performance	# of Organizations
Oct 1, 2022 to Sep 30, 2023	7
Oct 1, 2023 to Sep 30, 2024	9
Oct 1, 2024 to Sep 30, 2025	9
Totals to Date*	25

Activity Performed Attachments

Note: Some attachments listed here may not appear in the Appendix due to file incompatibility. All attachments can be accessed using the links below.

Descriptive Name	Field Tags	Attachment Type
No Files Attached		

Objective Name: Objective 2

Strategy: Research, Survey, Data Collection and Analysis

Proposed Objective: Conduct investigations (legacy)

Pertains to R3: No

Activity Performed: Fish and wildlife species data acquisition and analysis (legacy)

of Investigations: 7

Principal Investigator: Mark Howery

Geographic Location:

- General Location: Oklahoma
- Includes Marine Federal Waters: No
- Detailed Location:
- Location Description:

The geographic area for this grant is statewide because its administrative and field activities may occur in any and all of the 77 Oklahoma counties – Adair, Alfalfa, Atoka, Beaver, Beckham, Blaine, Bryan, Caddo, Canadian, Carter, Cherokee, Choctaw, Cimarron, Cleveland, Coal, Comanche, Cotton, Craig, Creek, Custer, Delaware, Dewey, Ellis, Garfield, Garvin, Grady, Grant, Greer, Harmon, Harper, Haskell, Hughes, Jackson, Jefferson, Johnston, Kay, Kingfisher, Kiowa, Latimer, LeFlore, Lincoln, Logan, Love, Major, Marshall, Mayes, McClain, McCurtain, McIntosh, Murray, Muskogee, Noble, Nowata, Marshall, Mayes, McClain, McCurtain, McIntosh, Murray, Muskogee, Noble, Nowata, Okfuskee, Oklahoma, Okmulgee, Osage, Ottawa, Pawnee, Payne, Pittsburg, Pontotoc,

Final Performance Report - OK T-113-R-2 Conservation Collaboration, Population Monitoring, and Data Management for Species of Greatest Conse...

Pottawatomie, Pushmataha, Roger Mills, Rogers, Seminole, Sequoyah, Stephens, Texas, Tillman, Tulsa, Wagoner, Washington, Washita, Woods, and Woodward counties. Most of the administrative activities with our conservation partners will occur in the ODWC offices in Oklahoma City and in cities including Tulsa, Stillwater, and Norman where many of our partner organizations are based.

Activity Report Comments

Field investigations were conducted for each of the tagged species of greatest conservation need except for the Blackside Darter (*Percina maculata*). We did not conduct any investigations for aquatic species during the grant period. The results of our investigations for the other species of greatest conservation need are described in the attached Final Performance Report.

* Totals to date represents a cumulative total of all periods of performance and may exceed the objective.

Objective Report	
Period of Performance	# of Investigations
Oct 1, 2022 to Sep 30, 2023	5
Oct 1, 2023 to Sep 30, 2024	6
Oct 1, 2024 to Sep 30, 2025	6
Totals to Date*	17

Species Tags

Species Tags		
Bachman's Sparrow <i>Aimophila aestivalis</i>	Burrowing Owl <i>Athene cunicularia</i>	bumble bee; American bumble bee <i>Bombus pensylvanicus</i>
Arizona black-tailed prairie dog; Black-tailed Prairie Dog <i>Cynomys ludovicianus</i>	Crawfish Frog <i>Lithobates areolatus</i>	blackside darter <i>Percina maculata</i>
<i>Perimyotis subflavus</i>	Texas Horned Lizard <i>Phrynosoma cornutum</i>	Rich Mountain Salamander <i>Plethodon ouachitae</i>
Bell's Vireo <i>Vireo bellii</i>	Swift Fox <i>Vulpes velox</i>	

Activity Performed Attachments

Note: Some attachments listed here may not appear in the Appendix due to file incompatibility. All attachments can be accessed using the links below.

Descriptive Name	Field Tags	Attachment Type
No Files Attached		

Objective Name: Objective 3

Strategy: Research, Survey, Data Collection and Analysis

Proposed Objective: Create or manage databases

Pertains to R3: No

Activity Performed: Information technology and management

of Databases: 1

Principal Investigator:

Geographic Location:

- General Location: Oklahoma
- Includes Marine Federal Waters: No
- Detailed Location:
- Location Description:

The geographic area for this grant is statewide because its administrative and field activities may occur in any and all of the 77 Oklahoma counties – Adair, Alfalfa, Atoka, Beaver, Beckham, Blaine, Bryan, Caddo, Canadian, Carter, Cherokee, Choctaw, Cimarron, Cleveland, Coal, Comanche, Cotton, Craig, Creek, Custer, Delaware, Dewey, Ellis, Garfield, Garvin, Grady, Grant, Greer, Harmon, Harper, Haskell, Hughes, Jackson, Jefferson, Johnston, Kay, Kingfisher, Kiowa, Latimer, LeFlore, Lincoln, Logan, Love, Major, Marshall, Mayes, McClain, McCurtain, McIntosh, Murray, Muskogee, Noble, Nowata, Okfuskee, Oklahoma, Okmulgee, Osage, Ottawa, Pawnee, Payne, Pittsburg, Pontotoc, Pottawatomie, Pushmataha, Roger Mills, Rogers, Seminole, Sequoyah, Stephens, Texas, Tillman, Tulsa, Wagoner, Washington, Washita, Woods, and Woodward counties. Most of the administrative activities with our conservation partners will occur in the ODWC offices in Oklahoma City and in cities including Tulsa, Stillwater, and Norman where many of our partner organizations are based.

Activity Report Comments

We maintained a database of distributional records for Oklahoma's species of greatest conservation need and this database was updated during each 12-month segment of the grant. The records that were added to the species of greatest conservation need database during the grant period are reported in Appendix A and in Tables 4 and 8 of the attached Final Performance Report.

* Totals to date represents a cumulative total of all periods of performance and may exceed the objective.

Objective Report	
Period of Performance	# of Databases
Oct 1, 2022 to Sep 30, 2023	1
Oct 1, 2023 to Sep 30, 2024	1
Oct 1, 2024 to Sep 30, 2025	1
Totals to Date*	3

Activity Performed Attachments

Note: Some attachments listed here may not appear in the Appendix due to file incompatibility. All attachments can be accessed using the links below.

Descriptive Name	Field Tags	Attachment Type
No Files Attached		

Objective Name: Objective 4

Strategy: Outreach/Communication

Proposed Objective: Produce products

Pertains to R3: No

Activity Performed: Digital products

of Products: 3

Geographic Location:

- General Location: Oklahoma
- Includes Marine Federal Waters: No
- Detailed Location:

- **Location Description:**

The geographic area for this grant is statewide because its administrative and field activities may occur in any and all of the 77 Oklahoma counties – Adair, Alfalfa, Atoka, Beaver, Beckham, Blaine, Bryan, Caddo, Canadian, Carter, Cherokee, Choctaw, Cimarron, Cleveland, Coal, Comanche, Cotton, Craig, Creek, Custer, Delaware, Dewey, Ellis, Garfield, Garvin, Grady, Grant, Greer, Harmon, Harper, Haskell, Hughes, Jackson, Jefferson, Johnston, Kay, Kingfisher, Kiowa, Latimer, LeFlore, Lincoln, Logan, Love, Major, Marshall, Mayes, McClain, McCurtain, McIntosh, Murray, Muskogee, Noble, Nowata, Okfuskee, Oklahoma, Okmulgee, Osage, Ottawa, Pawnee, Payne, Pittsburg, Pontotoc, Pottawatomie, Pushmataha, Roger Mills, Rogers, Seminole, Sequoyah, Stephens, Texas, Tillman, Tulsa, Wagoner, Washington, Washita, Woods, and Woodward counties. Most of the administrative activities with our conservation partners will occur in the ODWC offices in Oklahoma City and in cities including Tulsa, Stillwater, and Norman where many of our partner organizations are based.

Activity Report Comments

During the grant period, fourteen electronic outreach products (news releases and articles) were developed and distributed to inform stakeholders and the public about the conservation work being done by the Oklahoma Department of Wildlife Conservation and its partners for the benefit of species of greatest conservation need. These are described and links to them are provided in the attached Final Performance Report.

* Totals to date represents a cumulative total of all periods of performance and may exceed the objective.

Objective Report	
Period of Performance	# of Products
Oct 1, 2022 to Sep 30, 2023	5
Oct 1, 2023 to Sep 30, 2024	5
Oct 1, 2024 to Sep 30, 2025	4
Totals to Date*	14

Activity Performed Attachments

Note: Some attachments listed here may not appear in the Appendix due to file incompatibility.

All attachments can be accessed using the links below.

Descriptive Name	Field Tags	Attachment Type
No Files Attached		

Performance Reporting Questionnaire

1. What progress has been made towards completing the objective(s) of the project?

This grant was completed and attached is its Final Performance Report that describes the stakeholder engagement, field investigations, database entries, and outreach products that were conducted to further the conservation of species of greatest conservation need. The Final Performance Report is provided in two parts; the first part provides a narrative description of the work that was accomplished toward the grant's four objectives, and the second part is presented as Appendix A, which is a summary of the distributional records that were added to the species of greatest conservation need database that was maintained under grant objective #3. A copy of the grant's abstract is provided below.

ABSTRACT:

The conservation of species of greatest conservation need (SGCN) is the Oklahoma Wildlife Diversity Program's highest priority and we accomplish this through multiple avenues including coordinated partnerships with the U.S. Fish and Wildlife Service and other governmental agencies, species-specific biological surveys, and working with interested members of the public to obtain observational records that we could not have obtained on our own for multiple species. We worked with our counterparts in other state wildlife agencies across the southeastern and western United States to share information and insights into the ecology of a wide range of SGCN, but especially those that have been petitioned or proposed for federal listing under the Endangered Species Act. We also continued to work within the national flyway system and with regional avian joint ventures, such as the Oaks and Prairies Joint Venture, to further the conservation of avian SGCN across state boundaries. We engaged with the U.S. Fish and Wildlife Service and other partners on nine on-going Species Status Assessments for species under evaluation for Endangered Species Act-listing and coordinated with regional conservation partners regarding other at-risk species. We participated in the national Breeding Bird Survey by running three of the long-term routes in Oklahoma to help monitor a wide range of terrestrial bird species including 14 SGCN. We also conducted targeted surveys to collect distribution data for the Swift Fox (*Vulpes velox*), Crawfish Frog (*Lithobates areolata*), Rich Mountain Salamander (*Plethodon ouachitae*), Black-tailed Prairie Dog (*Cynomys ludovicianus*), and conducted community-level surveys for SGCN birds, reptiles, and amphibians on selected state wildlife management areas. We managed and promoted two citizen science outreach projects that solicited Whooping Crane (*Grus americana*) and Texas Horned Lizard (*Phrynosoma cornutum*) observations. These produced 20 confirmed reports of migrating groups of Whooping Cranes, and 625 reports of Texas Horned Lizards. All field records and citizen science observations of Oklahoma SGCN were entered into a geospatial database that we developed for sharing these records with the Oklahoma Natural Heritage Inventory and other conservation partners. Finally, we conducted outreach efforts that highlighted the conservation needs of SGCN including the Mexican Free-tailed Bat (*Tadarida brasiliensis*), Crawfish Frog (*Lithobates areolata*), Oklahoma Cave Crayfish (*Cambarus tartarus*) and Red-cockaded Woodpecker

(*Dryobates borealis*).

2. Please describe and justify any changes in the implementation of your objective(s) or approach(es).

There were no changes made to the grant's objectives or to the approaches associated with those objectives. We did not, however, complete a field investigation for one of the species of greatest conservation need that was tagged with this grant. We did not conduct surveys for the Blackside Darter (*Percina maculata*) during the grant period due to logistical complications associated with access to suitable habitat.

3. If applicable, please share if the project resulted in any unexpected benefits, promising practices, new understandings, cost efficiencies, management recommendations, or lessons learned.

In 2024, we made some changes to our citizen science project for the reporting of Texas Horned Lizard (*Phrynosoma cornutum*) observations. We altered the reporting form to make the location a required field, and then added a mapping application to the online reporting system that allowed the observers to find the location of their observation on a map and download the latitude and longitude coordinates for their observation in decimal degrees. Based on the observation records that we received after these changes were implemented (sample size of approximately 390), we saw a substantial increase in the number of reports that included accurate and useable location data, and these changes have not had a noticeable negative effect on public participation and the number of reports that we receive.

4. For Survey projects only: If applicable, does this project continue work from a previous grant? If so, how do the current results compare to prior results? (Recipients may elect to add attachments such as tables, figures, or graphs to provide further detail when answering this question.)

Several components of this project build upon work that was conducted in two previous grants that were funded through the State Wildlife Grants program (T-84-R-1 and T-113-R-1). The Breeding Bird Survey effort in this grant was similar to that of the earlier grants; however, weather complications prevented to completion of the Pushmataha BBS route in 2024 and 2025. The Swift Fox monitoring that was conducted under this grant had similar results to the monitoring that was completed under the two previous grants. Swift Fox detection rates, at the scale of a township, remain similar. We continued to document Swift Fox occurrence, through

track observations, in approximately 80% to 85% of the townships that we surveyed in the Oklahoma panhandle (Beaver, Cimarron, and Texas counties) and the average time that elapsed between the initiation of a survey within a township and the detection of the first Swift Fox track line continued to fall within the range of 37 to 45 minutes, suggesting a stable population. We continued to receive an average of 160 to 200 Texas Horned Lizard reports per year; but the percentage of reports that included a photograph for documentation increased from approximately 52% in the previous grant to nearly 60% during this grant's period. Additionally, we received a greater proportion of reports with accurate and usable location information; this increased from approximately 85% during the previous grant to 98% during this grant's period.

5. If applicable, identify and attach selected publications, photographs, screenshots of websites, or other documentation (including articles in popular literature, scientific literature, or other public information products) that have resulted from this project that highlight the accomplishments of the project.

Within the body of the report, there are descriptions of and links to electronic outreach products (written articles) about the conservation of selected species of greatest conservation need. A listing of these links is provided below.

<https://www.wildlifedepartment.com/outdoorok/oj/states-flying-mammal-focus-ongoing-ou-research>

<https://www.wildlifedepartment.com/outdoorok/oj/louisiana-gives-oklahomas-endangered-woodpecker-population-boost>

<https://www.wildlifedepartment.com/outdoorok/oj/its-raining-its-pouring-crawfish-frog-snoring>

<https://www.wildlifedepartment.com/outdoorok/oj/breeding-birds-counted-trio-surveys>

<https://www.wildlifedepartment.com/outdoorok/oj/pioneering-grant-program-reaches-milestone>

<https://www.wildlifedepartment.com/outdoorok/oj/list-threatened-and-endangered-species-gets-updates-2023>

<https://www.wildlifedepartment.com/outdoorok/oj/wild-double-take-whooping-crane-and->

[american-white-pelican](#)

<https://www.wildlifedepartment.com/outdoorok/oj/weve-got-answers-biologists-reply-lizard-faqs>

<https://www.wildlifedepartment.com/outdoorok/oj/biologist-gets-birds-track-status-trends>

<https://www.wildlifedepartment.com/outdoorok/oj/rare-oklahoma-crayfish-hatched-texas-zoo>

<https://www.wildlifedepartment.com/outdoorok/oj/study-focused-bats-and-disease-causing-fungus>

<https://www.wildlifedepartment.com/outdoorok/oj/habitat-work-helps-threatened-red-cockaded-woodpecker-expand-ok-range>

6. Is this a project you wish to highlight for communication purposes?

No

At the current time, this is not a project that we wish to highlight for communication purposes; however, we are happy to distribute the Final Performance Report and promote the outreach products that were developed under this grant.

Questionnaire Attachments

Note: Some attachments listed here may not appear in the Appendix due to file incompatibility.

All attachments can be accessed using the links below.

Descriptive Name	Field Tags	Attachment Type
T-113-2 Final Report in TRACS	<ul style="list-style-type: none"><li data-bbox="670 464 1040 491">• Objective Completion Progress	Performance Report / Performance Hard Copy Report
T-113-2 Final Appendix A SGCN Observatio...	<ul style="list-style-type: none"><li data-bbox="670 562 1040 590">• Objective Completion Progress	Performance Report / Performance Hard Copy Report

Appendix

FINAL PERFORMANCE REPORT



Federal Aid Grant No. F22AF02644 (T-113-R-2)

**Conservation Collaboration, Population Monitoring and
Data Management for Species of Greatest Conservation
Need in Oklahoma**

Oklahoma Department of Wildlife Conservation

October 1, 2022 – September 30, 2025

FINAL PERFORMANCE REPORT

State: Oklahoma

Grant Number: F22AF02644 (T-113-R-2)

Grant Program: State Wildlife Grants

Grant Title: Conservation Collaboration, Population Monitoring and Data Management for Species of Greatest Conservation Need in Oklahoma

Grant Period: 1 October 2022 – 30 September 2025

Principal Investigators:

Mark Howery, Oklahoma Dept. of Wildlife Conservation

Curtis Tackett, Oklahoma Dept. of Wildlife Conservation

Alex Cooper, Oklahoma Dept. of Wildlife Conservation

Jena Donnell, Oklahoma Dept. of Wildlife Conservation

Cheyenne Gonzales, Oklahoma Dept. of Wildlife Conservation

Kurt Kuklinski, Oklahoma Dept. of Wildlife Conservation

ABSTRACT:

The conservation of species of greatest conservation need (SGCN) is the Oklahoma Wildlife Diversity Program's highest priority and we accomplish this through multiple avenues including coordinated partnerships with the U.S. Fish and Wildlife Service and other governmental agencies, species-specific biological surveys, and working with interested members of the public to obtain observational records that we could not have obtained on our own for multiple species. We worked with our counterparts in other state wildlife agencies across the southeastern and western United States to share information and insights into the ecology of a wide range of SGCN, but especially those that have been petitioned or proposed for federal listing under the Endangered Species Act. We also continued to work within the national flyway system and with regional avian joint ventures, such as the Oaks and Prairies Joint Venture, to further the conservation of avian SGCN across state boundaries. We engaged with the U.S. Fish and Wildlife Service and other partners on nine on-going Species Status Assessments for species under evaluation for Endangered Species Act-listing and coordinated with regional conservation partners regarding other at-risk species. We participated in the national Breeding Bird Survey by running three of the long-term routes in Oklahoma to help monitor a wide range of terrestrial bird species including 14 SGCN. We also conducted targeted surveys to collect distribution data for the Swift Fox (*Vulpes velox*), Crawfish Frog (*Lithobates areolata*), Rich Mountain Salamander (*Plethodon ouachitae*), Black-tailed Prairie Dog (*Cynomys ludovicianus*), and conducted community-level surveys for SGCN birds, reptiles, and amphibians on selected state wildlife management areas. We managed and promoted two citizen science outreach projects that solicited Whooping Crane (*Grus americana*) and Texas Horned Lizard (*Phrynosoma cornutum*) observations. These produced 20 confirmed reports of migrating groups of Whooping Cranes, and 625 reports of Texas Horned Lizards. All field records and citizen science observations of Oklahoma SGCN were entered into a geospatial database that we developed for sharing these records with the Oklahoma Natural Heritage Inventory and other conservation

partners. Finally, we conducted outreach efforts that highlighted the conservation needs of SGCN including the Mexican Free-tailed Bat (*Tadarida brasiliensis*), Crawfish Frog (*Lithobates areolata*), Oklahoma Cave Crayfish (*Cambarus tartarus*) and Red-cockaded Woodpecker (*Dryobates borealis*).

OBJECTIVES:

Objective 1: Stakeholder Involvement - Engage Nine Organizations by 2025

Conduct administrative activities that facilitate the conservation of species of greatest conservation need through partnerships and collaborations between ODWC and other conservation agencies and organizations from October 1, 2022 to September 30, 2025

Objective 2: Research, Survey, Data Collection, and Analysis - Conduct Seven Investigations by 2025

Conduct field surveys that collect spatial data and monitor populations of species of greatest conservation need using low-impact techniques that do not alter their habitat, do not affect local populations, and do not affect threatened or endangered species from October 1, 2022 to September 30, 2025.

Objective 3: Research, Survey, Data Collection, and Analysis - Manage One Database by 2025

Maintain a database of spatial and ecological data for species of greatest conservation need from October 1, 2022 to September 30, 2025

Objective 4: Outreach/Communication - Produce Three Products by 2025

Produce digital outreach articles for Whooping Crane, Texas Horned Lizard, Eastern Spotted Skunks, and other species of greatest conservation need in Oklahoma from October 1, 2022 to September 30, 2025.

RESULTS AND DISCUSSION:

Objective 1: Stakeholder Involvement, Engage Nine Organizations by 2025

Conduct administrative activities that facilitate the conservation of species of greatest conservation need through partnerships and collaborations between ODWC and other conservation agencies and organizations from October 1, 2022 to September 30, 2025

During the three years of this grant, the staff of the Oklahoma Wildlife Diversity Program engaged with ten stakeholder groups as described in greater detail below. These groups were the SEAFWA Wildlife Diversity Committee, the WAFWA ESA Information Working Group, the Central Flyway Council, the Oaks and Prairies Joint Venture, the AFWA Southern Wings Working Group, the Swift Fox Conservation Team, the Ozark Bat and Karst Working Group, the Oklahoma Bat Coordination Team, the U.S. Fish and Wildlife Service's Endangered Species Division (listing, recovery, and at-risk species programs), and the Oklahoma Conservation Exchange Group.

SEAFWA Wildlife Diversity Committee:

Principal Investigators Mark Howery and Curtis Tackett were engaged in the work of the Southeastern Association of Fish and Wildlife Agencies' (SEAFWA) Wildlife Diversity Committee and Mark served as the Committee Chair in calendar years 2023, 2024, and 2025. Since 2012, the focus of the SEAFWA Wildlife Diversity Committee has been the proactive conservation of at-risk species, which closely mirrors each state's list of species of greatest conservation need (SGCN). The SEAFWA states share information and experiences regarding the status, ecology, and management of at-risk species and in particular the species that have been petitioned for potential federal listing under the Endangered Species Act (ESA). Since 2008, more than 400 species across the southeastern United States have been petitioned for ESA listing and approximately eighty percent of these have been addressed or are currently scheduled on the U.S. Fish and Wildlife Service's National Listing Work Plan.

The SEAFWA Wildlife Diversity Committee holds a stand-alone, multi-day meeting each spring and monthly virtual meetings to share information about petitioned species and federal listing actions. As the Committee's chairman, Mark was responsible for organizing monthly agendas, facilitating the meetings, and coordinating with the representatives from the other state wildlife agencies and guest speakers. He also prepared written summaries of the Committee's work in fiscal years 2023 and 2024, which were presented to the SEAFWA state directors at their October 2023 meeting in Corpus Christi, Texas and December 2024 meeting in Augusta, Georgia. Virtual meetings were held on the third Thursday of most months from October 2022 through September 2025, and in-person meetings were held March 6 – 8, 2023, March 4 – 6, 2024, and March 10 – 12, 2025 in Georgia at the Georgia DNR's Charlie Elliott Wildlife Center. During each of the monthly meetings, a standing item of business was the review of all current Federal Register Notices that are pertinent to ESA listing and regulation actions within the SEAFWA geography (15 southeastern states and two U.S. territories), and we shared information regarding new petitions for federal listings, new and on-going Species Status Assessments (SSAs), and new five-year status reviews for previously listed species. States also shared information about their surveys and management projects that benefit petitioned or at-risk species (at-risk species are rare and declining species that are at-risk of becoming threatened or endangered in the foreseeable future). For the Oklahoma Department of Wildlife Conservation, this has been a good forum for us to communicate with our neighboring states and to maintain those relationships around the conservation of shared species of concern including the Alligator Snapping Turtle (*Macrochelys temminckii*), Louisiana Pigtoe (*Pleurobema riddellii*), Frosted Elfin (*Callophrys irus*), Western Chicken Turtle (*Deirochelys reticularia miaria*), Colorless Shiner (*Notropis perpallidus*), and Tricolored Bat (*Perimyotis subflavus*). The Committee has maintained a spreadsheet for tracking the southeastern species on the USFWS's National Listing Work Plan. For each Work Plan species, the spreadsheet includes the states where it is present, identifies the states in which status assessments and ecological research have been completed or are on-going, and lists the federal point(s) of contact for each Species Status Assessment. Within the past six years, the U.S. Fish and Wildlife Service has created at-risk species coordinator positions for their Regions 2 (Albuquerque) and 4 (Atlanta), and both biologists, Katie Boyer and Rebecca Harrison respectively, attend our virtual meetings regularly and provide updates regarding on-going and up-coming listing actions. Through the SEAFWA monthly meetings, we were able to provide feedback on the Region 2 At-Risk Species Strategic Plan that has a strong focus on pollinators, freshwater mussels, and bats.

The SEAFWA Wildlife Diversity Committee worked on a wide range of activities during the grant period including a collaboration with the SEAFWA Wildlife Health Committee to prepare guidance for states in addressing emerging diseases that could affect SGCN, providing assistance to USFWS Regions 2 and 4 for the binning of the species that were addressed during the 2024 update to the National Listing Work Plan, preparations for symposia at the 2023 and 2024 SEAFWA conferences addressing aquatic SGCN, better integrating the conservation needs of at-risk SGCN into Department of Defense Integrated Natural Resource Management Plans, and collaboration with the USFWS Science Applications Branch and the Midwest Landscape Conservation Initiative on cross-region Landscape Recovery tool and a State Wildlife Action Plan visualization tool. An ad hoc subcommittee was created in 2024 to facilitate information sharing between state and federal agencies regarding crayfish conservation. The annual in-person meetings have provided opportunities for more in-depth discussions that have included approaches that states are taking in SGCN bat conservation, engaging stakeholders and volunteers in community science projects built around SGCN, and ways to more comprehensively address full annual cycle bird conservation, rare plant conservation, fire ecology, and the annual updates to the Southeast Conservation Blueprint that is maintained by the Southeast Conservation Adaptation Strategy.

WAFWA Endangered Species Act Informational Work Group:

The Western Association of Fish and Wildlife Agencies' Endangered Species Informational Work Group (ESAIWG) was formed in 2015 and involves state wildlife agency representatives throughout the WAFWA states as well as state field office and regional U.S. Fish and Wildlife Service staff from Regions 2 and 6. The primary purpose of the Work Group is to share information about ongoing and upcoming projects on federally listed species, petitioned species, proposed species, and species of greatest conservation need that are of interest to western states. The USFWS regional offices provide updates on the status of specific listing actions, on-going species status assessments, and petitions in addition to the annual changes in the National Listing Workplan and any de/down-listing updates. P.I. Curtis Tackett represents ODWC on the Work Group and shares updates on surveys and projects funded through the State Wildlife Grants program for federally petitioned species. Focal species that were discussed by the working group during the grant period included, the Texas Kangaroo Rat (*Dipodomys elator*), Pinyon Jay (*Gymnorhinus cyanocephalus*), Lesser Prairie Chicken (*Tympanuchus pallidicinctus*), Plains Spotted Skunk (*Spilogale interrupta*), Tricolored Bat (*Perimyotis subflavus*), Peppered Chub (*Macrhybopsis tetranema*), Monarch (*Danaus plexippus*), and Kiamichi Crayfish (*Faxonius saxatilis*).

Central Flyway Council Coordination:

Principal Investigator Mark Howery represented ODWC on the Central Flyway Council's Nongame Migratory Bird Technical Committee (NMBTC) throughout the reporting period. The Central Flyway Council is a regional partnership involving the ten state wildlife agencies, three Canadian provinces, Canadian Wildlife Service and two U.S. Fish and Wildlife Service regions (Regions 2 & 6) that encompass the Central Flyway. The Council's NMBTC assists the U.S. Fish and Wildlife Service with conservation and regulatory issues connected to the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Additionally, it serves as a forum through which the state, provincial and federal agencies can communicate, share data, and

review federal regulation proposals. Throughout the grant period, the Nongame Migratory Bird Technical Committee held bimonthly virtual meetings and annual two-day in-person meetings in conjunction with the Central Flyway Council's summer meeting. Most of the committee's work focused on migratory bird SGCN and during the grant period the committee worked specifically on conservation issues involving the Mountain Plover (*Charadrius montanus*), the federally-petitioned Pinyon Jay (*Gymnorhinus cyanocephalus*), the Golden Eagle (*Aquila chrysaetos*), and USFWS status assessments for the Peregrine Falcon (*Falco peregrinus*), Bald Eagle (*Haliaeetus leucocephalus*), Interior Population of the Piping Plover (*Charadrius melodus*), and Eastern Black Rail (*Laterallus jamaicensis*). We participated in three meetings with the USFWS Whooping Crane (*Grus americana*) recovery coordinator to discuss population monitoring and the factors limiting population growth. We also continued our discussion of the use of satellite telemetry and Motus towers for monitoring the timing of migration and the migratory pathways for shorebirds and grassland birds including the Long-billed Curlew (*Numenius americanus*), Sprague's Pipit (*Anthus spragueii*), Chestnut-collared Longspur (*Calcarius ornatus*), and Burrowing Owl (*Athene cunicularia*). All states participated in a regional colonial waterbird monitoring project during the 2024 nesting season and these data were analyzed by the U.S. Fish and Wildlife Service to develop an index of population change for some species across the Central and Mississippi flyways. The Central Flyway NMBTC was integrally involved in the development of the Midcontinental Shorebird Conservation Plan that spans the interior of both North and South America from the Arctic Circle to Tierra del Fuego. During the grant period, two virtual workshops were held, and the shorebird plan was completed in 2024. The flyway meetings also served as an information-sharing platform for updates regarding the impact of Highly Pathogenic Avian Influenza (HPAI) on migratory nongame birds. Some raptors, including Bald Eagle, Great Horned Owl, and Peregrine Falcon, and some colonial waterbird species, including American White Pelican, Eared Grebe, and Caspian Tern, have been affected by the virus through localized die-offs, but songbirds as a whole have been minimally impacted.

Mark served as one of the Central Flyway's representatives on two national cross-flyway working groups. One group developed and implemented the national population monitoring effort for colonial waterbirds and held bi-monthly virtual meetings via the Teams platform to finalize a statistically rigorous monitoring framework and a standardized set of data fields for the first nationwide survey, which was successfully implemented during May and June of 2024. The other national working group worked with the USFWS on refinements to the process for authorizing take of depredating Golden Eagles, primarily through take for placement into falconry.

Southern Wings Working Group and Oaks and Prairies Joint Venture:

Separate from the Central Flyway but related by way of bird conservation, Mark also participated in the Association of Fish and Wildlife Agency's Southern Wings Working Group and the Science Team for the Oaks and Prairies Joint Venture. The Southern Wings Working Group meets quarterly to develop and review progress on a series of international bird conservation projects that link U.S. breeding bird populations with conservation on their wintering grounds in Central and South America. The Oaks and Prairies Joint Venture covers a geography that encompasses the Cross Timbers and Tallgrass Prairie ecological regions in central and east-central Oklahoma. The Joint Venture's Science Team met in June of 2024 to discuss grassland bird conservation and to revisit the current focal areas and programs of the

joint venture that encourage private landowners to enhance or restore tallgrass prairie and oak savannah habitats.

Oklahoma Bat Coordinating Team - The OBCT is an information sharing collaborative network of bat experts and cave managers from across the state. The team is co-led by P.I. Curtis Tackett and Matt Fullerton from the U.S. Fish and Wildlife Service. Annual meetings were held in January or February as virtual events to account for unpredictable weather and travel conditions. These meetings brought together bat experts from academic institutions, state and federal agencies, environmental consulting companies, non-profit organizations as well as individual caving groups. The 2024 and 2025 meetings included guests from TPWD and FWS to provide updates on the Cave Myotis working group and national WNS efforts respectively. Meeting topics will include updates on WNS surveillance, wind energy development, compilation of bat occurrence data into NA Bat, internal and external communications, research projects, current and upcoming survey efforts, partner updates, and T&E updates related to the Tricolored Bat (*Perimyotis subflavus*), Northern Long-eared Bat (*Myotis septentrionalis*), and Little Brown Bat (*Myotis lucifugus*).

Ozark Karst and Bat Conservation Working Group:

In November 2022 and November 2023, P.I.s Mark Howery and Curtis Tackett attended the meetings of the Ozark Karst and Bat Conservation Working Group. This group was organized by the USFWS's Arkansas Field Office to bring together biologists and land managers across the Ozark Region to share information about the conservation of the fauna associated with caves and karst formations. The group meets annually; however, in the odd numbered years the meeting is focused on efforts within the state of Arkansas and in even numbered years it is expanded to the entire region (adding entities from Missouri and Oklahoma). During both meetings that we attended, we provided an update on cave biological inventories and habitat conservation work in Oklahoma and heard presentations regarding cave crayfish (*Cambarus* sp.), Ozark Big-eared Bat (*Corynorhinus townsendii ingens*), Indiana Bat (*Myotis sodalis*), Gray Bat (*Myotis grisescens*), and Ozark Cavefish (*Amblyopsis rosae*) research and monitoring.

Swift Fox Conservation Team Meeting:

In October, PI's Mark Howery and Cheyenne Gonzales attended the 2023 Biennial Swift Fox Conservation Team meeting in Colby, Kansas. The two main objectives of this meeting were to review and revise the Swift Fox Conservation Assessment and Conservation Strategy and to provide participants with the opportunity to give research updates. PI Mark Howery provided an update on Swift Fox monitoring efforts within Oklahoma, highlighting ODWC's annual track survey results. PI Cheyenne Gonzales recorded meeting notes which served as the 2023 Swift Fox Conservation Team Report.

Midwest Pollinator Working Group and Oklahoma Pollinator Cooperative:

In 2023 and early 2024, P.I.s Cheyenne Gonzales and Mark Howery participated in the virtual meetings of the Midwest Pollinator Working Group, which are organized by the staff of the Midwest Landscape Initiative (MLI). This group was formerly known as the Mid-America State Monarch Team, which developed the Mid-America Monarch Conservation Strategy and included non-MAFWA states (Oklahoma, Texas, and Arkansas) in the Monarch's primary migration corridor. With the shift to a Midwest-focused pollinator group under the MAFWA, we

elected to reduce our participation in that working group in mid-2024 and became more engaged with the newly reorganized Oklahoma Pollinator Cooperative. Cheyenne and Mark attended their pollinator summit in August 2024, and Cheyenne has since participated with their pollinator habitat improvement working group.

Species Status Assessments and Federal Listing Action Reviews:

P.I.s Curtis Tackett and Mark Howery divide the responsibilities for participating in the Species Status Assessments (SSAs) for at-risk species that reside in Oklahoma. During this annual grant segment, they were engaged with the SSA teams for the Alligator Snapping Turtle (*Macrochelys temminckii*) (described below in greater detail), Western Chicken Turtle (*Deirochelys reticularia miaria*), Colorless Shiner (*Notropis perpallidus*), Kiamichi Crayfish (*Faxonius saxatilis*), Oklahoma Cave Crayfish (*Cambarus tartarus*), Longnose Darter (*Percina nasuta*), Tri-colored Bat (*Perimyotis subflavus*), Louisiana Pigtoe (*Pleurobema riddellii*), and Rocky Shiner (*Notropis suttkusi*). In addition to these SSAs, they provided information for the post-delisting monitoring effort for the Black-capped Vireo (*Vireo atricapillus*) and reviewed the draft recovery plan for the federally endangered Peppered Chub (*Macrhybopsis tetranema*). P.I. Curtis Tackett assisted the USFWS recovery teams with information regarding the Oklahoma populations of Ozark Big-eared Bat (*Corynorhinus townsendii ingens*), Western Fanshell (*Cyprogenia aberti*), Rabbitsfoot (*Quadrula cylindrica*), and Eastern Black Rail (*Laterallus jamaicensis*). He also reviewed and prepared the agency's responses to proposed downlisting of the Red-cockaded Woodpecker (*Dryobates borealis*) from endangered to threatened status, proposed listing of the Regal Fritillary (*Speyeria idalia*) as a threatened species, the proposed listing of the Monarch (*Danaus plexippus*) as a threatened species, and the proposed rescission of the definition of "harm" under the Endangered Species Act. Information was provided for the 90-day findings for the Alabama Shad (*Alosa alabamae*), Pinyon Jay (*Gymnorhinus cyanocephalus*), Morrison's Bumble Bee (*Bombus morrisoni*), and Arogos Skipper (*Atrytone arogos*), and for the not-warranted findings for the Plains Spotted Skunk (*Spilogale putorius interrupta*) and the Kiamichi Crayfish (*Faxonius saxatillis*). Curtis Tackett coordinated frequently with the USFWS's Oklahoma Ecological Services Field Office staff in Tulsa regarding five-year status reviews for listed species and new developments regarding recently listed or recently uplisted species including the Northern Long-eared Bat (*Myotis septentrionalis*), Lesser Prairie Chicken (*Tympanuchus pallidicinctus*), and Western Fanshell (*Cyprogenia aberti*) and in-person meetings and field activities involving Indiana Bat (*Myotis sodalis*) and Red-cockaded Woodpecker recovery projects.

Alligator Snapping Turtle Species Status Assessment (SSA):

During the first annual segment of the grant, P.I.s Mark Howery and Curtis Tackett spent substantial time reviewing and providing comments on the updated Alligator Snapping Turtle SSA. The U.S. Fish and Wildlife Service had originally scheduled a final listing decision on the Alligator Snapping Turtle (currently proposed as a threatened species) for 2023; however, the geographic range of this species is very large, and new distribution and population data are being generated almost continuously across its range. In February and March of 2023, the USFWS conducted an elicitation process with technical experts in specific analysis units including the Western Mississippi River Unit in which Oklahoma lies. One of the shortcomings of the previous version of the Alligator Snapping Turtle SSA was that only a small number of biologists with technical expertise were involved in the evaluation of the document and its threats analysis.

Additionally, new data had been collected from several states (e.g., Georgia, Mississippi, Missouri, Oklahoma, and Texas) since the original SSA was completed. The elicitation process involved a larger group of biologists, and it began with an explanatory webinar that was followed by a lengthy questionnaire that asked participants to evaluate the magnitude and geographic scope of potential threats and mortality factors affecting Alligator Snapping Turtles. This was followed in July and August by a second questionnaire that sought further clarification on some of the threat analyses. The elicitation process provided an opportunity for state wildlife agencies and other partners to present new perspectives and new field data (collected since 2020) to inform the SSA revision, and to identify conservation measures that have been put into place to benefit Alligator Snapping Turtle populations directly or indirectly. In November 2023, a revised draft of the Alligator Snapping Turtle SSA was sent to stakeholders and technical experts, and ODWC staff submitted ten pages of comments and additional information for the next update. The listing decision for the Alligator Snapping Turtle has been delayed two additional times and new solicitations for data were issued in April of 2024 and in February of 2025. The Alligator Snapping Turtle occurred historically in 23 counties in eastern Oklahoma and is presumed to have occurred in an additional 8 counties based on their proximity to counties of known historic occurrence. Since 2020, Alligator Snapping Turtle populations have been confirmed in 17 of these historic counties (Atoka, Choctaw, Haskell, Hughes, Johnston, LeFlore, Mayes, McCurtain, McIntosh, Muskogee, Nowata, Osage, Pittsburg, Pushmataha, Rogers, Sequoyah, and Wagoner).

Identification of Management and Research Needs for Species of Greatest Conservation Need:

Each year, the ODWC dedicates a portion of its State Wildlife Grants apportionment to pass-through grants to external conservation partners. This is traditionally accomplished through a formal Request for Proposals (RFP) process. All P.I.s on this grant participated in the development of project descriptions (scopes of work) that were evaluated for inclusion in the 2023, 2024, and 2025 SWG RFPs. The P.I.s evaluated the statuses of Tier I and Tier II SGCN to identify information gaps, then they conducted literature reviews to research recommended survey techniques to develop what are essentially pre-proposals that frame the scope of work needed to address the species’ data deficiencies. We considered projects that addressed survey and monitoring needs for Mountain Plover (*Charadrius montanus*), Round-tailed and Texas Horned Lizard (*Phrynosoma modestum* and *P. cornutum* respectively), Rich Mountain Salamander (*Plethodon ouachitae*), and Swift Tiger Beetle (*Paravindela celeripes*). Table 1 lists projects, which addressed survey and monitoring needs for SGCN with insufficient biological data in Oklahoma and were included in one or more of the RFPs.

Table 1. Scope of Work Summaries for Projects to Fill Data Gaps for Oklahoma SGCN.

Research Need & Data Deficiencies Addressed	SGCN Addressed
Herpetological Assessment of the Oklahoma Shortgrass Prairie Region Species Distribution/Range Habitat Assessment	Chihuahuan Green Toad (<i>Anaxyrus debilis</i>) Common Checkered Whiptail (<i>Aspidoscelis tesselata</i>) Lesser Earless Lizard (<i>Holbrookia maculata</i>) Long-nosed Snake (<i>Rhinocheilus lecontei</i>) Western Massasauga (<i>Sistrurus tergeminus</i>) Round-tailed Horned Lizard (<i>Phrynosoma modestum</i>)

	Texas Horned Lizard (<i>Phrynosoma cornutum</i>)
Wading Bird Nesting Colony Survey and Assessment Species Distribution/Range Community Demographics Habitat Assessment	Little Blue Heron (<i>Egretta caerulea</i>) Snowy Egret (<i>Egretta thula</i>)
Assessment of Seeps, Vernal Pools, and Associated Floral and Faunal Communities in Eastern Oklahoma Species Distribution/Range Habitat Assessment	Ringed Salamander (<i>Ambystoma annulatum</i>) Mole Salamander (<i>Ambystoma talpoideum</i>) Ouachita Dusky Salamander (<i>Desmognathus brimelyorum</i>) Many-ribbed Salamander (<i>Eurycea multiplicata</i>) Four-toed Salamander (<i>Hemidactylium scutatum</i>) Ouachita Spiketail (<i>Cordulegaster talaria</i>)
Comprehensive Mussel Community Assessments of the Blue, Illinois, and Verdigris rivers and Their Tributaries Species Distribution/Range Community Demographics Habitat Assessment	Plain Pocketbook (<i>Lampsilis cardium</i>) Ouachita Kidneyshell (<i>Ptychobranhus occidentalis</i>) Neosho Mucket (<i>Lampsilis rafinesqueana</i>) Rabbitsfoot (<i>Quadrula cylindrica</i>) Western Fanshell (<i>Cyprogenia aberti</i>) Louisiana Fatmucket (<i>Lampsilis hydiana</i>)
Data Deficient SGCN Priority List Species Distribution/Range Life History Population Demographics Habitat Needs/Limitations Threats/Stressors	Crystal Darter (<i>Crystallaria asprella</i>) Spotfin Shiner (<i>Cyprinella spilopterus</i>) Peppered Shiner (<i>Notropis perpallidus</i>) Gulf Swampsnake (<i>Liodytes rigida sinicola</i>) Western Mudsnake (<i>Farancia abacura</i>) Lesser Siren (<i>Siren intermedia</i>) Three-toed Amphiuma (<i>Amphiuma tridactylum</i>) Washboard Mussel (<i>Megalonaias nervosa</i>) Butterfly Mussel (<i>Ellipsaria lineolata</i>)

A similar process is used for the identification of management and research needs for the projects that are proposed for funding under the federal ESA Section 6 program. Curtis Tackett coordinates with Oklahoma Ecological Services Field Office (OKESFO) staff to generate research and recovery project needs for threatened and endangered species. This includes meetings with taxa experts, soliciting proposals from traditional partners and developing budgets and project narratives. The ODWC and OKESFO also hold an informal annual meeting to discuss project ideas and funding priorities for the next fiscal year in the areas of conservation planning, species surveys, data management, and habitat management.

Oklahoma Conservation Exchange Group:

Each year, three or four of the P.I.s represented the Wildlife Diversity Program at the annual meeting of the Oklahoma Conservation Exchange Group (OCEG). This is a coordination meeting between the ODWC Wildlife Diversity Program, the Oklahoma Field Office of the USFWS, the Oklahoma Chapter of The Nature Conservancy, the Oklahoma Biological Survey, and the Sutton Avian Research Center that is held each winter and is centered around the conservation of rare and declining species. At each meeting, we provided updates for six to eight of the projects that we support with State Wildlife Grants and Endangered Species Act Section 6 funding (e.g., survey projects for Crawfish Frog (*Lithobates areolatus*), Eastern Whip-poor-will (*Antrostomus vociferus*), Western Fanshell (*Cyprogenia aberti*), Western Chicken Turtle

(*Deirochelys reticularia miaria*), Kiamichi Crayfish (*Faxonius saxatilis*), Ringed Salamander (*Ambystoma annulatum*), and Texas Horned Lizard (*Phrynosoma cornutum*)). Other partners provided updates on their projects, which included a multi-year survey efforts for the Frosted Elfin (*Callophrys irus*) and for bumble bees by the Oklahoma Biological Survey, the cave protection efforts by the USFWS for the conservation of Ozark Big-eared Bats (*Corynorhinus townsendii ingens*), and conservation planning by TNC at their recently acquired Jackson Cross Timbers Preserve in Creek County. We use this meeting as an opportunity to discuss potential new SGCN conservation projects and obtain recommendations and suggestions from the other conservation organizations in the partnership regarding the species and habitats that they view as immediate priorities. Following the 2024 meeting of the Oklahoma Conservation Exchange Group, we held a series of virtual meetings with the Ouachita National Forest and Oklahoma Natural Heritage Program to compile all known records/reports for the Kiamichi Slimy Salamander (*Plethodon kiamichi*) and the Sequoyah Slimy Salamander (*Plethodon sequoyah*) to inform federally funded status assessments for both species. Working with other partners in the OCEG, we assisted the Oklahoma Herpetological Society with a 2023 mini symposium covering the conservation of the Alligator Snapping Turtle, and a 2024 mini symposium addressing Ringed Salamander conservation.

Internal ODWC In-Reach:

Principal Investigators Curtis Tackett and Kurt Kuklinski devote a portion of their time working with other biologists within ODWC's Fisheries and Wildlife divisions regarding SGCN conservation. Often, these conversations begin when an ODWC field biologist or program biologist needs assistance in preparing an assessment of their activities' potential impacts to federally listed plant and animal species in order to comply with Section 7 of the Endangered Species Act. Curtis and Kurt serve as ODWC's primary contacts for ESA Section 7 compliance for internal projects, and this provides an opportunity to discuss and consider potential impacts and benefits to threatened and endangered species and other SGCN (all federally listed species are classified as species of greatest conservation need in the OK Wildlife Action Plan). They helped the other ODWC biologists navigate the ESA Section 7 consultation process by evaluating the project scope and activities, generating an official species list through IPAC, and helping them prepare an informal biological evaluation document.

Objective 2: Research, Survey, Data Collection, and Analysis; Conduct Eight Investigations by 2022

Conduct field surveys that collect spatial data and monitor populations of species of greatest conservation need using low-impact techniques that do not alter their habitat, do not affect local populations, and do not affect threatened or endangered species from October 1, 2022 to September 30, 2025.

During the grant period, the Principal Investigators conducted eight field investigations involving one or more Oklahoma Species of Greatest Conservation Need. These investigations included surveys to document 14 species of breeding SGCN birds along three Breeding Bird Survey routes and on eleven tracts of public and private land in eight counties; general SGCN surveys on eight of ODWC's wildlife management areas, and six species-specific survey efforts for the Swift Fox (*Vulpes velox*), Black-tailed Prairie Dog (*Cynomys ludovicianus*), Whooping Crane

(*Grus americana*), Texas Horned Lizard (*Phrynosoma cornutum*), Crawfish Frog (*Lithobates areolata*), and Rich Mountain Salamander (*Plethodon ouachitae*).

Breeding Bird Survey Routes:

P.I. Mark Howery completed the Holdenville Breeding Bird Survey (BBS) each June in 2023, 2024, and 2025. This is one of the original BBS routes for Oklahoma and was established in 1968; Mark has covered this route annually since 1993. He is also responsible for running the Pushmataha BBS route, which is a newer route that was established in 1993. This route was completed in 2023, but high rainfall made the route impassable in 2024 and 2025 due to a low water crossing between stops #20 and #21. In 2025, P.I. Mark Howery resumed the coverage of the Grimes BBS route (also one of the original 1968 routes) after the previous surveyor retired from the route. The results of these surveys are summarized in Tables 2 and 3. All three of these BBS routes traverse habitats that are occupied by five to eight avian SGCN, and cumulatively 14 SGCN were documented on these routes. Northern Bobwhite (*Colinus virginianus*), Red-headed Woodpecker (*Melanerpes erythrocephalus*), Bell’s Vireo (*Vireo bellii*), and Painted Bunting (*Passerina ciris*) were documented on two or more routes (Tables 2 and 3). Brown-headed Nuthatch (*Sitta pusilla*), Prairie Warbler (*Setophaga bicolor*), and Bachman’s Sparrow (*Peucaea aestivalis*) and occasionally Kentucky Warbler (*Geothlypis formosa*) and Prothonotary Warbler (*Protonotaria citrea*) are documented on the Pushmataha BBS route, while Swainson’s Hawk (*Buteo swainsonii*), Loggerhead Shrike (*Lanius ludovicianus*), Cassin’s Sparrow (*Peucaea cassinii*) and Bullock’s Oriole (*Icterus bullockii*) are routinely found along the Grimes BBS route.

Table 2. Summary of the birds detected on the Holdenville Breeding Bird Survey route in 2023, 2024, and 2025. Oklahoma Species of Greatest Conservation Need are shown in bold font.

Common Name	Holdenville BBS 14 June 2023	Holdenville BBS 22 June 2024	Holdenville BBS 30 June 2025
Northern Bobwhite	4	11	10
Wild Turkey			1
Rock Pigeon	3	2	2
Eurasian Collared-Dove		2	1
Mourning Dove	18	29	29
Yellow-billed Cuckoo	26	12	18
Greater Roadrunner	1	1	
Chuck-wills-widow			1
Chimney Swift	1		
Ruby-throated Hummingbird	4	3	6
Killdeer	1		1
Great Blue Heron	1	1	1
Great Egret		3	7
Green Heron		2	
Yellow-crowned Night-Heron	1		1
Turkey Vulture	8	6	9
Black Vulture	1	4	3
Mississippi Kite	1	6	5
Red-tailed Hawk		1	2
Red-shouldered Hawk	1		2

Broad-winged Hawk			1
Belted Kingfisher		1	
Red-headed Woodpecker	1	1	1
Red-bellied Woodpecker	12	10	8
Downy Woodpecker	4	3	3
Pileated Woodpecker	1		1
American Kestrel			1
Great Crested Flycatcher	26	13	18
Western Kingbird	2	1	2
Eastern Kingbird	2	1	1
Scissor-tailed Flycatcher	17	15	11
Eastern Wood-Pewee	5	3	5
Eastern Phoebe	9	9	14
White-eyed Vireo	15	13	16
Bell's Vireo	1	2	1
Red-eyed Vireo	17	13	7
Blue Jay	7	4	8
American Crow	19	19	21
Fish Crow	3	1	3
Purple Martin	2	2	3
Northern Rough-winged Swallow	2	1	
Cliff Swallow	4	42	10
Barn Swallow	13	11	13
Carolina Chickadee	15	16	10
Tufted Titmouse	44	51	57
White-breasted Nuthatch	3	1	3
Blue-gray Gnatcatcher	14	24	17
Carolina Wren	24	34	41
Bewick's Wren	1		1
Eastern Bluebird	4	12	13
American Robin	1		1
Gray Catbird	1		
Brown Thrasher	2	1	3
Northern Mockingbird	23	27	35
European Starling	5	3	4
House Sparrow	3	6	4
House Finch	1		
American Goldfinch	1	3	1
Lark Sparrow	8	6	3
Field Sparrow	18	26	23
Yellow-breasted Chat	5	2	4
Eastern Meadowlark	8	14	15
Orchard Oriole	2	2	5
Baltimore Oriole	3	3	
Red-winged Blackbird	3	6	7
Brown-headed Cowbird	10	10	13
Common Grackle	6	6	6
Louisiana Waterthrush	1		
Kentucky Warbler		2	1

Northern Parula	3	1	3
Yellow-throated Warbler			2
Prothonotary Warbler		1	
Common Yellowthroat	1		
Summer Tanager	15	13	11
Northern Cardinal	92	98	107
Blue Grosbeak	12	12	17
Indigo Bunting	50	45	58
Painted Bunting	41	43	47
Dickcissel	20	22	21
Total Species/Route	67	61	68

Table 3. Summary of the birds detected on the Pushmataha Breeding Bird Survey route in 2023 and the Grimes BBS Route in 2025. Oklahoma SGCN are shown in bold font.

Common Name	Pushmataha BBS 23 June 2023	Grimes BBS 19 June 2025
Canada Goose		4
Northern Bobwhite	40	132
Wild Turkey		4
Eurasian Collared-Dove		5
Mourning Dove	18	86
Yellow-billed Cuckoo	19	11
Greater Roadrunner		1
Common Nighthawk		8
Chuck-wills-widow	3	3
Chimney Swift	8	
Ruby-throated Hummingbird	2	
Killdeer		1
Turkey Vulture	7	3
Black Vulture	2	
Mississippi Kite	1	5
Swainson's Hawk		1
Red-tailed Hawk	1	3
Red-shouldered Hawk	1	
Broad-winged Hawk	5	
Red-headed Woodpecker	15	10
Red-bellied Woodpecker	7	6
Downy Woodpecker	1	
Northern Flicker	1	
Pileated Woodpecker	2	
Great Crested Flycatcher	21	13
Eastern Kingbird	12	5
Scissor-tailed Flycatcher	6	40
Eastern Wood-Pewee	15	
Eastern Phoebe	1	5
White-eyed Vireo	10	
Bell's Vireo		4

Red-eyed Vireo	42	
Loggerhead Shrike		1
Blue Jay	5	
American Crow	26	15
Fish Crow	2	
Purple Martin	1	
Cliff Swallow	2	29
Barn Swallow	1	48
Carolina Chickadee	7	4
Tufted Titmouse	32	7
White-breasted Nuthatch	11	
Brown-headed Nuthatch	2	
Blue-gray Gnatcatcher	14	1
Carolina Wren	25	
Bewick's Wren		3
Eastern Bluebird	3	12
Brown Thrasher		6
Northern Mockingbird	5	35
European Starling		2
House Sparrow		3
House Finch	1	5
Cassin's Sparrow		4
Bachman's Sparrow	5	
Grasshopper Sparrow		22
Lark Sparrow	3	70
Chipping Sparrow	8	
Field Sparrow	2	30
Yellow-breasted Chat	59	
Eastern Meadowlark	1	124
Western Meadowlark		3
Orchard Oriole	39	
Bullock's Oriole		2
Red-winged Blackbird	1	11
Brown-headed Cowbird	6	14
Common Grackle	1	5
Common Yellowthroat	22	
Northern Parula	1	
Prairie Warbler	27	
Pine Warbler	41	
Summer Tanager	58	
Scarlet Tanager	2	
Northern Cardinal	29	45
Blue Grosbeak	43	15
Indigo Bunting	90	
Painted Bunting	2	18
Dickcissel	8	99
Total Species/Route	60	49

Breeding-Season Avian SGCN Surveys:

During the grant period, Principal Investigators Mark Howery, Curtis Tackett, Cheyenne Gonzales, Kurt Kuklinski, and Jena Donnell conducted breeding-season bird surveys on eleven tracts of land distributed across Creek, Greer, Harmon, Jackson, Jefferson, Okmulgee, Pontotoc, and Stephens counties. These surveys occurred during the months of May, June, and early July and targeted avian Species of Greatest Conservation Need such as the Loggerhead Shrike (*Lanius ludovicianus*), Bell’s Vireo (*Vireo bellii*), Kentucky Warbler (*Geothlypis formosa*), Prothonotary Warbler (*Protonotaria citrea*), and Cassin’s Sparrow (*Peucaea cassinii*). During these surveys, we recorded the complete breeding bird community in each tract, but the survey effort focused on the habitats that were most suitable for avian SGCN. Table 4 summarizes the avian SGCN detections that were documented during these surveys.

Table 4. Avian Species of Greatest Conservation Need Documented During Breeding-Season Surveys. Each record is a single individual unless otherwise noted.

Common Name	Scientific Name	County	Date
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 7, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 2, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Okmulgee	June 2, 2023
Bell’s Vireo	<i>Vireo bellii</i>	Creek	June 4, 2024
Bell’s Vireo	<i>Vireo bellii</i>	Creek	June 4, 2024
Bell’s Vireo	<i>Vireo bellii</i>	Creek	July 5, 2024
Bell’s Vireo	<i>Vireo bellii</i>	Creek	May 7, 2024
Bell’s Vireo	<i>Vireo bellii</i>	Creek	May 7, 2024
Bell’s Vireo	<i>Vireo bellii</i>	Creek	May 7, 2024
Bell’s Vireo	<i>Vireo bellii</i>	Creek	June 25, 2024
Bell’s Vireo	<i>Vireo bellii</i>	Creek	June 25, 2024
Bell’s Vireo (2)	<i>Vireo bellii</i>	Stephens	June 12, 2025
Bell’s Vireo (2)	<i>Vireo bellii</i>	Stephens	June 18, 2025
Bell’s Vireo	<i>Vireo bellii</i>	Jefferson	June 18, 2025
Cassin’s Sparrow	<i>Peucaea cassinii</i>	Stephens	June 18, 2025
Cassin’s Sparrow	<i>Peucaea cassinii</i>	Jackson	May 29, 2024
Cassin’s Sparrow	<i>Peucaea cassinii</i>	Jackson	May 29, 2024

Cassin's Sparrow	<i>Peucaea cassinii</i>	Jackson	May 29, 2024
Cassin's Sparrow	<i>Peucaea cassinii</i>	Jackson	May 29, 2024
Cassin's Sparrow	<i>Peucaea cassinii</i>	Jackson	May 29, 2024
Cassin's Sparrow	<i>Peucaea cassinii</i>	Jackson	May 29, 2024
Kentucky Warbler	<i>Geothlypis formosa</i>	Okmulgee	June 2, 2023
Kentucky Warbler	<i>Geothlypis formosa</i>	Okmulgee	June 2, 2023
Kentucky Warbler	<i>Geothlypis formosa</i>	Creek	June 4, 2024
Kentucky Warbler	<i>Geothlypis formosa</i>	Creek	June 4, 2024
Kentucky Warbler	<i>Geothlypis formosa</i>	Creek	June 4, 2024
Kentucky Warbler	<i>Geothlypis formosa</i>	Creek	June 4, 2024
Kentucky Warbler	<i>Geothlypis formosa</i>	Creek	May 7, 2024
Kentucky Warbler	<i>Geothlypis formosa</i>	Creek	May 10, 2024
Kentucky Warbler	<i>Geothlypis formosa</i>	Creek	May 10, 2024
Kentucky Warbler	<i>Geothlypis formosa</i>	Creek	June 25, 2024
Kentucky Warbler	<i>Geothlypis formosa</i>	Pontotoc	June 29, 2024
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Greer	June 15, 2023
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Okmulgee	June 2, 2023
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Okmulgee	June 7, 2023
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Creek	April 17, 2024
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Pontotoc	June 29, 2024
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Stephens	June 18, 2025
Loggerhead Shrike 2 adult; 2 fledglings	<i>Lanius ludovicianus</i>	Jefferson	June 18, 2025
Loggerhead Shrike (2)	<i>Lanius ludovicianus</i>	Jefferson	June 18, 2025
Louisiana Waterthrush	<i>Parkesia motacilla</i>	Okmulgee	June 2, 2023
Louisiana Waterthrush	<i>Parkesia motacilla</i>	Creek	June 4, 2024
Louisiana Waterthrush	<i>Parkesia motacilla</i>	Pontotoc	June 29, 2025
Painted Bunting	<i>Passerina ciris</i>	Stephens	June 12, 2025
Painted Bunting	<i>Passerina ciris</i>	Stephens	June 12, 2025
Painted Bunting	<i>Passerina ciris</i>	Stephens	June 12, 2025
Painted Bunting	<i>Passerina ciris</i>	Stephens	June 12, 2025
Painted Bunting	<i>Passerina ciris</i>	Stephens	June 18, 2025
Painted Bunting	<i>Passerina ciris</i>	Stephens	June 18, 2025
Painted Bunting (2)	<i>Passerina ciris</i>	Stephens	June 18, 2025
Painted Bunting (2)	<i>Passerina ciris</i>	Stephens	June 18, 2025
Painted Bunting	<i>Passerina ciris</i>	Stephens	June 18, 2025

Prothonotary Warbler	<i>Protonotaria citrea</i>	Okmulgee	June 2, 2023
Prothonotary Warbler	<i>Protonotaria citrea</i>	Okmulgee	June 2, 2023
Prothonotary Warbler	<i>Protonotaria citrea</i>	Okmulgee	June 7, 2023
Prothonotary Warbler	<i>Protonotaria citrea</i>	Okmulgee	June 7, 2023
Prothonotary Warbler	<i>Protonotaria citrea</i>	Okmulgee	June 7, 2023
Prothonotary Warbler	<i>Protonotaria citrea</i>	Creek	June 4, 2024
Prothonotary Warbler	<i>Protonotaria citrea</i>	Creek	May 10, 2024
Prothonotary Warbler	<i>Protonotaria citrea</i>	Creek	June 25, 2024
Prothonotary Warbler	<i>Protonotaria citrea</i>	Pontotoc	June 29, 2024
Golden-fronted Woodpecker	<i>Melanerpes aurifrons</i>	Harmon	June 15, 2023
Golden-fronted Woodpecker	<i>Melanerpes aurifrons</i>	Greer	June 15, 2023
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Okmulgee	June 7, 2023
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Harmon	June 15, 2023
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Harmon	June 15, 2023
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Stephens	June 12, 2025
Red-headed Woodpecker (2)	<i>Melanerpes erythrocephalus</i>	Creek	June 4, 2024
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Jackson	June 26, 2024

SGCN Surveys on ODWC Wildlife Management Areas:

PIs Cheyenne Gonzales and Jena Donnell conducted single-visit surveys to seven of ODWC's Wildlife Management Areas (WMAs) to search for and document species of greatest conservation need. They surveyed Cookson WMA in March 2024, Red Slough WMA in May 2024, Cimarron Hills WMA in June 2024, Sandy Sanders WMA in September 2024, Osage WMA in April 2025, Arbuckle Springs WMA in May 2025, and Sandhills WMA in June 2025. In addition, they organized surveys at Gist WMA and Hackberry Flat WMA to search for Texas Horned Lizards and other SGCN with the assistance of PIs Alex Cooper and Mark Howery, and Kurt Kuklinski. During these surveys, species of greatest conservation need including Oklahoma Salamander (*Eurycea tynnerensis*), Tricolored Bat, Southern Red-backed Salamander (*Plethodon serratus*), Ouachita Dusky Salamander (*Desmognathus brimleyorum*), Texas Horned Lizard (*Phrynosoma cornutum*), American Alligator (*Alligator mississippiensis*) Texas Toad (*Anaxyrus speciosus*), Loggerhead Shrike (*Lanius ludovicianus*), Painted Bunting (*Passerina ciris*), and

Prothonotary Warbler (*Protonotaria citrea*) were documented, and summaries of these records are included in Appendix A. Additionally, PIs Cheyenne Gonzales, Jena Donnell, and Curtis Tackett assisted USFWS and ODOT staff with the January 2025 Bat Culvert Blitz in the Tulsa-area.

To aid in data collection, P.I.s Cheyenne Gonzales and Jena Donnell created two digital data forms (ODWC Opportunistic Observations; ODWC Observations for OBIS) using the GIS software platform Survey123. These forms were developed to serve as the main reporting format for observations made during surveys of WMAs. The Opportunistic Observations form can be used to record any taxon seen, while the OBIS form is designed to capture SGCN and rare wildlife observations in a format that can be uploaded and shared with the Oklahoma Natural Heritage Inventory’s Oklahoma Biodiversity Information System (OBIS). Cheyenne Gonzales and Jena Donnell tested these Survey 123 applications during their surveys on Cimarron Hills and Sandy Sanders WMAs in June and September 2025 respectively and used the application to collect observations of SGCN and other nongame species.

Whooping Crane Migration Monitoring:

We participated in the Central Flyway-wide effort to monitor migrating Whooping Cranes (*Grus americana*) and to document the locations which Whooping Cranes use as stopover roosting and feeding sites in Oklahoma. These records also refine the spatial extent of the cranes’ migration corridor. We maintain a Whooping Crane page on the ODWC website that includes a reporting portal through which field employees, waterfowl hunters, and the public can report their Whooping Crane observations and upload photographs (<https://www.wildlifedepartment.com/wildlife/wildlife-diversity/report-whooping-crane-sighting/form>). When we receive reports, either over the phone or through the Internet-based application, we speak to the reporting individual to verify the accuracy of their identification and to collect first-hand information from them about the location, age, behavior, and apparent health of the cranes. When feasible, P.I.s Curtis Tackett and Kurt Kuklinski attempted to confirm the presence of the cranes, often with the assistance of county game wardens or field biologists in the region. They then submit confirmed reports to the U.S. Fish and Wildlife Service through an online reporting portal that is designed for tracking migrating Whooping Cranes. Table 5 provides a list of the confirmed reports that we received during the grant period. In Oklahoma, most reports are received during the fall migration period, and we often receive very few or no reports during the spring migration period because Whooping Cranes typically use favorable wind conditions (strong and persistent south winds) to fly directly from the Texas Coast to the Platte River in Nebraska without stopping down in northern Texas, Oklahoma, or Kansas.

Table 5. Whooping Crane Observational Reports from the Fall 2022 through the Spring 2025 Migration Periods.

Date	County	Number of WHCRs	Status
November 6, 2022	Alfalfa	3 adults, 1 juvenile	Confirmed; Photographed
November 7, 2022	Alfalfa	3 adults	Confirmed
November 7, 2022	Cotton	2 adults, 1 juvenile	Confirmed; Photographed
November 8, 2022	Alfalfa	3 adults	Confirmed; Photographed
November 8, 2022	Alfalfa	11 adults	Confirmed;

November 14, 2022	Alfalfa	3 adults	Confirmed;
October 23 - 30, 2023	Kiowa	1 adult	Confirmed; Photographed
October 24, 2023	Jackson	1 adult	Confirmed, Photographed
October 31, 2023	Alfalfa	11 adults, 1 juvenile	Confirmed
November 1, 2023	Alfalfa	12 adults, 2 juveniles	Confirmed
November 2, 2023	Alfalfa	1 adult	Confirmed
November 3, 2023	Alfalfa	8 adults, 2 juveniles	Confirmed
November 3, 2023	Alfalfa	4 adults, 1 juvenile	Confirmed
January 16 – 30, 2024	Tillman	1 adult	Confirmed; Photographed
October 28-30, 2024	Alfalfa	2 adults, 1 juvenile	Confirmed
November 3, 2024	Alfalfa	3 adults	Confirmed, Photographed
November 4, 2024	Cotton	4 adults, 1 juvenile	Confirmed, Photographed
November 6, 2024	Alfalfa	6 adults	Confirmed
December 2 – 5, 2024	Beaver	1 adult	Confirmed, Photographed
March 9, 2025	Alfalfa	4 adults	Confirmed

Hackberry Flat WMA Christmas Bird Count

On December 17, 2024, the Oklahoma Department of Wildlife Conservation launched the first Christmas Bird Count for the area on and surrounding Hackberry Flat WMA in Tillman County, Oklahoma. This is intended to be an annual event in perpetuity, and it fills a current hole in the coverage of Christmas Bird Counts in southwestern Oklahoma. The region supports wintering populations of several of Oklahoma’s avian SGCN including Harris’s Sparrow (*Zonotrichia querula*), Loggerhead Shrike, Northern Bobwhite, (*Colinus virginianus*), LeConte’s Sparrow (*Ammospiza leconteii*), and Northern Pintail (*Anas acuta*), each of which was documented on the count (Table 6). Like all Christmas Bird Counts, the count area is a circle with a 7.5-mile radius around a point on Hackberry Flat WMA, and the circle encompasses all of the WMA, surrounding agricultural fields, and a portion of the Red River. P.I.s Mark Howery, Cheyenne Gonzales, Kurt Kuklinski, and Jena Donnell participated in the survey along with other ODWC biologists and Hackberry Flat Center volunteers.

Table 6. Summary of the December 2024 Hackberry Flat WMA Christmas Bird Count (SGCN are shown in bolded font)

Hackberry Flat Christmas Bird Count December 2024	
Species	Count
Snow Goose	1042
Ross' Goose	651
Greater White-fronted Goose	2934
Cackling Goose	93
Canada Goose	2588
Northern Shoveler	33
Gadwall	77
American Wigeon	527
Mallard	133
Northern Pintail	2036
Green-winged Teal	1414

Canvasback	12
Redhead	1
Ring-necked Duck	166
Bufflehead	23
Ruddy Duck	35
Northern Bobwhite	43
Eared Grebe	1
Eurasian Collared-Dove	7
Mourning Dove	405
American Coot	9
Sandhill Crane	738
Killdeer	14
Greater Yellowlegs	115
Least Sandpiper	34
Long-billed Dowitcher	7
Wilson's Snipe	62
Great Blue Heron	12
Northern Harrier	78
Bald Eagle	1
Red-tailed Hawk	48
Rough-legged Hawk	1
Golden Eagle	1
Barn Owl	4
Great Horned Owl	2
Golden-fronted Woodpecker	1
Red-bellied Woodpecker	4
Yellow-bellied Sapsucker	1
Downy Woodpecker	2
Ladder-backed Woodpecker	2
Northern Flicker	18
American Kestrel	42
Merlin	2
Prairie Falcon	4
Eastern Phoebe	2
Loggerhead Shrike	60
Carolina Chickadee	7
Black-crested Titmouse	2
Horned Lark	389
Ruby-crowned Kinglet	1
Golden-crowned Kinglet	1
Marsh Wren	2
Bewick's Wren	1
Northern Mockingbird	6
European Starling	8

Eastern Bluebird	6
House Sparrow	55
American Goldfinch	25
Lapland Longspur	171
Longspur sp.	30
Lark Bunting	45
Field Sparrow	1
Dark-eyed Junco	8
White-crowned Sparrow	99
Harris's Sparrow	64
White-throated Sparrow	1
Vesper Sparrow	52
Savannah Sparrow	229
Song Sparrow	79
Grasshopper Sparrow	1
LeConte's Sparrow	1
Eastern Meadowlark	90
Western Meadowlark	82
Meadowlark sp.	1466
Red-winged Blackbird	1338
Brown-headed Cowbird	531
Brewer's Blackbird	465
Common Grackle	8
Yellow-rumped Warbler	2
Northern Cardinal	27
Species Total: 78	18778

Surveys for SGCN Amphibians - Crawfish Frog and Rich Mountain Salamander:

Principal Investigators Kurt Kuklinski, Alex Cooper, Mark Howery, Curtis Tackett, and Jena Donnell conducted early spring surveys for Crawfish Frogs (*Lithobates areolata*) on three nights in late March 2023 (Figure 1). Road-based routes were driven beginning at sunset and continuing for three to four hours after sunset depending upon the ambient air temperature and frog calling activity. We drove roads with one or more windows down and stopped at intervals of one half to one mile to listen for calling activity by frogs. We stopped and listened for a minimum of three minutes to determine whether Crawfish Frogs were calling at each location. Often, multiple frogs would be calling simultaneously at breeding ponds and in flooded ditches, so it was impossible to determine the number of individual frogs; therefore, we recorded presence/absence of calling Crawfish Frogs. Routes were driven through portions of McIntosh, Muskogee, Okfuskee, Okmulgee, and Wagoner counties, and Crawfish Frogs were documented in all five counties.

Principal Investigators Jena Donnell and Alex Cooper assisted a group of biologists and technicians from ODWC and the Ouachita National Forest with their Rich Mountain Salamander (*Plethodon ouachitae*) monitoring survey in late April 2023, and Cheyenne Gonzales and Alex

Cooper assisted the team in April 2025. The observations made by the P.I.s on both the Crawfish Frog and the Rich Mountain Salamander surveys are included in Appendix A.

Figure 1. One of the Crawfish Frogs Heard and/or Seen During Nocturnal Calling Surveys in Wagoner County.



Texas Horned Lizard Observations:

Principal Investigators Mark Howery, Jena Donnell, and Cheyenne Gonzales continued the popular citizen science project that collects information associated with Texas Horned Lizard (*Phrynosoma cornutum*) observations through an electronic reporting form on the ODWC's Wildlife Diversity webpage. In 2024, changes were made to the format of the survey that made the exact location of the sighting a required field, and a statewide mapping application was added to the online survey to help observers determine the location of their sightings and right-click to download the location's coordinates in decimal degrees. We saw a small drop in the reporting rate for the first two months after the roll-out of these changes, but the number of reports increased subsequently. The great majority (over 98%) of the observations that we received after the addition of the mapping application appeared to be accurate and consistent with the other information that is reported such as habitat conditions. Because of this, we believe that this was a beneficial addition to the survey that improves the overall quality of the data that we receive. In addition to the reporting form modifications, we updated the information that we provide regarding the natural history of the Texas Horned Lizard and its status in Oklahoma. The webpages for reporting Texas Horned Lizard observations and photographs, and for additional Texas Horned Lizard life history information can be found at the following URLs:

<https://www.wildlifedepartment.com/wildlife/report-wildlife>

<https://www.wildlifedepartment.com/wildlife/field-guide/reptiles/texas-horned-lizard>

Between March 2023 and September 2025, we received 625 complete observational records for Texas Horned Lizards. An additional 14 reports were received for locations in Texas that were

shared with our counterparts at the Texas Parks and Wildlife Department. In 2023, we received 186 Texas Horned Lizard reports representing 40 counties (included in Table 7). Of these, 98 (52.7%) had photographs submitted with the report that served as corroborating information. During 2024, we received 102 complete observation reports representing 33 counties in central and western Oklahoma. The number of reports that we received was smaller than the numbers we received during the preceding four years, and we believe that this was due to a combination of factors including the changes that we made to the reporting form and our reduced effort to solicit reports on social media during the summer months. The percentage of reports that were accompanied by one or more photographs (observers can submit as many as three photographs with their report) increased substantially in 2024 to 69%. In contrast, during the preceding four years, 52% of the reports that we received included a photograph. We suspect that the higher percentage this year is an artifact of our reduced promotion of the survey on social media that year. When we push out a request for horned lizard sightings, we typically receive a large batch of relatively spontaneous reports from prior weeks that don't have photographic documentation to accompany them. In 2025, we received 337 reports representing 41 counties. Of these reports, 204 (60.5%) included one or more photographs and 133 (39.5%) did not.

The 625 reports that we received during the grant period are summarized in Table 7, and to provide a partial geographic representation of these data, the 337 reports that we received in 2025 are mapped in Figure 2. These provided some level of documentation for Texas Horned Lizard populations in 48 counties, which included all 30 counties in western Oklahoma, eight of the eleven counties along the I-35 corridor (all except for Garvin, Love, and Murray counties in south-central Oklahoma), and ten counties east of I-35 (Creek, Johnston, Marshall, Nowata, Osage, Pawnee, Pottawatomie, Rogers, Tulsa, and Washington). Forty-three of the 48 counties had one or more reports that included a photograph, with a range of one to 22 photographic records per county. More reports included photographs (59.5%) than did not (39.5%) and all of these photographs were correctly identified as Texas Horned Lizards. This combination of a high photographic documentation rate and a highly accurate identification rate has led us to believe that all or nearly all of the reports that we received represented valid Texas Horned Lizard observations. An interesting phenomenon that we observed each year between late July and late September was an increase in the number and percentage of reports that included photographs of hatchlings. The presence of hatchlings seems to motivate people to submit reports of their observations, and we received photographic documentation of hatchlings at sites in Beaver, Beckham, Cimarron, Comanche, Custer, Ellis, Garfield, Grady, Grant, Greer, Harmon, Jackson, Kingfisher, Kiowa, Logan, Major, McClain, Noble, Tulsa, Washita, and Woodward counties.

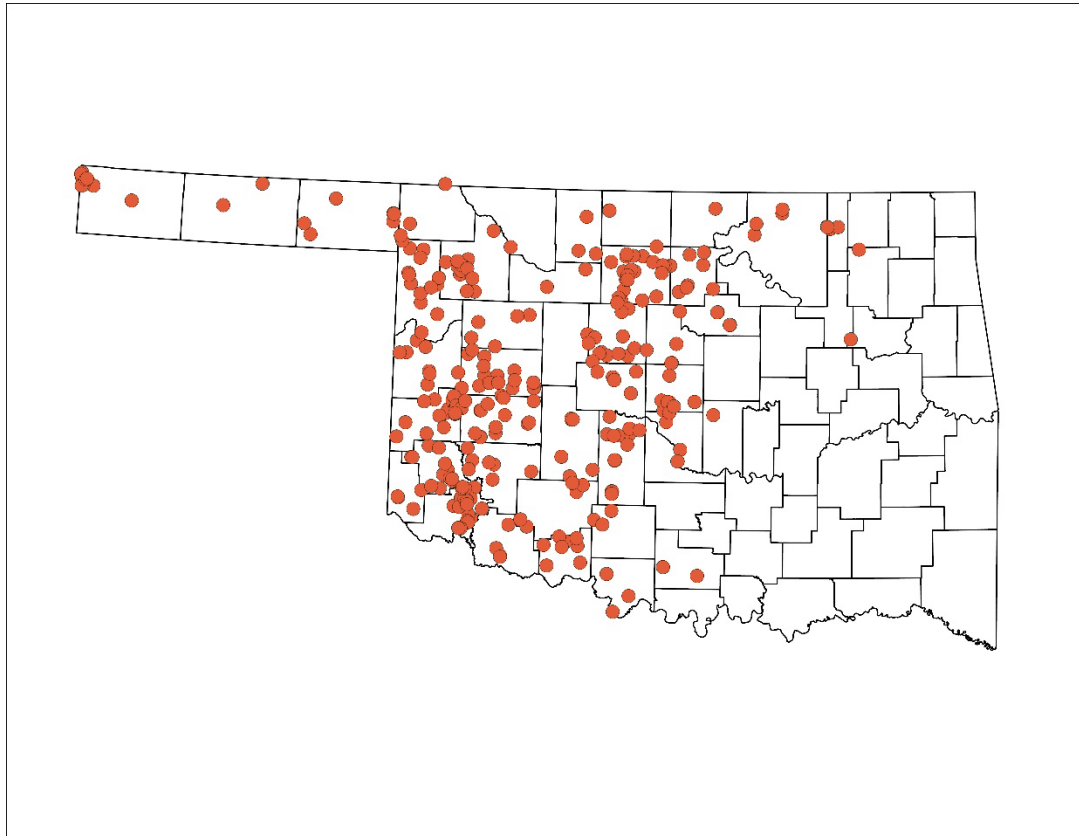
Table 7. Texas Horned Lizard Observations Reported in 2023, 2024, and 2025. (The counties listed represent the current range of the Texas Horned Lizard in Oklahoma.)

County	Sightings with Photos	Sightings without Photos	Total for County
Alfalfa	4	1	5
Beaver	7	4	11
Beckham	22	20	42
Blaine	1		1
Caddo	6	12	18

Canadian	12	5	17
Carter	3	2	5
Cimarron	19	4	23
Cleveland	4	6	10
Comanche	10	6	16
Cotton	6	3	9
Creek	1		1
Custer	24	14	38
Dewey	4	3	7
Ellis	11	11	22
Garfield	17	20	37
Garvin			
Grady	19	16	35
Grant	12	7	19
Greer	14	10	24
Harmon	6	4	10
Harper	2	2	4
Jackson	19	13	32
Jefferson	6		6
Johnston		1	1
Kay	2		2
Kingfisher	17	13	30
Kiowa	9	7	16
Logan	7	3	10
Love			
Major	6	4	10
Marshall		1	1
McClain	8	3	11
Murray			
Noble	8	6	14
Nowata	2	1	3
Oklahoma	9	3	12
Osage	4	2	6
Pawnee		1	1
Payne	3	2	5
Pottawatomie		4	4
Roger Mills	8	4	12
Rogers	1		1
Stephens	1	2	3
Texas	4	3	7
Tillman	8	3	11
Tulsa	3	4	7
Washington	4	1	5
Washita	21	10	31
Woods		1	1

Woodward	18	11	29
Total	372 (59.5%)	253 (40.5%)	625
	43 counties	43 counties	48 counties

Figure 2. Geospatial Distribution of the 337 Texas Horned Lizard Reports Received in 2025.



Black-tailed Prairie Dog Colony Surveys:

Wildlife Diversity staff completed approximately 10 Black-tailed Prairie Dog (BTPD) (*Cynomys ludovicianus*) colony surveys across western Oklahoma during the grant period. These surveys targeted specific known or suspected colony sites to determine their presence and to estimate their acreage, as well as to estimate the area occupied by colonies at the county level. Staff also conducted BTPD habitat suitability site assessments to identify potential relocation sites. When suitable habitat was determined to be available, staff partnered with City of Lawton Parks and Recreation staff to live capture BTPD from city parks and relocate them to suitable locations where colony re-establishment was desired. Relocation sites included two ODWC Wildlife Management Areas in western Oklahoma and a private property where the landowners requested the colonization of BTPD as an ecological benefit to the property. We also provided BTPD colony data to the Western Association of Fish and Wildlife Agencies (WAFWA) and Colorado

State University for the development of a range-wide habitat suitability model for Black-tailed Prairie Dogs. We met with the biologists and GIS specialists working on this modeling project and reviewed their initial model and aerial survey data for Oklahoma for accuracy and helped them eliminate nearly 20 questionable colony locations from their analysis.

Swift Fox Population Monitoring:

We continued an annual monitoring project for Oklahoma's Swift Fox (*Vulpes velox*) population using a low-impact technique that involved walking portions of county roads and field edges in pre-determined townships and searching for Swift Fox track lines in the substrate. The protocol involved entering a township at a random location and driving public roads looking for areas with suitable tracking substrate (typically the edges of dirt and gravel roads) and suitable Swift Fox habitat (typically rangeland, non-irrigated winter wheat fields, fallow fields, and fields enrolled in the Conservation Reserve Program and planted to perennial grasses). We searched roadsides for Swift Fox tracks and recorded the length of time that elapsed between the time that we initiated our track search within a township and the time at which we detected the first set of fox tracks. Each township was surveyed for a minimum of 30 minutes of search time and a maximum of 120 minutes of search time. If Swift Fox tracks could not be found after 120 minutes of searching, Swift Foxes were assumed to be absent or to occur at a density too low for detection within that township. Swift Fox track surveys were conducted in the fall (early October to early November) after young-of-the-year foxes have dispersed from their natal dens. We also recorded the locations of other Oklahoma SGCN (e.g. Black-tailed Prairie Dog, Lesser Earless Lizard) that were observed incidentally during the survey, and these were included in Appendix A. Track surveys were conducted in 2023 and 2024; however, no surveys were conducted in 2022 because of severe drought in the region which greatly limited the availability of suitable tracking substrate.

Texas County was the focus of the 2023 monitoring effort, which was conducted on September 26, and between October 9 and 12. Texas County is comprised of 60 townships of which 30 fall within the survey grid. We completed 28 of the 30 target townships in Texas County (two were not surveyed because one of the surveyors had to leave prematurely) and surveyed six townships in the adjacent part of western Beaver County for a total of 34 township surveys. The 2023 surveys were conducted by Mark Howery, Cheyenne Gonzales, Kurt Kuklinski, Curtis Tackett, Alex Cooper, and Jena Donnell and Table 8 provides a summary of the township survey results.

Swift Fox track lines were found in 28 of the 34 townships that were surveyed (88%), and Swift Fox scat was found in one township in which tracks were not found (Table 8). Of the 28 townships in which Swift Fox tracks were found, the average time that elapsed between the start of each survey and the first detection of a Swift Fox track line was 35 minutes, with a range of 6 minutes to 114 minutes. Swift Fox tracks were located within the first thirty minutes of searching in 13 of the 28 townships in which foxes were detected (46%), and in four of those townships we were able to detect a second set of tracks before the minimum 30-minute survey window elapsed. The average length of time until the first detection was comparable to the long-term average of this survey (38 minutes), which suggests that the Swift Fox population is relatively stable in the central portion of the Oklahoma panhandle. The Swift Fox detections in 22 of the 28 positive

townships (78%) were found on roads that were either surrounded by native-grass rangeland or had native-grass rangeland in at least two cardinal directions from the track line.

Cimarron County (the western third of the Oklahoma panhandle) was the focus of the 2024 surveys, which were conducted by Mark Howery, Cheyenne Gonzales, Kurt Kuklinski, Alex Cooper, and Jena Donnell on November 5 and 6. Unfortunately, a winter storm unexpectedly dropped three to 10 inches of snow over the study area on the night of November 6, and we had to cancel the survey prematurely. Cimarron County is comprised of 54 townships of which 23 are part of the survey grid. Despite the reduced survey window caused by the unexpected snow event, we were able to complete surveys in 16 of the 23 townships. Within the 16 townships that were surveyed, Swift Fox tracks were detected in 12 townships (75%) and scat that was suspected to belong to Swift Fox was found in another township. Prior to the 2024 survey, PI Cheyenne Gonzales created a digital data form (Swift Fox Survey Form) in the Survey123 GIS platform that was intended to serve as the primary reporting format for ODWC’s Swift Fox monitoring efforts. After the completion of the 2024 surveys, an updated version of the survey form was created to address reporting difficulties that were encountered. Because of these difficulties, we do not have a complete set of search times leading to the first track detection in each township and we were not able to calculate and compare average search times to previous surveys. The 2024 survey results are included also in Table 8.

Table 8. Summary of Swift Fox Track Presence/Absence During Track Searches in 2023 (34 Townships) and 2024 (16 Townships) Across Beaver Cimarron and Texas Counties.

Date	County	Swift Fox Detection (Yes/No)	Number of Swift Fox Detections	Time Until First Swift Fox Detection	Adjacent Habitat Type
11/06/24	Cimarron	No		N/A	
11/06/24	Cimarron	Yes	2	14 minutes 21 minutes	Native Rangeland Native Rangeland/Winter Wheat
11/05/24	Cimarron	Yes	1		Rangeland
10/10/23	Texas	Yes	1	50 minutes	Native Rangeland
10/10/23	Texas	Yes	1	54 minutes	Native Rangeland
10/12/23	Texas	Yes	1	21 minutes	Native Rangeland / Winter Wheat)
09/26/23	Texas	No	0	N/A	N/A
10/12/23	Beaver	Yes	2	11 minutes	Native Rangeland / CRP Native Rangeland
10/12/23	Beaver	Yes	1	26 minutes	Native Rangeland / Winter Wheat
11/06/25	Cimarron	Yes, scat	1		Rangeland
11/06/25	Cimarron	Yes	1		Rangeland/Wheat
11/06/25	Cimarron	Yes	1	33 minutes	Rangeland/Wheat
11/06/25	Cimarron	Yes	1		Rangeland
11/06/25	Cimarron	Yes	1		Rangeland/Crop

10/10/23	Texas	Yes	1	57 minutes	Native Rangeland
10/10/23	Texas	No	0	N/A	N/A
09/26/23	Texas	No	0	N/A	N/A
09/26/23	Texas	No	0	N/A	N/A
10/12/23	Beaver	Yes	1	40 minutes	CRP / Native Rangeland
10/12/23	Beaver	Yes	1	60 minutes	Native Rangeland
11/06/25	Cimarron	Yes	1	3 minutes	Winter Wheat / CRP
11/06/25	Cimarron	Yes	1	14 minutes	Rangeland / Winter Wheat
10/10/23	Texas	Yes	1	114 minutes	1 Cropland / 1 CRP / 1 W Wheat
10/10/23	Texas	No	0	N/A	N/A
10/09/23	Texas	Yes	1	47 minutes	Native Rangeland
10/11/23	Texas	Yes	1	6 minutes	3 Native Range / 1 Other Cropland
10/11/23	Texas	Yes, scat	1	N/A	Native Rangeland
11/05/25	Cimarron	Yes	1		Rangeland
10/10/23	Texas	Yes	1	22 minutes	CRP
10/10/23	Texas	Yes	1	50 minutes	Native Rangeland / CRP
10/11/23	Texas	Yes	1	7 minutes	Native Rangeland / Cropland
10/11/23	Texas	Yes	2	21 minutes	Cropland / Native Rangeland
10/11/23	Texas	Yes	1	34 minutes	3 Native Range/1 Other Crop
11/05/25	Cimarron	No		N/A	
11/06/25	Cimarron	Yes	1		Rangeland
10/11/23	Texas	Yes	1	30 minutes	Winter Wheat / Native Rangeland
10/10/23	Texas	Yes	1	15 minutes	CRP / Native Rangeland
10/10/23	Texas	Yes	1	49 minutes	Native Rangeland
10/11/23	Texas	Yes	2	6 minutes	CRP / W Wheat 1 CRP / 2 Native Rangeland / 1 Winter Wheat
10/11/23	Texas	Yes	1	21 minutes	CRP / W Wheat
10/12/23	Beaver	Yes	1	11 minutes	CRP / Winter Wheat
11/05/25	Cimarron	Yes	1		Native Rangeland
11/06/25	Cimarron	No		N/A	
11/06/25	Cimarron	Yes	1		Native Rangeland / Winter Wheat
10/10/23	Texas	Yes	1	79 minutes	Native Rangeland / Irrigated Crop
10/10/23	Texas	Yes	1	8 minutes	Native Rangeland / Irrigated Crop

10/11/23	Texas	Yes	1	48 minutes	2 Native Range / 1 CRP / 1 W Wheat
10/11/23	Texas	Yes	1	34 minutes	Native Rangeland
10/11/23	Texas	Yes	2	13 minutes	CRP / Cropland Native Rangeland / Winter Wheat
10/12/23	Beaver	Yes	1	51 minutes	Native Rangeland

Objective 3: Research, Survey, Data Collection, and Analysis; Manage One Database by 2022

Each year we updated our database of distributional records for Oklahoma Species of Greatest Conservation Need. This database was modeled after the Oklahoma Natural Heritage Inventory's (ONHI) Element Occurrence Database and formatted in such a way that the records within it can be migrated into the ONHI Oklahoma Biodiversity Information System periodically. There are fields for the common and scientific names of each species, the date of the record and number of individual animals seen, the location for each record in decimal degrees, the observer's name, the context for the collection of that record, and general notes. The development of the Survey 123 applications has increased the ease of adding new records to this database and we are working to expand the database's fields to match the fields collected by these apps. Appendix A contains 303 SGCN distributional records that were collected during the grant period. These do not include approximately 170 records for breeding birds and Swift Foxes that are listed in Tables 4 and 8 above, or the 625 Texas Horned Lizard records that we in the process of entering into the database. Once the entry of the Texas Horned Lizard records is completed, all records associated with this report will be provided to the Oklahoma Natural Heritage Inventory for inclusion in the Oklahoma Biodiversity Information System database.

Objective 4: Outreach/Communication; Produce Three Products by 2025

Because the authorizing language for the State Wildlife Grants program implements a 10% cap on the use of these funds for outreach activities within a grant, we established two tracking numbers for the activities that were charged to this grant. We used the number F22AF02644-001 to code any expenditures related to surveys, data management, and collaborative conservation activities, and the number F22AF02644-002 was used for all outreach activities. This tracking system ensured the less than 10% of the grant's budget was used for the outreach activities that are described in this section.

During the grant period, we developed 14 electronic communication products (e.g., news releases and popular articles) to increase awareness of the conservation efforts that ODWC undertook for Oklahoma's Species of Greatest Conservation Need. These included outreach efforts to solicit observations of Whooping Cranes and Texas Horned Lizards from the public, and also informational articles about the conservation of the Mexican Free-tailed Bat (*Tadarida brasiliensis*), Swift Fox (*Vulpes velox*), Red-cockaded Woodpecker (*Dryobates borealis*),

Crawfish Frog (*Lithobates areolatus*), Alligator Gar (*Atractosteus spatula*), Oklahoma Cave Crayfish (*Cambarus tartarus*), and American Burying Beetle (*Nicrophorus americanus*). To expand the reach of these stories, they were shared in the Oklahoma Wildlife Diversity Program's monthly electronic newsletter called the Wild Side, as well as other Wildlife Department communication outlets, including its Outdoor Oklahoma Journal (on ODWC's website) and its YouTube, Facebook, and Instagram social media platforms. One of these included a series of articles on the Texas Horned Lizard that was sent to all ODWC email contacts (approximately 988,000 unique email addresses) and had an open rate of over 30%. A list of the products follows, and although the number of communication products that were produced exceeded our goal, the expenses for these remained below 10% of the grant's overall expenditures.

State's Flying Mammal Focus of Ongoing OU Research: Drafted and published an article (interview conducted during the previous grant segment) related to University of Oklahoma research assessing the overall health and movements of the Mexican free-tailed bat at the Wildlife Department's Selman Bat Cave WMA. The newsletter in which this article was shared was delivered to 15,634 addresses and was opened by 6,532 addresses. This article link received 154 unique clicks. The article was published also in the Outdoor Oklahoma Journal.

<https://www.wildlifedepartment.com/outdoorok/oj/states-flying-mammal-focus-ongoing-ou-research>

Louisiana Gives Oklahoma's Endangered Woodpecker Population a Boost: Collected video and photos during a red-cockaded woodpecker translocation effort and published an article and video about the effort to relocate 12 red-cockaded woodpeckers to Oklahoma's shortleaf pine forest from a donor population in Louisiana. The newsletter in which this article was shared was delivered to 15,695 addresses and opened by 6,605 addresses. This article link received 172 unique clicks.

<https://www.wildlifedepartment.com/outdoorok/oj/louisiana-gives-oklahomas-endangered-woodpecker-population-boost>

It's Raining, It's Pouring ... The Crawfish Frog is Snoring: Collected video and photos and interviewed a pass-through State Wildlife Grant research team and published an article about their efforts to study the state's secretive crawfish frog with research and survey sites spanning from a single breeding pond to the eastern one-third of the Oklahoma. The bulletin in which this article was shared was delivered to 1,068,252 addresses and opened by 429,324 addresses. This article link received 438 unique clicks.

<https://www.wildlifedepartment.com/outdoorok/oj/its-raining-its-pouring-crawfish-frog-snoring>

Breeding Birds Counted in Trio of Surveys: Collected video and photos during Breeding Bird Atlas surveys in Tillman and Jackson counties and published an article about biologists collecting records of the bird community found during the survey. The newsletter in which this article was shared was delivered to 16,770 addresses and opened by 5,931 addresses. This article link received 75 unique clicks.

<https://www.wildlifedepartment.com/outdoorok/oj/breeding-birds-counted-trio-surveys>

Pioneering Grant Program Reaches Milestone

A Wild Side and Outdoor Oklahoma Journal link for a ~1,500-word article highlighting the twentieth year of Oklahoma State Wildlife Grants. Shared through Wild Side

eNewsletter, and Outdoor Oklahoma Journal. Results for the Wild Side: Sent October 25, 2022 - Subscribers: 14,513; Opens: 6,115; Unique Link Clicks: 156

<https://www.wildlifedepartment.com/outdoorok/oj/pioneering-grant-program-reaches-milestone>

Alligator Gar Video

A one-minute clip featuring the alligator gar that showcases this species as: Oklahoma's largest fish, having thousands of teeth, eating fish, spawning episodically, and being the focus of a partnership between the Wildlife Department and the U.S. Fish and Wildlife Service. A landscape version of the clip was uploaded to YouTube and a vertical version was created to share on social media, including YouTube Shorts. A written article and link to the video clip were included in the December 2022 Wild Side newsletter. Results for this article were: Subscribers: 14,732; Opens: 5,898; Unique Link Clicks: 314

List of Threatened and Endangered Species Gets Updates in 2023

An ~800-word article sharing information about two recent changes to the Federal List of Endangered and Threatened Wildlife and Plants that include Oklahoma species. Written article published in the October 2022 Wild Side newsletter and the Outdoor Oklahoma Journal. Results for the Wild Side article were: Sent October 25, 2022 - Subscribers: 15,279; Opens: 6,677; Unique Link Clicks: 183

<https://www.wildlifedepartment.com/outdoorok/oj/list-threatened-and-endangered-species-gets-updates-2023>

Wild Double Take: Whooping Crane and American White Pelican

A 36-second video featuring the similarities and differences between Whooping Cranes and American White Pelicans. Shared in mid-April 2023 on our YouTube channel and in our March 2023 Wild Side e-newsletter. Results for the Wild Side were: Sent March 23, 2023 - Subscribers: 15,279; Opens: 6,679; Unique Link Clicks: 43

<https://www.wildlifedepartment.com/outdoorok/oj/wild-double-take-whooping-crane-and-american-white-pelican>

Crawfish Frog Post for Social Media

A brief note that an OSU survey team documented crawfish frogs during the month of February as part of their State Wildlife Grant.

«► Listening surveys are generating exciting new data for the secretive crawfish frog in eastern Oklahoma. A @USGSCoopUnit survey team documented the earliest known Oklahoma record on Feb. 16 and has heard the distinctive snoring calls at 55 sites in 16 counties.

Texas Horned Lizard Outreach

Prepared a Texas Horned Lizard multi-article outreach bulletin based on interviews with ODWC biologists and summaries of on-going State Wildlife Grants funded projects on Texas Horned Lizards. The Texas Horned Lizard-themed bulletin was sent to all ODWC subscribers in August 2023 and then included in the Outdoor Oklahoma Journal on ODWC's website. A short video clip also was produced and posted on ODWC's YouTube channel. Results for the Texas Horned Lizard bulletin were: Sent August 3, 2023 - Subscribers: 988,230; Opens: 379,840; Unique Link Clicks: 6,270

<https://www.wildlifedepartment.com/outdoorok/oj/weve-got-answers-biologists-reply-lizard-faqs>

Pushmataha Breeding Bird Survey Article and Social Media Post

Prepared an article about the national Breeding Bird Survey that was shared in the July 2023 Wild Side and a social media post that was shared through YouTube and Instagram. Results for the Wild Side were: Sent July 20, 2023, Subscribers: 15,508; Opens: 6,294; Unique Link Clicks: 161

<https://www.wildlifedepartment.com/outdoorok/oj/biologist-gets-birds-track-status-trends>

Conservation of the Oklahoma Cave Crayfish

Prepared an article based on the San Antonio Zoo's successful hatching and rearing of Oklahoma Cave Crayfish at the zoo. Four of these state-endangered animals were collected in partnership with ODWC and are housed at the San Antonio Zoo to learn more about their life history and reproductive behavior. The article was published in the September Wild Side eNewsletter with the following results: The Wild Side: Sent Sept. 28, 2023, Subscribers: 15,605; Opens: 6,651; Unique Link Clicks: 174

<https://www.wildlifedepartment.com/outdoorok/oj/rare-oklahoma-crayfish-hatched-texas-zoo>

Tricolored Bat Research

Prepared an article for the February Wild Side and Outdoor Oklahoma Journal providing an overview of Tricolored Bat and White Nose Syndrome research that was funded through the State Wildlife Grants program.

<https://www.wildlifedepartment.com/outdoorok/oj/study-focused-bats-and-disease-causing-fungus>

Monitoring of New Red-cockaded Woodpecker Breeding Group

Prepared an article for the July Wild Side and Outdoor Oklahoma Journal summarizing work by the Ouachita National Forest and ODWC to monitor a recently discovered breeding group of Red-cockaded Woodpeckers in the LeFlore County Unit of the national forest.

<https://www.wildlifedepartment.com/outdoorok/oj/habitat-work-helps-threatened-red-cockaded-woodpecker-expand-ok-range>

SIGNIFICAN DEVIATIONS:

There were no significant deviations from the objectives or approaches of this grant.

Prepared by: Mark Howery, Wildlife Diversity Biologist
Curtis Tackett, Wildlife Diversity Biologist
Jena Donnell, Wildlife Diversity Information Specialist
Alex Cooper, Wildlife Diversity Biologist
Cheyenne Gonzales, Wildlife Diversity Biologist
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Oklahoma Department of Wildlife Conservation

Date Prepared: November 24, 2025

	A	B	C	D	E	F
1	Taxon Details					Locality
2	Species Name	Event Date	Recorded By	# Indiv	Lifestage	County
3	Alligator mississippiensis	3/25/2025	CG, JD	1	Subadult	McCurtain
4	Alligator mississippiensis	3/25/2025	CG, JD	1	Adult	McCurtain
5	Alligator mississippiensis	3/24/2025	CG, JD	1	Subadult	McCurtain
6	Alligator mississippiensis	3/24/2025	CG, JD	1	Adult	McCurtain
7	Ambystoma annulatum	3/19/2024	CG, JD, KG, HG	7	Juvenile	Cherokee
8	Anaxyrus speciosus	5/31/2025	CG	1	Adult	Tillman
9	Anaxyrus speciosus	9/24/2024	JD, CG	1	Adult	Beckham
10	Anaxyrus speciosus	9/24/2024	CG, JD	1	Adult	Beckham
11	Anaxyrus speciosus	9/24/2024	JD, CG	1	Adult	Beckham
12	Anaxyrus speciosus	9/24/2024	JD, CG	1	Adult	Beckham
13	Anaxyrus speciosus	9/24/2024	JD, CG	1	Adult	Beckham
14	Anaxyrus speciosus	9/24/2024	JD, CG	1	Adult	Beckham
15	Anaxyrus speciosus	9/24/2024	JD, CG	1	Adult	Beckham
16	Anaxyrus speciosus	9/23/2024	JD, CG	3	Adult	Greer
17	Anaxyrus speciosus	9/23/2024	JD, CG	1	Adult	Greer
18	Anaxyrus speciosus	9/23/2024	JD, CG	1	Adult	Greer
19	Anaxyrus speciosus	9/23/2024	JD, CG	2	Adult	Beckham
20	Anaxyrus speciosus	9/23/2024	JD, CG	1	Adult	Greer
21	Anaxyrus speciosus	9/23/2024	JD, CG	1	Adult	Beckham
22	Anaxyrus speciosus	9/23/2024	JD, CG	2	Adult	Greer
23	Anaxyrus speciosus	9/23/2024	JD, CG	1	Adult	Beckham
24	Anaxyrus speciosus	9/23/2024	JD, CG	1	Adult	Beckham
25	Anaxyrus speciosus	5/28/2024	MH, CG	3+	Adult	Tillman
26	Anaxyrus speciosus	5/28/2024	MH, CG	5+	Adult	Tillman
27	Anaxyrus speciosus	5/28/2024	MH,CG	4	Adult	Tillman
28	Antrozous pallidus	7/22/2025	JD	2	Adult	Cimarron
29	Antrozous pallidus	7/22/2025	JD	20	Adult	Cimarron
30	Antrozous pallidus	7/22/2025	JD	1	Adult	Cimarron
31	Antrozous pallidus	7/22/2025	JD	3	Adult	Cimarron
32	Antrozous pallidus	7/22/2025	JD	20	Adult	Cimarron

	A	B	C	D	E	F
33	<i>Aquila chrysaetos</i>	10/23/2024	Jena Donnell	1	Juvenile	Cimarron
34	<i>Argynnis diana</i>	5/23/2024	CG, JD	1	adult	McCurtain
35	<i>Argynnis diana</i>	5/23/2024	CG, JD	1	adult	McCurtain
36	<i>Argynnis diana</i>	5/23/2024	CG, JD	1	adult	McCurtain
37	<i>Argynnis diana</i>	5/23/2024	CG, JD	1	adult	McCurtain
38	<i>Argynnis diana</i>	5/23/2024	CG, JD	1	Adult	McCurtain
39	<i>Argynnis diana</i>	6/2/2023	MH, CT	1	Adult	Okmulgee
40	<i>Argynnis diana</i>	6/2/2023	MH, CT	1	Adult	Okmulgee
41	<i>Athene cunicularia</i>	7/22/2025	JD	1	Adult	Cimarron
42	<i>Athene cunicularia</i>	10/4/2024	CG	1	Adult	Tillman
43	<i>Athene cunicularia</i>	10/4/2024	CG	2	Adult	Tillman
44	<i>Athene cunicularia</i>	10/3/2024	CG	1	Adult	Tillman
45	<i>Athene cunicularia</i>	10/3/2024	CG	2	Adult	Tillman
46	<i>Athene cunicularia</i>	10/3/2024	CG	1	Adult	Tillman
47	<i>Athene cunicularia</i>	6/26/2024	CG, MH, JD, KS	1		Tillman
48	<i>Athene cunicularia</i>	6/26/2024	CG, MH, JD, KS	4		Tillman
49	<i>Athene cunicularia</i>	10/10/2023	KK JD	2	Adult	Texas
50	<i>Athene cunicularia</i>	9/23/2024	JD, CG	1	Adult	Greer
51	<i>Athene cunicularia</i>	10/10/2023	MH, CG	2	Adult	Texas
52	<i>Bassariscus astutus</i>	2/14/2025	Brent Morgan	1	Adult	Cherokee
53	<i>Bombus pensylvanicus</i>	6/1/2024	CG, JD	1	Adult	Tillman
54	<i>Bombus pensylvanicus</i>	8/16/2023	Jena Donnell	1		Cleveland
55	<i>Bombus pensylvanicus</i>	6/19/2024	CG, JD	1	Adult	Woods
56	<i>Buteo regalis</i>	1/30/2024	KS, BP, TS, JD	1	Immature	Tillman
57	<i>Buteo regalis</i>	10/23/2024	Jena Donnell	1	Adult	Cimarron
58	<i>Buteo regalis</i>	10/23/2024	Jena Donnell	1		Cimarron
59	<i>Buteo regalis</i>	10/22/2024	Jena Donnell	1	Adult	Cimarron
60	<i>Buteo regalis</i>	10/22/2024	Jena Donnell	1		Cimarron
61	<i>Calidris subruficollis</i>	4/10/2025	ODWC	2	Adult	Osage
62	<i>Callipepla squamata</i>	7/22/2025	Jena Donnell	2	Adult	Cimarron
63	<i>Callipepla squamata</i>	11/6/2024	Kurt Kuklinski	1	Adult	Cimarron
64	<i>Callipepla squamata</i>	11/5/2024	Jena Donnell	30		Cimarron

	A	B	C	D	E	F
65	Callipepla squamata	10/23/2024	Jena Donnell	10		Cimarron
66	Callipepla squamata	10/22/2024	Jena Donnell	25		Cimarron
67	Callipepla squamata	10/22/2024	Jena Donnell	20		Cimarron
68	Callipepla squamata	10/10/2023	MH, CG	3	Adult	Texas
69	Charadrius montanus	10/10/2023	MH,CG	11	Adult	Texas
70	Charadrius nivosus	6/19/2024	CG, JD	4	Adult	Alfalfa
71	Chrysemys dorsalis	3/24/2025	CG, JD	1	Subadult	McCurtain
72	Chrysemys dorsalis	3/24/2025	CG, JD	1	Adult	McCurtain
73	Colinus virginianus	6/26/2024	CG, JD	1	Adult	Jackson
74	Colinus virginianus	9/25/2024	JD, CG	6	Adult	Greer
75	Cygnus buccinator	2/11/2025	CG	2	Adult	Osage
76	Cynomys ludovicianus	6/18/2025	Mark Howery	colony		Stephens
77	Cynomys ludovicianus	6/18/2025	Mark Howery	colony		Stephens
78	Cynomys ludovicianus	11/6/2024	JD, CG	colony		Cimarron
79	Cynomys ludovicianus	11/6/2024	JD, CG	colony		Cimarron
80	Cynomys ludovicianus	11/6/2024	Mark Howery	colony		Cimarron
81	Cynomys ludovicianus	11/6/2024	Mark Howery	colony		Cimarron
82	Cynomys ludovicianus	11/6/2024	Mark Howery	colony		Cimarron
83	Cynomys ludovicianus	11/6/2024	Mark Howery	colony		Cimarron
84	Cynomys ludovicianus	11/6/2024	Mark Howery	colony		Cimarron
85	Cynomys ludovicianus	11/6/2024	Mark Howery	colony		Cimarron
86	Cynomys ludovicianus	10/23/2024	JD	colony		Texas
87	Cynomys ludovicianus	10/23/2024	JD	colony		Cimarron
88	Cynomys ludovicianus	10/23/2024	JD	colony		Cimarron
89	Cynomys ludovicianus	10/23/2024	JD	colony		Cimarron
90	Cynomys ludovicianus	10/22/2024	JD	colony		Cimarron
91	Cynomys ludovicianus	10/22/2024	JD	colony		Cimarron
92	Cynomys ludovicianus	10/22/2024	JD	colony		Cimarron
93	Cynomys ludovicianus	10/22/2024	JD	colony		Cimarron
94	Cynomys ludovicianus	10/22/2024	JD	colony		Cimarron
95	Cynomys ludovicianus	10/22/2024	JD	colony		Cimarron
96	Cynomys ludovicianus	10/21/2024	JD	colony		Cimarron

	A	B	C	D	E	F
97	<i>Cynomys ludovicianus</i>	10/21/2024	JD	colony		Cimarron
98	<i>Cynomys ludovicianus</i>	10/21/2024	JD	colony		Texas
99	<i>Cynomys ludovicianus</i>	10/21/2024	JD	colony		Beaver
100	<i>Cynomys ludovicianus</i>	10/21/2024	JD	colony		Beaver
101	<i>Cynomys ludovicianus</i>	10/21/2024	JD	colony		Beaver
102	<i>Cynomys ludovicianus</i>	6/26/2024	CG, MH, JD, KS	50+		Tillman
103	<i>Cynomys ludovicianus</i>	6/26/2024	CG, MH, JD, KS	50+		Tillman
104	<i>Cynomys ludovicianus</i>	10/10/2023	KK, JD	50+		Texas
105	<i>Cynomys ludovicianus</i>	10/10/2023	KK, JD	50+		Texas
106	<i>Cynomys ludovicianus</i>	10/10/2023	MH, CG	50+		Texas
107	<i>Cynomys ludovicianus</i>	10/10/2023	MH, CG	50+		Texas
108	<i>Cynomys ludovicianus</i>	10/10/2023	MH, CG	30		Texas
109	<i>Cynomys ludovicianus</i>	10/10/2023	MH, CG	50+		Texas
110	<i>Cynomys ludovicianus</i>	10/10/2023	MH, CG	50+		Texas
111	<i>Cynomys ludovicianus</i>	10/10/2023	MH, CG	50+		Texas
112	<i>Cynomys ludovicianus</i>	10/10/2023	MH, CG	50+		Texas
113	<i>Cynomys ludovicianus</i>	10/9/2023	MH, CG, CT, JD, KK	100+		Texas
114	<i>Cynomys ludovicianus</i>	10/11/2023	MH, CG	50+		Texas
115	<i>Cynomys ludovicianus</i>	10/10/2023	KK, JD	colony		Texas
116	<i>Cynomys ludovicianus</i>	10/11/2023	KK, JD	colony		Texas
117	<i>Cynomys ludovicianus</i>	10/11/2023	KK, JD	colony		Texas
118	<i>Cynomys ludovicianus</i>	10/11/2023	KK, JD	colony		Texas
119	<i>Cynomys ludovicianus</i>	10/11/2023	MH, CG	30		Texas
120	<i>Cynomys ludovicianus</i>	10/11/2023	MH, CG	100+		Texas
121	<i>Desmognathus brimleyorum</i>	3/26/2025	CG, JD	10		LeFlore
122	<i>Dryobates borealis</i>	6/17/2025	ODWC	3	2 Adults, 1 Hatchling	LeFlore
123	<i>Eurycea longicauda</i>	3/29/2022	Jena Donnell	1	Adult	Cherokee
124	<i>Eurycea lucifuga</i>	3/20/2024	CG, JD, KG, HG	1		Cherokee
125	<i>Eurycea multiplicata</i>	3/26/2025	CG	1	Adult	McCurtain
126	<i>Eurycea tynerensis</i>	3/19/2024	CG, JD, KG, HG	5	1 adult, 4 larvae	Cherokee

	A	B	C	D	E	F
127	Eurycea tynerensis	3/20/2024	CG, JD, KG, HG	15	Adults	Cherokee
128	Eurycea tynerensis	3/20/2024	CG, JD, KG, HG	2	1 adult, 1 juvenile	Cherokee
129	Eurycea tynerensis	3/28/2022	Jena Donnell	3	1 Adult; 2 juveniles	Cherokee
130	Eurycea tynerensis	3/19/2024	CG, JD, KG, HG	5	1 adult, 4 larvae	Cherokee
131	Falco mexicanus	1/30/2024	KS, BP, TS, JD	1	Adult	Tillman
132	Falco peregrinus	5/3/2023	Jena Donnell	1	Adult	Osage
133	Haliaeetus leucocephalus	10/28/2024	Jena Donnell	1	Adult	Rogers
134	Haliaeetus leucocephalus	10/21/2024	Jena Donnell	1	Adult	Woodward
135	Haliaeetus leucocephalus	10/21/2024	Jena Donnell	1	Adult	Canadian
136	Haliaeetus leucocephalus	10/23/2024	Jena Donnell	2	Adult	Cimarron
137	Haliaeetus leucocephalus	1/30/2024	CG, MH, MC	1	Juvenile	Tillman
138	Holbrookia maculata	6/1/2024	Jena Donnell	1	Adult	Tillman
139	Holbrookia maculata	10/10/2023	JD, KK	1	Adult	Texas
140	Holbrookia maculata	10/11/2023	MH,CG	1	Adult	Texas
141	Lanius ludovicianus	6/24/2025	CG	1	Adult	Tillman
142	Lanius ludovicianus	5/31/2025	CG	2	Adult	Tillman
143	Lanius ludovicianus	4/24/2025	CG	1	Adult	Tillman
144	Lanius ludovicianus	4/15/2025	CG	1	Adult	Tillman
145	Lanius ludovicianus	4/10/2025	ODWC	1	Adult	Osage
146	Lanius ludovicianus	4/10/2025	CG	1	Adult	Osage
147	Lanius ludovicianus	4/8/2025	CG, JD	1	Adult	Osage
148	Lanius ludovicianus	4/8/2025	CG, JD	1	Adult	Osage
149	Lanius ludovicianus	4/8/2025	CG, JD	2	Adult	Osage
150	Lanius ludovicianus	1/30/2024	KS, BP, TS, JD	1	Adult	Tillman
151	Lanius ludovicianus	4/11/2024	Jena Donnell	1	Adult	Haskell
152	Lanius ludovicianus	9/25/2024	JD, CG	1	Adult	Harmon
153	Lanius ludovicianus	9/24/2024	JD, CG	1	Adult	Greer
154	Lanius ludovicianus	9/23/2024	JD, CG	1	Adult	Harmon
155	Lanius ludovicianus	9/23/2024	Jena Donnell	1	Adult	Beckham

	A	B	C	D	E	F
156	Lanius ludovicianus	5/3/2023	Jena Donnell	1	Adult	Osage
157	Lanius ludovicianus	5/3/2023	Jena Donnell	1	Adult	Osage
158	Lanius ludovicianus	10/22/2024	Jena Donnell	1	Adult	Cimarron
159	Lanius ludovicianus	1/30/2024	KS, BP, TS, JD	1	Adult	Tillman
160	Lanius ludovicianus	4/29/2024	Jena Donnell	1	Adult	Coal
161	Lanius ludovicianus	1/30/2024	KS, BP, TS, JD	1	Adult	Tillman
162	Lanius ludovicianus	1/30/2024	KS, BP, TS, JD	1	Adult	Tillman
163	Lanius ludovicianus	7/23/2024	Cheyenne Gonzales	1	Adult	Tillman
164	Lanius ludovicianus	9/24/2024	Cheyenne Gonzales	1	Adult	Harmon
165	Lanius ludovicianus	9/23/2024	Cheyenne Gonzales	1	Adult	Greer
166	Lanius ludovicianus	10/3/2024	CG	1	Adult	Tillman
167	Lanius ludovicianus	10/3/2024	KK	1	Adult	Tillman
168	Lanius ludovicianus	10/5/2024	CG	1	Adult	Tillman
169	Lithobates areolata	3/29/2023	MH	calling	Adult	Okmulgee
170	Lithobates areolata	3/29/2023	MH	calling	Adult	Okmulgee
171	Lithobates areolata	3/29/2023	MH	calling	Adult	Okmulgee
172	Lithobates areolata	3/29/2023	MH	calling	Adult	Okmulgee
173	Lithobates areolata	3/29/2023	MH	calling	Adult	Okmulgee
174	Lithobates areolata	3/29/2023	MH	calling	Adult	Okmulgee
175	Lithobates areolata	3/29/2023	MH	calling	Adult	Okmulgee
176	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
177	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
178	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
179	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
180	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
181	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
182	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
183	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
184	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
185	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
186	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
187	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee

	A	B	C	D	E	F
188	Lithobates areolata	3/24/2023	AC	calling	Adult	Okfuskee
189	Lithobates areolata	3/24/2023	AC	calling	Adult	Okmulgee
190	Lithobates areolata	3/24/2023	AC	calling	Adult	Okmulgee
191	Lithobates areolata	3/24/2023	AC	calling	Adult	Okmulgee
192	Lithobates areolata	3/24/2023	AC	calling	Adult	Okmulgee
193	Lithobates areolata	3/24/2023	AC	calling	Adult	Okmulgee
194	Lithobates areolata	3/22/2023	KK, AC	calling	Adult	McIntosh
195	Lithobates areolata	3/22/2023	KK, AC	calling	Adult	Okmulgee
196	Lithobates areolata	3/22/2023	KK, AC	calling	Adult	McIntosh
197	Lithobates areolata	3/22/2023	CT, KK, AC, JD, MH	calling	Adult	Wagoner
198	Lithobates areolata	3/22/2023	CT, KK, AC, JD, MH	calling	Adult	Wagoner
199	Lithobates areolata	3/22/2023	CT, KK, AC, JD, MH	calling	Adult	Wagoner
200	Lithobates areolata	3/22/2023	CT, KK, AC, JD, MH	calling	Adult	Wagoner
201	Melanerpes aurifrons	9/23/2024	JD, CG	2	Adult	Greer
202	Melanerpes erythrocephalus	6/30/2025	MH	1	Adult	Seminole
203	Melanerpes erythrocephalus	6/25/2025	JD	1	Adult	Custer
204	Melanerpes erythrocephalus	6/19/2025	MH	1	Adult	Roger Mills
205	Melanerpes erythrocephalus	6/19/2025	MH	2	Adult	Roger Mills
206	Melanerpes erythrocephalus	6/19/2025	MH	2	Adult	Roger Mills
207	Melanerpes erythrocephalus	6/19/2025	MH	2	Adult	Roger Mills
208	Melanerpes erythrocephalus	6/19/2025	MH	1	Adult	Roger Mills
209	Melanerpes erythrocephalus	6/11/2025	JD, CG	1	Adult	Woods
210	Melanerpes erythrocephalus	6/10/2025	JD	1	Adult	Woods
211	Melanerpes erythrocephalus	6/9/2025	JD	1	Adult	Woods
212	Melanerpes erythrocephalus	6/9/2025	JD	1	Adult	Woods
213	Melanerpes erythrocephalus	4/10/2025	ODWC	1	Adult	Osage
214	Melanerpes erythrocephalus	4/10/2025	ODWC	1	Adult	Osage
215	Melanerpes erythrocephalus	4/10/2025	ODWC	2	Adult	Osage
216	Melanerpes erythrocephalus	4/10/2025	ODWC	1	Adult	Osage
217	Melanerpes erythrocephalus	3/19/2024	CG, JD, KG, HG	1	Adult	Cherokee
218	Melanerpes erythrocephalus	8/7/2024	Jena Donnell	3	Adult	Marshall
219	Melanerpes erythrocephalus	6/26/2024	CG, MH, JD, KS	1	Adult	Jackson

	A	B	C	D	E	F
220	Melanerpes erythrocephalus	7/16/2024	Jena Donnell	2	Adult	Harper
221	Melanerpes erythrocephalus	5/21/2024	CG, JD	1	Adult	McCurtain
222	Melanerpes erythrocephalus	5/20/2024	CG, JD	1	adult	Atoka
223	Melanerpes erythrocephalus	6/19/2024	CG, JD	1	Adult	Woods
224	Melanerpes erythrocephalus	8/6/2024	Cheyenne Gonzales	1	Adult	Dewey
225	Myotis yumanensis	7/22/2025	JD	4	Adult	Cimarron
226	Myotis yumanensis	7/22/2025	JD	7	Adult	Cimarron
227	Parkesia motacilla	4/10/2025	Jena Donnell	1	Adult	Osage
228	Parkesia motacilla	4/9/2025	Jena Donnell	1	Adult	Osage
229	Parkesia motacilla	4/9/2025	ODWC	1	Adult	Osage
230	Passerina ciris	5/20/2025	CG, JD	2	Adult	Johnston
231	Passerina ciris	5/21/2025	JD	1	Adult	Johnston
232	Passerina ciris	5/21/2025	CG, JD	1	Adult	Johnston
233	Perimyotis subflavus	9/27/2025	JD	1	Adult	Delaware
234	Perimyotis subflavus	9/27/2025	JD	1	Adult	Delaware
235	Perognathus merriami	9/24/2024	JD, CG	1	Adult	Beckham
236	Perognathus merriami	9/23/2024	JD, CG	1	Adult	Greer
237	Phalaropus tricolor	5/1/2024	Cheyenne Gonzales	1	Adult	Tillman
238	Phrynosoma cornutum	10/11/2023	MH, CG	1	Juvenile	Texas
239	Phrynosoma cornutum	6/25/2024	CG, MH, JD	1	Adult	Tillman
240	Phrynosoma cornutum	6/25/2024	CG, MH, JD	1	Adult	Tillman
241	Phrynosoma cornutum	6/26/2024	CG, MH, JD, KS	1	Subadult	Jackson
242	Phrynosoma cornutum	6/26/2024	CG, MH, JD, KS	1	Subadult	Jackson
243	Phrynosoma cornutum	9/23/2024	JD, CG	1	Juvenile	Beckham
244	Phrynosoma cornutum	9/23/2024	JD, CG	1	Subadult	Greer
245	Phrynosoma cornutum	5/28/2024	JD, CG	1	Adult	Tillman
246	Phrynosoma cornutum	5/9/2024	CG, AN	1	Adult	Tillman
247	Phrynosoma cornutum	4/17/2024	Cheyenne Gonzales	1	Adult	Tillman
248	Phrynosoma cornutum	7/23/2024	Cheyenne Gonzales	1	Adult	Tillman
249	Phrynosoma cornutum	4/24/2025	Cheyenne Gonzales	1	Adult	Tillman
250	Phrynosoma cornutum	4/24/2025	Cheyenne Gonzales	1	Adult	Tillman

	A	B	C	D	E	F
251	Phrynosoma cornutum	5/8/2025	ODWC	4	2 Adults, 2 Juveniles	Tillman
252	Phrynosoma cornutum	5/15/2025	Jena Donnell	1	Adult	Tillman
253	Phrynosoma cornutum	5/15/2025	Jena Donnell	1	Juvenile	Tillman
254	Phrynosoma cornutum	5/31/2025	CG	2	Adult	Tillman
255	Phrynosoma cornutum	6/24/2025	CG	1	Adult	Tillman
256	Phrynosoma cornutum	6/24/2025	CG	1	Adult	Tillman
257	Phrynosoma cornutum	6/25/2025	JD	1	Subadult	Ellis
258	Plethodon sp.	3/25/2025	CG, JD	1	Adult	McCurtain
259	Plethodon sp.	3/25/2025	CG, JD	1	Adult	McCurtain
260	Plethodon sp.	3/25/2025	CG, JD	1	Adult	McCurtain
261	Plethodon sp.	3/25/2025	CG, JD	1	Juvenile	McCurtain
262	Plethodon albagula	4/30/2024	JD, JH, GS	1	Adult	Le Flore
263	Plethodon angusticlavius	3/29/2022	JD, CA	1	Adult	Cherokee
264	Plethodon ouachitae	4/22/2025	CG, JD	1	Adult	LeFlore
265	Plethodon ouachitae	4/22/2025	CG, JD	1	Adult	LeFlore
266	Plethodon ouachitae	4/22/2025	CG	1	Adult	LeFlore
267	Plethodon ouachitae	4/22/2025	CG, JD	1	Adult	LeFlore
268	Plethodon ouachitae	4/21/2025	ODWC	1	Adult	LeFlore
269	Plethodon ouachitae	4/21/2025	CG	1	Subadult	LeFlore
270	Plethodon ouachitae	4/21/2025	CG	2	Adult	LeFlore
271	Plethodon ouachitae	4/21/2025	CG	1	Adult	LeFlore
272	Plethodon ouachitae	4/21/2025	CG	1	Adult	LeFlore
273	Plethodon ouachitae	4/21/2025	CG	1	Adult	LeFlore
274	Plethodon ouachitae	4/21/2025	CG	1	Adult	LeFlore
275	Plethodon ouachitae	4/21/2025	CG	1	Adult	LeFlore
276	Plethodon ouachitae	4/21/2025	CG	1	Adult	LeFlore
277	Plethodon ouachitae	4/21/2025	ODWC	1	Adult	LeFlore
278	Plethodon ouachitae	4/21/2025	ODWC	2	Adult	LeFlore
279	Plethodon ouachitae	4/21/2025	ODWC	1	Adult	LeFlore
280	Plethodon ouachitae	4/21/2025	CG	1	Adult	LeFlore
281	Plethodon ouachitae	4/21/2025	CG	1	Adult	Le Flore

	A	B	C	D	E	F
282	Plethodon ouachitae	5/11/2023	Jena Donnell	1	Adult	Le Flore
283	Rallus elegans	6/26/2025	ODWC	1	Adult	Tillman
284	Rhinocheilus lecontei	6/19/2025	Thad Potts, ODWC	1	Adult	Dewey
285	Salpinctes obsoletus	6/11/2025	CG, JD	1	Adult	Major
286	Salpinctes obsoletus	10/23/2024	JD	1	Adult	Texas
287	Salpinctes obsoletus	10/22/2024	JD	1	Adult	Cimarron
288	Sistrurus tergeminus	6/26/2025	ODWC	1	Adult	Tillman
289	Sistrurus tergeminus	7/2/2024	Cheyenne Gonzales	1	Adult	Tillman
290	Sistrurus tergeminus	9/24/2024	JD, CG	1	Adult	Harmon
291	Sistrurus tergeminus	9/24/2024	JD, CG	1	Adult	Harmon
292	Sitta pusilla	2/27/2024	JD, CG	1	Adult	Atoka
293	Tyto alba	1/30/2024	KS, BP, TS, JD	1	Adult	Tillman
294	Tyto alba	9/23/2024	JD, CG	1	Adult	Greer
295	Vireo bellii	6/9/2025	ODWC	1	Adult	Woods
296	Vireo bellii	6/9/2025	ODWC	1	Adult	Woods
297	Vireo bellii	6/9/2025	ODWC	1	Adult	Woods
298	Vireo bellii	6/10/2025	CG, JD	1	Adult	Woods
299	Vireo bellii	6/11/2025	CG, JD	2	Adult	Woods
300	Vireo bellii	6/19/2025	MH	1	Adult	Roger Mills
301	Vireo bellii	6/19/2025	MH	1	Adult	Roger Mills
302	Vireo bellii	6/19/2025	MH	1	Adult	Roger Mills
303	Vireo bellii	6/19/2025	MH	1	Adult	Roger Mills
304	Vireo bellii	6/26/2025	MH	2	Adult	Canadian
305	Vireo bellii	6/3/2025	MH	1	Adult	Seminole