### **Ethan Dittmer**

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#### **EDUCATION**

**Ph.D.** University of Nebraska-Lincoln

January 2023 - Current

Natural Resource Sciences, Applied Ecology Specialization

M.S. University of Arkansas at Monticello

December 2022

Forest Resources, Wildlife Ecology and Management Concentration

GPA: 4.0

**B.S.** Southern Illinois University Carbondale

May 2020

Zoology, Wildlife Biology Concentration

GPA: 3.634 (Cum Laude)

Loyola University Chicago

December 2016

### WATERFOWL FIELD EMPLOYMENT

## **University of Nebraska-Lincoln**

Lincoln, NE January 2023 – Current

#### Graduate Research Assistant:

• Deploying Ornitela GPS transmitters on mallards within southeast Kansas to investigate their migration and wintering ecology with a focus on factors influencing diel and seasonal habitat use and selection, behavioral patterns and energy expenditure, determining stock origins, and understanding local and regional movements

### **University of Arkansas at Monticello**

Monticello, AR

Bethel, AK

August 2020 – December 2022

### Graduate Assistant:

- Deployed 90 Ornitela GPS transmitters on mallards at White River NWR during the fall/winter of 2020 and 2021 to investigate their use of sanctuary area
  - o Developed expertise in Ornitela transmitter deployment on mallards
  - o Proficient in the use of program R and Movebank to organize and manage data
- Assisted with other research at UAM including additional deployment of Ornitela transmitters on dabbling ducks, moist-soil seed sampling, and a dabbling duck body condition project

### U.S. Fish and Wildlife Service

GS-5/1 Biological Science Technician (Avian):

*May* 2020 – *July* 2020

- Employed to work on the YK Delta (Kigigak Island, Tutakoke/Kashunik Rivers and others)
- Due to COVID-19, field work was canceled
  - o Hired through the position to telework from home
  - o Completed mapping projects for the refuge, re-designed a study for salinity sampling, and completed research to assist with publishing a backlog of data

## **Cooperative Wildlife Research Laboratory**

Carbondale, IL

October - January 2018 - 2020

<u>Laboratory Technician (Mississippi Flyway Speciator)</u>:

- Process waterfowl wings as part of the USFWS Wing-bee
- Identify species/sex from submitted wings; Trained new technicians

Grand Tower, IL

February - March 2019

#### Drone Technician Co-lead:

• Charged with coordinating the design, implementation, and image processing for a project utilizing a DJI Mavic Pro 2 UAS to survey waterfowl at Oakwood Bottoms Greentree Reservoir during the spring

## **Delta Waterfowl**

Minnedosa, MB, CA

May - August 2019

### Waterfowl Technician:

- Assisted in a project investigating the breeding ecology of Canvasbacks
- Monitored nest success in response to predator reduction in SW Manitoba through extensive nest searching in treatment and control study blocks
- Experience with the use of a DJI Matrice 210 dual camera/thermal UAS for nest searching

## Kansas Department of Wildlife, Parks, and Tourism

Pleasanton, KS

May - August 2018

## Wildlife/Wetland Technician:

- Participated in the management of moist-soil habitat at the Marais des Cygnes Wildlife Area
- Utilized agricultural equipment, ATVs, boats and chainsaws

#### INDEPENDENT RESEARCH EXPERIENCE

## **Evaluating Hunter Surveys at Oakwood Bottoms Greentree Reservoir in Southern Illinois**

Cooperative Wildlife Research Laboratory

2018 - 2020

- Independent undergraduate research project Human-dimensions study evaluating the use of different methods to survey hunters at the site while also investigating site use
- Completed first study period during the 2018-19 duck season
  - o Hired and trained three undergraduate students to assist with the project
- Funding received through a proposal to the Shawnee National Forest (\$3,000) and Ducks Unlimited (\$500)
- Completed a second study season in 2019-20 that was approved for additional funding
  - o Reports of findings were provided to Shawnee National Forest Staff

#### **SCIENTIFIC PRESENTATIONS**

# Arkansas NWR and AGFC Waterfowl Hunting Meeting – Stuttgart, AR

December 2022

 Oral presentation, Mallard Sanctuary and Land Cover Use Patterns Around White River National Wildlife Refuge. – Overview of completed project and results

## Lower Mississippi Valley Joint Venture (LMVJV) Waterfowl Symposium – Memphis, TN October 2022

- Oral presentation, "Mallard use of Sanctuary and Non-sanctuary around White River National Wildlife Refuge" Overview of project and results
- Certificate of Merit for Outstanding Student Oral Presentation Award

- *March* 2022
- Oral presentation, "Using GPS transmitters to analyze mallard use of sanctuary area: White River NWR" Overview of project and summary findings
- Presented to AGFC commissioners, public/student audience, and presentation was livestreamed to AGFC's YouTube

## The Wildlife Society - Arkansas Chapter - DeGray Lake State Park, AR

March 2022

- Oral presentation, "Using GPS transmitters to analyze mallard use of sanctuary area: White River NWR" Overview of project and summary findings
- 3<sup>rd</sup> place Student Oral Presentation Award

# Five Oaks Ag Research & Education Center Open House – Humphrey, AR

September 2021

- Poster presentation, "Migration, Distribution, and Habitat Selection of Dabbling Ducks"
- Collaborative poster presentation highlighting the research of Dr. Osbornes three graduate students (Starla Phelps, Daniel Oden, Ethan Dittmer) utilizing GPS transmitters for waterfowl research

**GPS Collective** – Virtual May 2021

- Oral presentation, "Mallard use of Sanctuary and Transmitter Performance: White River NWR"
- Overview of preliminary findings on mallards' use of sanctuary at White River NWR and detailed review of differing performance of four Ornitela GPS transmitter models regarding battery performance and charging capability during the winter period

# 80th Midwest Fish and Wildlife Conference – Springfield, Illinois

January 2020

- Poster presentation, "Evaluating Hunter Surveys at Oakwood Bottoms Greentree Reservoir in Southern Illinois" Summary of first year findings and preliminary second year findings
- Trip funded through the CWRL

## The North American Duck Symposium – Winnipeg, Manitoba, Canada

August 2019

- Poster presentation, "Evaluating Hunter Surveys at Oakwood Bottoms Greentree Reservoir in Southern Illinois" First year findings and future plans
- Trip funded through the CWRL

### The Wildlife Society – Illinois Chapter – Springfield, IL

April 2019

- Poster presentation, "Evaluating Hunter Surveys at Oakwood Bottoms Greentree Reservoir in Southern Illinois" First year findings
- 2<sup>nd</sup> place Student Poster Award

### SIU Student Creative Activities and Research Forum – Carbondale, IL

*April* 2019

• Poster presentation, "Evaluating Hunter Surveys at Oakwood Bottoms Greentree Reservoir in Southern Illinois" – First year findings

## Mississippi Flyway Council – Orange Beach, AL

February 2019

- Oral presentation, "Evaluating Hunter Surveys at Oakwood Bottoms Greentree Reservoir in Southern Illinois" First year preliminary findings presented during the human-dimensions session led by Andy Raedeke of the MDC
- Trip funded through the CWRL

• Poster presentation, "Evaluating Hunter Surveys at Oakwood Bottoms Greentree Reservoir in Southern Illinois" – Methods and research goals

### **SCHOLARSHIPS**

Richard Daniel Memorial Scholarship - Illinois Trappers Association • \$1,000	August 2019
Earl Renshaw Scholarship - National Trappers Association / Furbearers Unlimited • \$500	August 2019
Emma Smith Hough Library Research Scholarship (Competitive research scholarship)  • \$1,500	April 2019
Travel Scholarship to The Wildlife Society (IL Chapter) Annual Meeting • \$150	March 2019
2019 Land of Lincoln Scholarship – Illinois National Wild Turkey Federation • \$1,000	November 2019
Richard Daniel Memorial Scholarship - Illinois Trappers Association • \$1,000	August 2018
Charles Dobbins Scholarship - National Trappers Association / Furbearers Unlimited $\bullet~\$500$	August 2018
William W. Hill Zoology Scholarship - Southern Illinois University Carbondale • \$1,500	May 2018
Illinois Federation of Outdoor Resources - Undergraduate Scholarship • \$1,000	May 2018

### **AWARDS**

Outstanding Student Oral Presentation Award LMVJV Waterfowl Symposium	October 2022
3 <sup>rd</sup> Place – Student Oral Presentation Arkansas Chapter of The Wildlife Society	March 2022
Star (Special Thanks for Achievement) Award – USFWS	July 2021
Academic Honors Senior class of Southern Illinois University – College of Science	April 2020
2 <sup>nd</sup> Place – Student Poster Illinois Chapter of The Wildlife Society	<i>April</i> 2019
Academic Honors Junior class of Southern Illinois University - College of Science	<i>April</i> 2019
Academic Honors Sophomore class of Southern Illinois University – College of Science	April 2018

### **GRANTS**

# Spatiotemporal Patterns of Sanctuary Use by Mallards in the LMAV: White River NWR

*May 2022* 

- Ducks Unlimited agreed to provide a grant from May 2022 December 2022, providing an additional semester of funding for my graduate assistantship stipend and tuition waiver
- \$10,000: Ethan Dittmer and Dr. Douglas Osborne (PI)
- Published in 2022 Ducks Unlimited International Science Report as a Southern Region Project

## **Introduction to R Workshop**

80th Midwest Fish and Wildlife Conference, Springfield, IL

January 2020

• Led by Auriel Fournier of Forbes Biological Station

# Applications of UAS in Wildlife Research

80th Midwest Fish and Wildlife Conference, Springfield, IL

January 2020

• Led by John O'Connell of Southern Illinois University Carbondale

## Moist-soil Management for Biologists and Managers Workshop

Puxico & Dexter, MO

August 2018

- Wetland Management and Educational Services, INC.
- Leigh Fredrickson, Senior Ecologist and Adonia Henry, Wetland Ecologist

### INTERVIEWS/MEDIA

### **Illinois Outdoor News**

Carbondale, IL March 2019

• Newspaper article by Les Winkeler "Homework Assignment: study hunter success at Oakwood Bottoms"

#### **WSIU Radio Interview**

Carbondale, IL January 2019

- Interview with Brad Palmer from WSIU Radio regarding the Oakwood Bottoms Hunter Survey project
- https://news.wsiu.org/siu/2019-01-31/siuc-student-surveys-hunters-in-shawnee-national-forest

## **SIU News Blog**

Carbondale, IL January 2019

- Write up of Oakwood Bottoms Hunter Survey project by Tim Crosby
- https://blog.news.siu.edu/20190124-zoology-student-fills-in-data-gap-on-duck-hunter-harvest/

#### **CERTIFICATIONS AND SKILLS**

- -FAA Remote Pilot Certification for Small Unmanned Aircraft Systems
  - Experience flying a DJI Matrice 210 and DJI Mavic 2 Pro
  - Experience with DJI, Litchi, and DroneDeploy software programs
- -Experience with ArcGIS through GEOG 310I "Intro to GIS" and application during my research
- -Valid Illinois driver's license, FOID and CCL permit
- -Species and sex identification of North American waterfowl during flight and rest
- -Identification of common moist-soil plants
- -Skilled carpenter capable of utilizing many carpentry tools
- -Experience using boats, ATVs, farm equipment
- -Lifetime hunter, fishermen, and trapper

#### **MEMBERSHIPS**

 Ducks Unlimited, Delta Waterfowl, The Wildlife Society, Illinois Federation of Outdoor Resources, Illinois Wild Turkey Federation, Illinois State Trappers Association, National Trappers Association, Backcountry Hunter and Anglers

### WATERFOWL VOLUNTEER EXPERIENCE / OUTREACH

# **Wonders of Waterfowl Workshop**

Humphrey, AR February 2022

• Presented a PowerPoint to junior and senior 4-H members highlighting the application of GPS transmitters for waterfowl research. Contact: Tiffany Osborne, Wildlife Instructor at UAM

# **Long-tailed Duck Capture**

Lake Michigan, WI March 2018

• Night capture from boat using a net and spotlight. Ducks then brought to surgery location and I aided in data collection, banding, and transmitter surgery. Contact: Luke Fara, USGS

## REFERENCES

**Dr. Douglas Osborne** – Phone: 870-460-1448, E-mail: osborne@uamont.edu Associate Professor Waterfowl Habitat Management Director Five Oaks Ag Research & Education Center University of Arkansas at Monticello *Relationship: Advisor for M.S.* 

**Dr. Heath Hagy** – Phone: 731-432-2856, E-mail: heath\_hagy@fws.gov

Waterfowl Ecologist

U.S. Fish and Wildlife Service, National Wildlife Refuge System, Southeast Region

Relationship: M.S. Graduate Committee Member

Jay Hitchcock - Phone: 870-946-5169, E-mail: Arthur\_Hitchcock@fws.gov

Assistant Refuge Manager – Dale Bumpers White River NWR

Relationship: Primary contact at White River NWR for the entirety of my project

**Jacob Coulter** – Phone: 913-749-9670, E-mail: Jacob.Coulter@KS.GOV Area Manager/Wildlife Officer – Marais des Cygnes Wildlife Area *Relationship: Supervisor at Marais des Cygnes Wildlife Area*