

WILDLIFE RESEARCH UPDATE

Research, Analysis, and Inventory Section - Wildlife Division



TABLE OF CONTENTS

NEW OPTION FOR DUCK HUNTERS

STRATEGIC PHEASANT RESEARCH

TRACKING THE TIMBERDOODLE

Simplifying duck regulations: A second licensing option for waterfowl hunters

by Matthew Garrick, Waterfowl Program Manager

This fall marks the first year of a four-year study of experimental duck regulations, where Nebraska and South Dakota waterfowl hunters will have a choice to make when they register for HIP – to be a tier-one or tier-two hunter. Once a tier has been picked, a hunter can not switch between tiers for the remainder of that hunting season, and there is no requirement to “graduate” to a Tier I license between years.

Tier I – Traditional six bird bag limit with species and sex restrictions.

Tier II – Three bird bag limit with no species or sex restrictions.

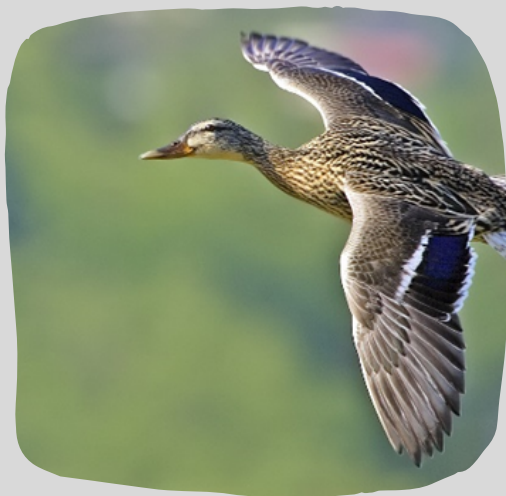
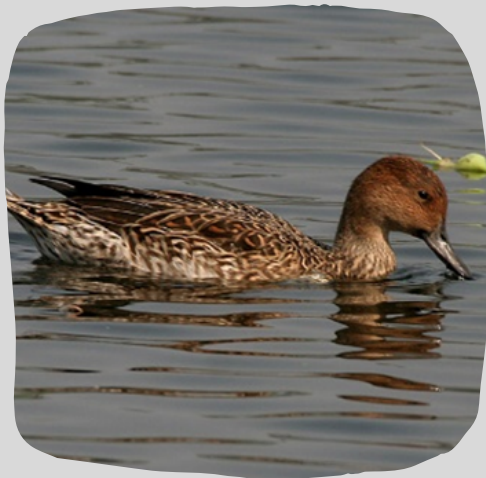
Tier II hunters will be actively involved in the evaluation by participating in surveys, duck wing collections, and hunter diaries to help us determine the effectiveness of this new licensing option. This option will provide hunters the opportunity to go duck hunting without fear of violation (in regards to over bag of restricted species/sex in the Tier I license) and spark a passion for a lifelong addiction to duck hunting.

Duck Regulations Continued...

The Tier II license will also allow mentors to take inexperienced hunters out without worry of whether or not they will over-bag a restricted species/sex. However, the Tier II license does not apply during the special September teal season, in that a Tier II hunter is only allowed to harvest teal with a daily bag limit of six. Possession limits are three times the daily bag (during regular duck season a Tier II hunter's possession limit is nine).

One of the most important aspects of this experiment is communicating these changes with hunters – both current and first timers. Communication teams in South Dakota and Nebraska have been working together to develop a strategy to provide outreach to the public. To date, we have presented this experiment at seminars, DU banquets, and through pod casts. Outreach is going to continue through magazines and social media, with a big push occurring prior to the start of the new HIP year, on August 1st.

For more information about two-tier licensing visit outdoornebraska.gov/ducktiers/



Targeted Conservation for Ring-necked Pheasants in Agriculturally-Dominated Landscapes

by John Laux, Upland Game and Access Program Manager

Similar to many surrounding states, Nebraska's ring-necked pheasant populations have experienced long-term declines – a trend driven largely by continued habitat loss. Over time, changes in agricultural land-use (i.e. grassland conversion to cropland, “cleaner” farming techniques, less diverse crop rotations, etc.) have drastically reduced the amount of suitable pheasant habitat on much of Nebraska's landscape.

In recent decades, pheasants have responded positively to the establishment of grassland habitat through the USDA's Conservation Reserve Program (CRP). In areas dominated by row crop production (e.g., eastern Nebraska), CRP fields often represent the only form of suitable nesting cover remaining. After peaking in the mid-1990's (1.4 million acres), Nebraska's CRP enrollment has declined substantially (2019 = 730,000 acres). The loss of CRP acres and other grasslands coupled with the continued intensification of agricultural land-use poses many challenges to land managers and landowners alike who are working to restore populations and improve pheasant hunting opportunities. In the past, the delivery of CRP and other conservation programs was often very scattered across the landscape yet recent research has indicated that upland gamebird benefit more when conservation efforts are more targeted (Yeiser et al.2018). Research was initiated recently in eastern Nebraska to help determine the influence of suitable habitat density on pheasant abundance. At the conclusion of this research project, several decision support tools will be developed to help prioritize future conservation delivery efforts to maximize benefits to local pheasant populations.

Research Questions:

- § How much suitable habitat is necessary to support ring-necked pheasant populations in landscapes dominated by row crops?
- § At what scale do pheasants respond to habitat restoration and management?
- § What is the respective value of individual habitat patches to local pheasant populations?
- § How can future conservation efforts be targeted to maximize benefits to pheasant populations?

To help answer these questions, NGPC partnered with the University of Nebraska-Lincoln (UNL) and the Rainwater Basin Joint Venture. Two graduate students recently hired on at UNL will be coordinating research efforts over the next three years. Currently in its pilot year (2021), this project was funded by the Wildlife and Sportfish Restoration Program and will decision support tools that will be used to develop a more strategic approach to future conservation delivery. Researchers will conduct “crow counts” each spring at randomly-selected points located throughout study areas in northeastern Nebraska and the eastern Rainwater Basin region. Survey points were stratified based on the density of suitable habitat to examine its influence on pheasant abundance. Once surveys are completed, spatial modeling will be used to help answer the research questions noted above.

Satellites and surveys: investigating Woodcock in Nebraska

by Stephen Brenner, Nongame Bird Biologist

Nebraska is often cited as the premier state where, ecologically speaking, east meets west. What this often means in the bird world is that Nebraska hosts many species in small numbers at the farthest extent of their natural range. The American woodcock (*Scolopax minor*) is one such species that is considered relatively common in the forests of the eastern US and upper Midwest but becomes increasingly rare in the Great Plains. This quirky bird is instantly recognizable and has a devoted following by both gamebird and birders alike, but a surprising large amount of information about the migratory patterns and population connectivity of this species remains unknown, especially in Nebraska.

With the help of many different biologists across the agency, we began a statewide research project on woodcock in 2021 focused on determining the abundance, range, breeding status, and migratory behavior of this species in Nebraska. While this is only year 1 of this project, we have learned a great deal in a very short time about these birds at the edge of their range.

Data and observations collected this season have challenged many pre-existing ideas about woodcocks in the state. We used both traditional surveys and new GPS satellite transmitters to help answer our questions about woodcock.

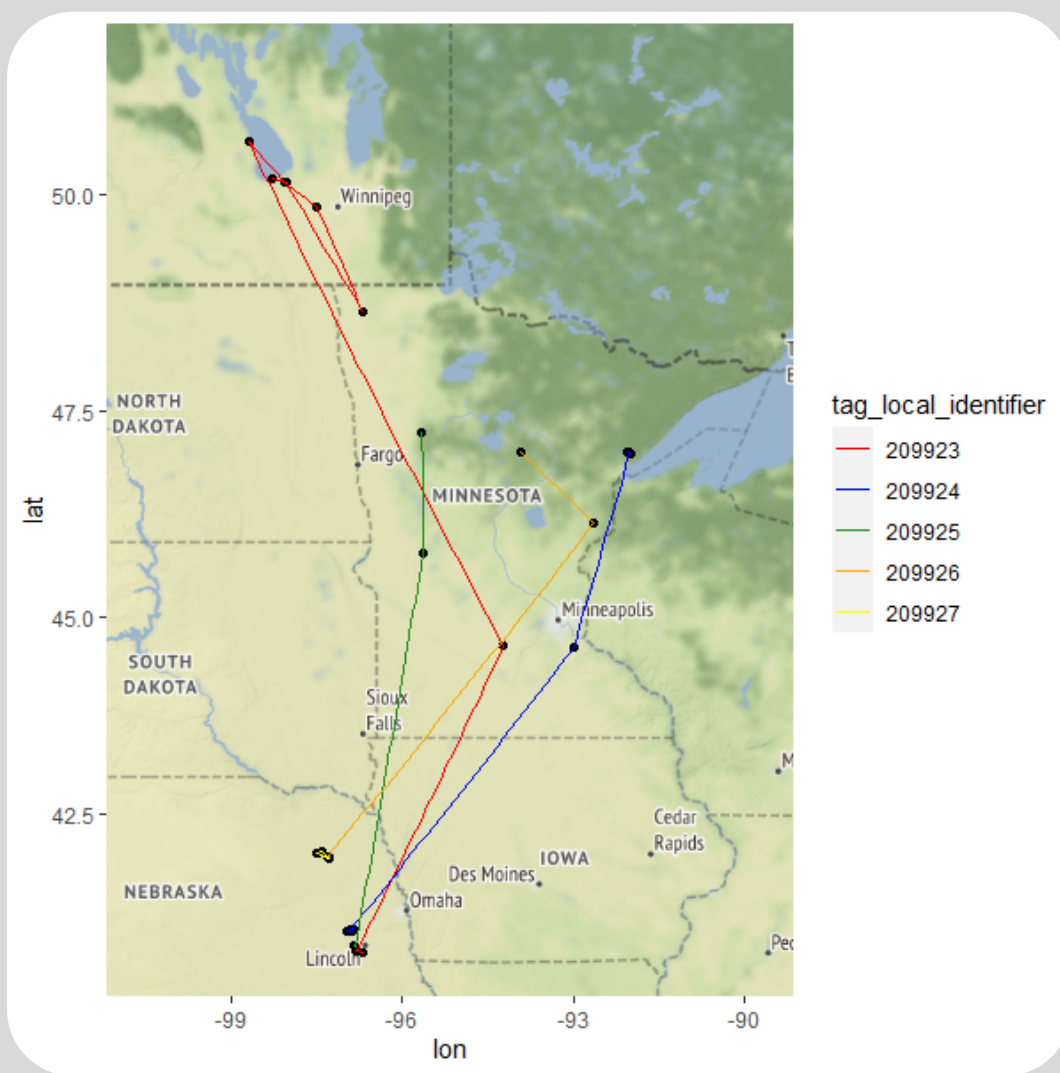
With the help of several volunteers, we covered a large portion of the state (over 180 survey points completed) with our surveys. Highlights include woodcock occurrences in central Nebraska at Calamus Reservoir, Loup Co and Dry Creek Wildlife Management Area (WMA), Holt Co in March. High counts for males (5) were recorded at Yankee Hill WMA, Lancaster Co, in March and Wood Duck WMA, Stanton Co, in April. The results from these surveys suggest that woodcock is uncommon in the state with activity peaking in late March but tapering off by the end of April in most areas.



Woodcock Continued...

We outfitted 5 male woodcock with satellite transmitters across the whole breadth of their breeding season. Tag deployment started March 8 and continued to April 15. Birds were tagged at Branched Oak WMA, Conestoga WMA, and Yankee Hill WMA near Lincoln, and then two were tagged at Wood Duck WMA near Norfolk. Four of the 5 birds have remained in or near their capture locations for about 2-3 weeks and then moved to the “north woods” of Minnesota or southern Manitoba in a very short time (usually within 2-3 days). The above graphic shows the large-scale movements of our tagged birds this season. Fine scale movements within Nebraska are not visible because of the scale of the graphic, but these Nebraska locations will be a focal point of analysis as certain common features of the WMAs and nearby areas seem to really attract those timberdoodles.

Overall, this has been a very exciting and highly informative first season. Every bit of data we have collected, from GPS tags to the constant zeros on certain survey routes, has increased our understanding of these birds in Nebraska immensely. However, many questions remain that we hope to address in the coming years as this project continues in Nebraska.



Contact Us

Will Inselman

Assistant Wildlife Division Administrator - Research
will.inselman@nebraska.gov

Caroline Jezierski

Heritage Program Manager
caroline.jezierski@nebraska.gov

Jeff Lusk

Data & Biometry Program Manager
jeff.lusk@nebraska.gov

Joel Jorgensen

Nongame Bird Program Manager
joel.jorgensen@nebraska.gov

John Laux

Upland Game and Access Program Manager
john.laux@nebraska.gov

Matthew Garrick

Waterfowl Program Manager
matthew.garrick@nebraska.gov

Sam Wilson

Furbearer Program Manager
sam.wilson@nebraska.gov

Todd Nordeen

Big Game Diseases and Research Program Manager
todd.nordeen@nebraska.gov