# RICHARDSON WILDLIFE FOUNDATION

# 2025

## ANNUAL REPORT

Drip torch used for controlled burn ignition

Richardson Wildlife Foundation (RWF), located in Lee County in north-central Illinois, is a not-for-profit corporation dedicated to the long-term restoration of habitats and the judicious use of our natural resources. The Foundation was established in 1989 by Edward J. Richardson with an initial land donation of 250 acres and three primary goals of *Habitat Restoration*, *Conservation Education*, and *Research*. This area is recognized as part of the Grand Prairie Division of Illinois and was part of the historic, 30,000-acre Inlet Swamp and adjacent bluff lands. The Richardson family has funded the Foundation as it has expanded to 1,976 acres through land donations from the Richardsons and the purchase of adjacent farms.

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## OFFICERS

Edward J. Richardson ..... President
J. Brian Towey ..... Vice President
Cody Considine ..... Secretary
Nicholas Richardson ..... Treasurer
Alexander Richardson ..... Director

## STAFF

J. Brian Towey ..... General Manager
Kenny Bielski ..... Ecologist
Brad Kleckner ..... Site Maintenance
Justin Pitzer ..... Operator / Steward


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**Front Cover Photo:**
Prairie Lily blooming this summer in our remnant prairie. We haven't seen this conservative plant bloom in over a decade.

Amanda igniting a controlled prairie burn

Kenny treating invasive Bush Honeysuckle with a basal bark herbicide application

## NEWS & NOTES

**"We leave something of ourselves behind when we leave a place, we stay there, even though we go away. And there are things in us that we can find again only by going back there." ~Pascal Mercier**

Over the years we've been fortunate to have some very high-quality individuals on our team at RWF. One of them was Amanda Contreras, who moved on from our Ecologist position this spring to pursue other opportunities. Amanda cut her teeth in this field as a summer intern back in 2017. She impressed from the start with her productivity, quick learning, and ability to work independently with good judgement. For those reasons we offered an extension into the fall season that year and were fortunate enough to bring her back in a technician role during the growing season of 2018. She continued to work and learn the restoration field over the next couple of years with some of our most respected colleagues. In the summer of 2020, we had a full-time position open and Amanda was the obvious best candidate. For the next five years, she rewarded our faith by pushing our native seed collection, habitat restorations, and invasive species control to new levels. In every full year that Amanda was our Ecologist, we set new RWF records for the number of native species collected. She brought our total seed collection from 230 species to 277. She lugged a backpack sprayer across countless acres, preventing invasive species from taking over. As a critical part of our burn crew, winter timberwork team, and wildlife intervention and survey squad, she left a permanent, positive legacy on this landscape. We know the work can be difficult, uncomfortable, bloody, sweaty, and endless, but it's also rewarding and vitally important. We're grateful to Amanda for her years of hard work and for her lasting impact on RWF habitat. We'll miss you, A.C., but we're excited for your future and wish you the best in your career and all aspects of life!

**"Start by doing what's necessary, then what's possible; and suddenly you are doing the impossible." ~St. Francis of Assisi**

Losing a good member of a small team can be a big blow. It was not without worry that we began the search for a new staff Ecologist. The months that the position was unfilled were a reminder of how much the Ecologist position entails—the remaining three of us couldn't keep up. We think we've found a very good fit with our new Ecologist, Kenny Bielski. It was obvious from his resume and interview that Kenny's interests fall directly in the wheelhouse of his new position on our team. With a Master's degree in Natural Resources Mgt., a B.S. in Forestry Restoration and Mgt., a Minor in Conservation Bio., and high-level fire certifications, his educational bona fides checked all the right boxes for the position, especially so for the phase of habitat development we are in with our woodlands. Kenny has had relevant work experience with excellent public and private organizations. He's practiced restoration of prairie and woodland habitat, fought invasive plant species, been a wildland firefighter, and most recently was an Assistant Preserve Manager at a Nature Conservancy prairie and Bison preserve in ND. One of the things we are most excited about with Kenny is that his expertise and opinions have so far been shaped outside of our own. He's bringing new ideas with him to the position even as he learns our methods and philosophies. We welcome the new perspective, especially in what can sometimes be an insular field. The opportunity for RWF is to potentially implement game-changing shifts in management practices. We hope that Kenny's future as RWF's Ecologist will continue our long history of outsized performance and usher in a few new ways of operating. Kenny hit the ground running in June and has done a great job so far absorbing the Ecologist's responsibilities. Welcome to the team, Kenny. We're excited to have you and look forward to your contributions!

Mechanically harvested Side Oats Grama and Little Bluestem drying in the loft of the dairy barn before processing

## SEED COLLECTION

Achieving diverse restorations on a large scale in our habitat development projects is significantly more efficient and cost-effective using seed than by other methods. For that reason, collection of prairie, wetland, and woodland forb and grass seed is critical to our ability to restore and improve the habitat offered on site. To maximize the diversity of our plantings for the benefit of wildlife and habitat functionality, we try to collect as many desirable native species as possible.

Forb seed collection requires considerable time due to variation in seed maturation dates, the labor-intensive method of hand-harvesting, and the number of species and quantities we target. Many species are difficult to collect due to the spotty distribution of plants or because seed production from individual plants is low. Collecting and processing forb seed by hand, although time-consuming, is considerably less expensive than purchasing an equivalent amount of seed from a commercial source.

By hand collection, we gathered 756 pounds of seed of **278 species** of native prairie, wetland, and woodland plants this year. Having not hired any summer interns, and with a two-month vacancy of our Ecologist position, we focused our efforts more on collecting the greatest diversity of species and less on total volume of seed. **This is the fifth year running that we have broken our record for diversity of species.** It is gratifying to look back on the progress we've made over the many years that we've worked to expand species diversity on this site. As we have continued to introduce additional native species, we've been able to draw seed from those plants to drastically increase our annual harvest and, by extension, improve the quality of the habitat we're able to restore for wildlife. A few of the species we were especially excited to collect or trade for this year were American Bur Reed, Prairie Lily, Marbleseed, and Savanna Blazingstar. We have been particularly focused on woodland and savanna habitat development lately, and we have continued to expand our collection of woodland wildflower seed accordingly. This is in part due to willing landowners and agencies from whom we have gratefully obtained permission to collect and/or transplant desirable native woodland species on several nearby, off-site, wooded locations, as well as from the excellent oak savanna on the Richardson property in LaFox.

Using a modified combine, we harvested 132 pounds of Side Oats Grama and 593 pounds of Little Bluestem seed from collection patches we planted four years ago. To supplement our collection, we participated in a seed swap with the Northern Illinois Native Seed Network hosted by DeKalb County Forest Preserve District, and we will seek to trade seed of some of our hand-collected forb species with native plant nurseries and other restoration agencies in exchange for species that are native to this area but are currently rare or absent from this site.

Hand-collected native seed drying on racks in the seed room of our shop building

Our first Downy Yellow Painted Cup, in a recent sand prairie restoration

## PRAIRIES

Illinois is known as "The Prairie State" and RWF lies within the Grand Prairie natural division of Illinois. Prior to European settlement, and the subsequent conversion of the landscape to agriculture, tallgrass prairie was the primary habitat type in our region. Any wetland, woodland, or savanna habitat would have been surrounded by and dwarfed in scale by the seas of prairie grasses, sedges, and forbs that composed the backbone of the local ecosystem. Just as there are many kinds of woodland ranging from boreal coniferous forest to bottomland hardwood, oak savanna, or thickets, and wetlands ranging from bogs to marshes to swamps to ponds, there are many varieties of prairies as well. Types of prairies are primarily determined by soil structure, hydrology, and topography and bleed together into a matrix in which delineation might be less than straightforward and even vary over time depending on climate patterns. RWF grasslands, be they remnant or restored, are primarily black soil prairie and sand prairie. Both types might range from the dryer side to the wetter and might transition across an area from one to the other or into the marshy sedge meadows associated more with our wetland habitat.

Prairie habitat represents a higher proportion of the Foundation property than any other habitat type, most of it restored on former crop ground. We conduct prescribed, controlled burns, generally on a three-year rotation for established prairies. This rotational approach leaves some areas unburned, protecting fire-sensitive species, providing cover for wildlife, and allowing for the greatest potential for species diversity. Our spring burn season this year started early with unusual opportunities to burn on January 5th and February 10th, though we burned most of our units in March as usual. We burned 52 units totaling about 341 acres. All units were burned safely using a 4-person crew equipped with water tankers, drip torches, Nomex clothing, and two-way radios. As a safety precaution for burning, and to allow for access to the property, about 48 miles of firebreaks and trails were maintained via mowing during the growing season.

To add diversity to older prairie restorations that had been conducted with lower species counts than we use these days, we interseeded 12 locations this year. Several of the areas had become infested with Reed Canarygrass over the years. These we have been treating with a grass-specific herbicide for the last two or more growing seasons. They totaled about 4 acres and were seeded selectively with forbs and sedges throughout, and with native grasses only where Reed Canarygrass had not been dominant. In portions where grass seed was not used, we'll be able to continue use of grass-specific herbicide until we have sufficiently defeated the Reed Canarygrass. At that point we will introduce quality wetland grasses such as Prairie Cordgrass and Bluejoint. We used over 80 pounds of 74 species of primarily moist soil forbs and sedges for these seedings.

We have been working to reduce woody invasions of briars and invasive trees in a small, sandy prairie opening just north of Turtle Wetland on the Original Tract. Into that area we seeded 57 native plant species at about 20 pounds to the acre. On the Dale Tract east of our Railroad Wetland we have been working to reduce excessive growth of Blackberries and invasive grasses on a south-facing slope of about 12 acres. Following herbicide applications to that purpose in the prior summer, we frost seeded this winter a seed mix that included 111 species, which we broadcast at 34 pounds per acre. Another older prairie restoration that we have been working to improve is just east of our office building on the Original Tract. Portions of this prairie were degraded enough by Reed Canarygrass invasion to warrant starting over. These we have repeatedly treated with Glyphosate and disked over the last 2 growing seasons. Those areas will be frost seeded this winter. The remaining 7 acres of that prairie are less degraded and quite salvageable. We spot sprayed small patches of Reed Canarygrass and Blackberries using appropriate herbicides during the prior summer and interseeded in the winter months with 94 species at 8.4 pounds of seed per acre. All of our 2025 interseeding jobs were conducted by frost seeding over light snow cover in January and February. For specific locations, see our habitat map (Appendix 1) at the back of this report.

Kingfisher Wetland in February, nearly dry

## WETLANDS

Wetlands are among the most biologically productive and diverse habitat types found in nature. They provide immense value to human well-being through their natural functions of water purification, flood control, and groundwater replenishment even before factoring in the direct and intrinsic values of wetland flora and fauna. They are also among the most imperiled habitat types. Approximately half the world's natural wetlands had been drained by the mid-1990s. On our site, any efforts to accomplish successful restoration of native habitat and provide for the needs of local populations of wildlife need to be informed by the wetland history of the property. RWF exists at the southern edge of the historic Inlet Swamp, drained over one hundred years ago, and many of our soils are "hydric," or wetland formed. Soil types, hydrology, and sunlight are what determine which native species can thrive. Recreating the 30,000-acre wetland complex that once existed here is neither feasible nor culturally possible at this point, so our approach has been to restore what are known as prairie pothole wetlands dotting our landscape and providing similar ecological functions on a smaller scale.

We record monthly water level readings at each wetland to assess fluctuations occurring throughout the year and across multiple years. We have been in a very dry weather pattern since the beginning of 2020, including multiple periods of true drought. As a result, many of our wetlands have entered the spring season below their full capacity. In normal conditions, spring is a time of peak water availability, as winter conditions allow for water buildup in pools and soil. Recent winters have scarcely frozen the ground surface and provided well below average snowfall or other precipitation. What spring and early summer rains we have received, therefore, may bring our wetlands to full pool, but they don't bank as much water in the soils or groundwater as they could, leading to faster losses when we don't get regular precipitation. Dry spells in the spring and summer months, as have been common lately, result in much faster loss because higher temps lead to increased evaporation and transpiration from growing plants. During the growing season this year, our rain gauges showed over 20% less precipitation than the historical average for our locality. Sixteen of our wetlands (35%) were dry by the end of June (unprecedented for our site) and by the end of the growing season over half of them (24) had entirely dried at some point. Our wetlands will overwinter below their capacity again this year. We hope to see winter precipitation and early spring rains bring water levels up to full prior to next summer. For wetland wildlife, extended dry conditions offer little cover from predators and limit opportunities for foraging or successful breeding.

We regularly make repairs in the summer months to our wetlands as part of an ongoing maintenance program. We do earthwork to repair Muskrat tunneling damage to berms and dikes. We reinstall Hickenbottom water intake risers after they are displaced by ice flow. We adjust and repair our Dos-IR Valves and PVC tilt-tube water control structures. This year, after letting our new Oxbow Wetland fill only partially in its first year to allow for plant establishment and prevent erosion, we installed the outside portion of a tilt-tube which will bring it to full pool this winter or spring. We did the same at Mink Wetland following a draw-down that was part of rehabbing and replanting the berm of that wetland. We replaced a post at Hilltop Wetland that marks and supports the control box and reinstalled the intake and debris guard at Pintail Wetland.

Over the winter, we seeded Oxbow Wetland, which we had constructed the prior summer. Our wetland seed collections have improved dramatically in diversity and scale over the course of our project's history, especially in recent years. Oxbow Wetland and the surrounding low ground occupy a small area (~1/2 acre), which allowed us to design a very high-quality seed mix that provides excellent coverage, even for species that remain limited in availability. It will be exciting and hopefully rewarding to watch the vegetative component of Oxbow develop in the coming years. The seed mix we used for the Oxbow Wetland planting included 137 species of forbs, grasses, sedges, and shrubs at 87 pounds to the acre.

Common Snapping Turtle in Goose Pond behind emergent Softstem Bulrush and Spike Rush

## WETLANDS (cont'd)

Hidden Wetland, on the Martin Tract, was originally restored in 1994. Hidden is a picturesque and productive wetland for wildlife but it was never seeded with a full complement of wetland plant species. In its early years it became dominated by Narrow-Leaved and Common Cattails, which are native but highly aggressive wetland plants that outcompete higher-value wetland flora. Cattails are a preferred food source of Muskrats, which have thrived at Hidden. Thirty years of Muskrat burrowing left the dike severely undermined. This year we rehabilitated the dike and began the process of improving the wetland flora in and around Hidden. In the summer we took advantage of extremely low water levels to access usually flooded portions of the wetland. We mowed cattails and Reed Canarygrass at Hidden and in the basin of the adjacent Pothole Wetland. We burned the mowed duff in the Pothole basin before using our earth scraper to move soil to reconstruct the berm at Hidden. We dug out Muskrat burrows in the dike, regraded with our bulldozer, and continued to add soil and grade until the berm was wider and gentler of slope than it had originally been constructed. As the cattails and invasive grass regrew, we applied aquatic-rated Glyphosate and Clethodim. This winter, we will seed the dike and low ground at Hidden and Pothole with 78 species of aquatic, emergent, and moist-soil native plants. While we are focused on that area, we'll also take the opportunity to improve the 10-acre tallgrass prairie restoration surrounding Hidden with an upgraded suite of upland plants.

Swamp Rose Mallow, Rattlesnake Master, Tall Ironweed, Blue Vervain

Winter forestry work, removing pines for oak release

## WOODLANDS

Woodland habitat at RWF can be boiled down to 3 categories of timber stands: mixed timber which predate the inception of the Foundation ("Existing Timber" on our map), hardwoods planted by RWF (majority Black and Bur Oak), and oaks planted among Red and White Pines by RWF. For each type of timber stand, our intent is to develop healthy oak savanna and woodland communities with a diverse, native understory. This is by its nature a slow process, but the Foundation has now been working on our woodland habitat for over 30 years. Our wooded habitat has come a long way over that time, showcasing the results of those many years of growth, bare-root and potted tree and shrub planting, selective cutting, invasive species control, protection of priority seedlings, and seeding of native understory plants. There remains plenty of work to do, but it is rewarding to see the returns on the investment of effort and resources when we evaluate our woods.

Most of our existing mixed timber stands are the result of natural succession following the abandonment of agricultural crop fields or pastures many decades ago. Some were planted with various pines 50+ years ago. Our management strategies for these woodlands are based upon individual assessments of the quality and species composition of each stand. Many contain a majority of non-native or low-wildlife-value tree species. Our goal for most of the existing woodlands is to increase the proportion of oaks and other beneficial native deciduous trees to shift these areas into healthy, self-sustaining woodlands and savannas. Implementing this goal includes the removal of non-native and detrimental species; protecting existing, desirable saplings from deer damage; and improving understory communities of shrubs, small trees, woodland wildflowers, savanna forbs, sedges, and grasses.

As our timber matures, more of our oak plantings reach a size at which they become tolerant of fire. Beyond tolerance, fire is an essential aspect of savanna and oak woodland ecology. Our experience with burning restored oak habitat has shown near 100% oak survival and observable benefits to the understory plant community. In the years following prescribed burns, we have seen increases in flowering plants in the understory and accelerated growth and acorn production from the oaks themselves. This year we burned about 60 acres of restored oak savanna habitat.

We usually concentrate the bulk of the mechanical aspect of our forestry management in the winter, when frozen ground can support heavy equipment without damaging roots or significantly disturbing the soil. This past winter we released oaks from competition with pines and undesired hardwood species on about 9 acres on the east end of the Wysneinski North Tract and 3 acres on the Bernardin Tract. We followed with a 459-pound frost-seeded mix of 150 species of grasses, forbs, sedges, and shrubs suitable for savanna, full-sun, and open woodland. Twice during the growing season, we mowed the Wysneinski North savanna restoration to disrupt recolonization of blackberries and invasive woody species.

Last year we completed the removal of stumps, root balls, and fallen timber remaining in the path of the 2023 tornado in the woodland on the South Jeanblanc Tract. To foster a healthier understory and savanna community, we frost seeded 268 pounds of seed of 150 species over 9 acres in January. A number of early-flowering species of spring wildflowers have seeds that are classified as

Harmless spiny oak gall on a Chinkapin Oak leaf caused by a gall wasp

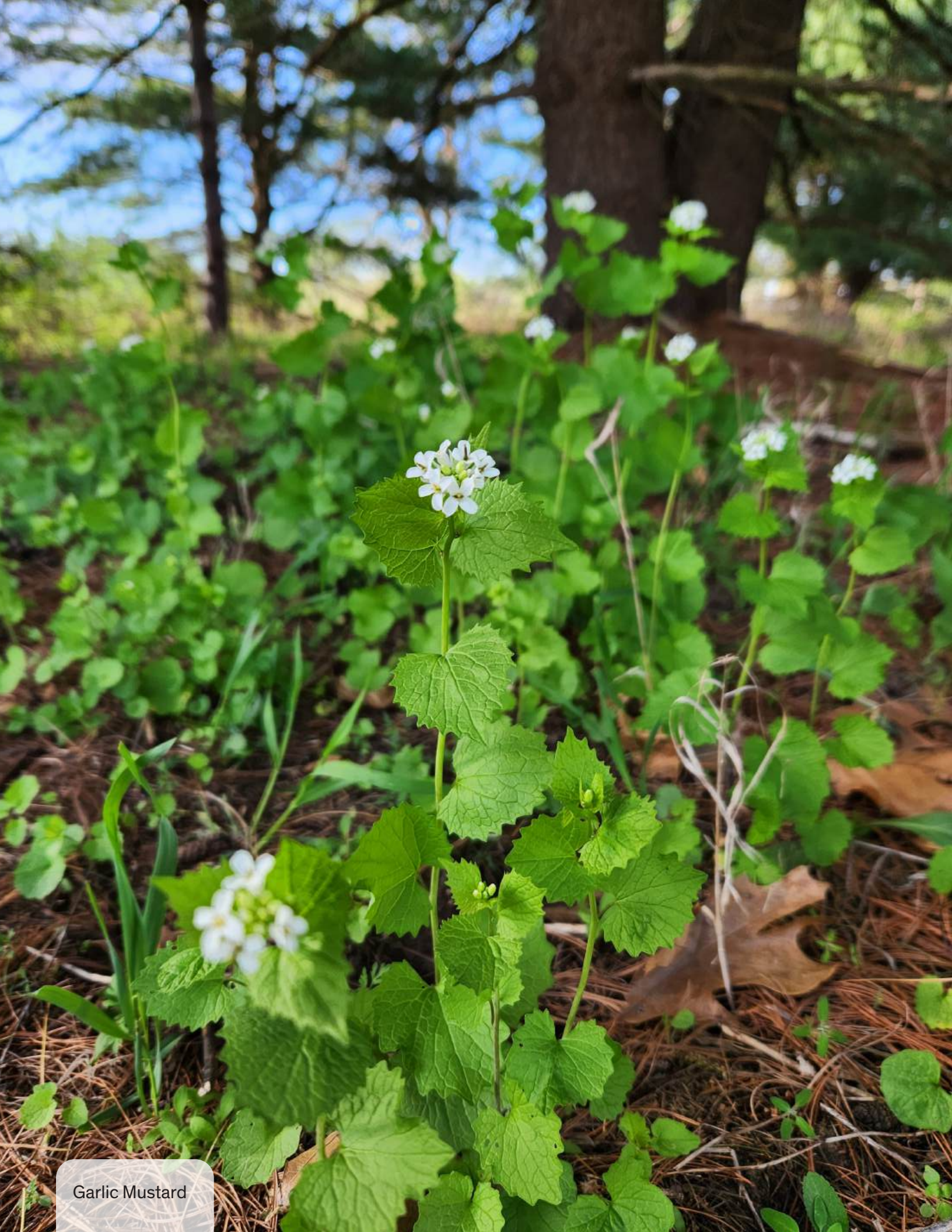
Following planting of potted trees we install Earthmats for water retention and reduction of competition

## WOODLANDS (cont'd)

recalcitrant. This means that they lose germination viability if allowed to fully dry (a necessary step, if we are to save them for frost-seeding in winter months). For such species, late spring or summer seedings are more effective. The seeds of spring ephemeral wildflowers are some of the most challenging species to collect in quantity, so we want to ensure the most effective outcomes from our efforts. We made an additional 3.8-pound seed mix of 15 species for the Jeanblanc woods following the spring seed collection period and sowed it in July. During the summer months we applied wire baskets to volunteer Black Oak and Shagbark Hickory seedlings, and in October we planted 79 potted trees and shrubs into the Jeanblanc woods, each equipped with an Earthmat to prevent desiccation and a wire basket to prevent deer browse and rubbing.

We introduced unrepresented or underrepresented species of oaks, hickory, and shrubs to 7 other woodlands and tree plantings across the property this year by planting 385 potted trees and shrubs along outside edges of existing timber. As with the Jeanblanc planting, we installed Earthmats and wire baskets on each plant and thoroughly watered them during the dry weeks after planting. Prior to planting we prepared each area by targeting invasive or unwanted species by cutting or herbicide treatment and later mowing. This winter, each area will be seeded with a diverse native seed mix to set these plantings up for success as they mature into healthy savanna habitat. See the table below for locations and species allocations for all of our fall tree planting. The purchases of potted trees and shrubs, Earthmats, and basket materials for these projects were facilitated by the Illinois Department of Natural Resources on a contract for habitat project implementation, made available due to our participation in the Illinois Recreational Access Program.

| | Bauer | Bernardin | Dale | Erbes | Jeanblanc | Orig. | Wys. N | Wys. S | Total |
|---|---|---|---|---|---|---|---|---|---|
| Black Oak | | | 12 | 2 | | | | 2 | 16 |
| Bur Oak | 2 | 2 | 14 | 10 | 11 | 8 | 7 | 6 | 52 |
| Chinkapin Oak | 2 | | 8 | 6 | 8 | 2 | | 4 | 28 |
| Pin Oak | 2 | | 8 | | | 5 | 3 | | 13 |
| White Oak | 5 | 4 | 16 | 11 | 13 | 9 | 8 | 7 | 64 |
| Swamp White Oak | 1 | 2 | 6 | 3 | 3 | 8 | 5 | | 20 |
| Shagbark Hickory | 3 | 3 | 9 | 6 | 9 | 8 | 6 | 3 | 39 |
| Hazelnut | 2 | 2 | 10 | 12 | 17 | 10 | 8 | 3 | 54 |
| Nannyberry | 2 | 2 | 10 | 9 | 7 | 10 | 5 | 3 | 38 |
| Red Osier Dogwood | | | 10 | 9 | 5 | 10 | 6 | 2 | 32 |
| Serviceberry | 2 | 2 | 6 | 7 | 6 | 8 | 5 | 2 | 30 |
| Total | 21 | 17 | 109 | 75 | 79 | 78 | 53 | 32 | **464** |


Garlic Mustard

## INVASIVE SPECIES MANAGEMENT

Habitat degradation is second only to habitat loss among the factors that most threaten native wildlife. Aggressive non-native species (invasives) are a primary driver of habitat degradation on the modern landscape. Unchecked expansion of invasive species can displace and cause decline or extirpation of their native counterparts, disrupting relationships within native communities that coevolved over thousands of years. The more habitat we restore for wildlife, the more effort is required for suppression of invasive species. Even as we continue to make great progress in reducing invasive plants, we find that it requires an immense amount of effort to hold ground against reinvasion, and that vigilance is required against invasions by additional exotic species, which continue to grow in number with no indication that this trend will slow down. Just outside of our borders there are plenty of unmanaged havens for invasives and these are a constant source of seed for new invasions on our site.

Recently we have encountered increasing invasions of Oriental Bittersweet, a plant somewhat similar to but far more aggressive than the native American Bittersweet. This vine is occasionally used in landscaping but frequently escapes to natural areas with the help of birds that eat its berries. This year we found and eliminated Oriental Bittersweet plants on the Bernardin, Original, and Erbes Tracts with foliar and basal applications of the herbicide Triclopyr 4.

Reed Canarygrass (RCG) poses a greater threat to the vegetative integrity of our wetlands than any other current factor. It is capable of forming a monoculture in these habitats that completely smothers and excludes natives. In recent years we have been very pleased with the results of herbicide treatments of RCG using Clethodim, an herbicide that targets grasses but does not harm broadleaf plants or sedges. While this herbicide may not be as effective per treatment at harming perennial grasses as Glyphosate is, the selectivity of Clethodim allows us to use it in areas in which the collateral damage to native species would be too severe to justify a broad-spectrum treatment. Following treatments with Clethodim, the unharmed sedges and broadleaf plants can continue to thrive and compete with the weakened invasive grass. As described in the Prairies section of this report, we have been developing a program of using Clethodim to combat RCG while introducing seed of native species that are not susceptible. Clethodim is not approved for use over or near water so these applications are limited to more upland areas or during dry periods.

Another wetland plant capable of dominating wet habitat is *Phragmites*, or Giant Reed. We treated small-scale invasions of *Phragmites* on the Dale and Mellot Tracts. *Phragmites* can be a very difficult plant to eliminate, but on our site we have had little trouble in controlling it to prevent complete takeover using periodic treatments with aquatic-safe forms of Glyphosate during its flowering stage.

Garlic Mustard is an invasive, herbaceous, biennial plant that can dominate at ground level in woodlands, edging out native woodland wildflowers and the fauna which depend on them. Our control efforts this year included applications of 3% solutions of Glyphosate, hand-pulling of plants before they seeded, and controlled burning. We targeted Garlic Mustard in woodlots on the Erbes, Jeanblanc, Original, Wysneinski Central, and Mellot Tracts. To avoid damage to valuable native spring wildflowers on the Bauer Tract, we hand-pulled Garlic Mustard in the timber west of Meridian Road. Garlic Mustard seed's persistence in the soil seed bank; new invasions brought in on the hooves, feet, and fur of animals; the scale of our invaded woodlands; and the short window of the effective treatment season conspire to make complete eradication an unachievable goal. Our strategy is to reduce existing invasions of Garlic Mustard to limit its spread, foster conditions that favor natives over Garlic Mustard, and aim for complete control only in certain priority areas.

Regrowth of invasive Bush Honeysuckle about a month after a topkilling burn

## INVASIVE SPECIES MANAGEMENT (cont'd)

Invasions of prairie plantings, other grasslands, and tree plantings by Canada, Bull, and Musk Thistles and White and Yellow Sweetclover are a periodic problem. Canada Thistle is an aggressive perennial invasive which tends to thrive in disturbed habitat or the early stages of habitat restoration. In some cases we target invasions in our prairies with the herbicide Clopyralid 3 or mow Canada Thistles during the growing season prior to the flowering stage to prevent seed development. We have found our best results have come from controlling seed production of Canada Thistles, chemically treating the most severe invasions in the spring, mitigating sources of disturbance, and interseeding native species to outcompete the thistle over time. Bull and Musk Thistles and White and Yellow Sweetclover are all biennial species (live two years, produce seed in year two, then die). For this reason, it is possible to limit seed production through repeated, well-timed mowing, allowing time and competition to diminish the population. This has been a focus of our strategy for years and has been effective in decreasing the density of the invasives and curtailing spread. We do, however, find that we mow many of the same acres every year, and while density of Sweetclover seems to be decreasing, its footprint remains largely the same. We have been evaluating a spring herbicide treatment using low rates of Clopyralid 3 herbicide over an area with significant Sweetclover invasion. Our goal is to determine if the treatments are effective at killing or preventing Sweetclover from seeding without having a deleterious effect on native broadleaf plants in the treatment area. Following our original treatment in our test plot, Sweetclover was nearly absent for two years, but it was back in full force this year and was mowed to prevent seeding. Our evaluation of the effect on natives and the utility of the herbicide regime continues.

Bush Honeysuckle, Autumn Olive, Glossy Buckthorn, and Common Buckthorn are invasive shrubs that can dominate both woodland and open canopy habitat. By outcompeting seedlings of native species, which local herbivores often favor, they can entirely alter the character of a habitat over time. We have made excellent progress clearing our woodlands and prairies of the adult, seed-producing individuals of these species, even as they have increased in prevalence on less-managed properties in our area. During the growing season and into the fall, we treated adult plants and seedlings of invasive shrubs with Glyphosate or Triclopyr 4, or a combination of Triclopyr and 2,4-D using backpack sprayers or spot spraying from a UTV. We use foliar, cut stump, or basal bark treatments depending on the season, surrounding habitat, and severity of invasion. Keeping up with ongoing regrowth of seedlings and new invasions is time-consuming and will be required indefinitely as we work through the invasive seed banks, but it is critical to maintaining the progress we've made and will help prevent further spread of invasives.

Although it is a native species, Sandbar Willow is an aggressive invader of moist, sunny habitat, particularly capable of diminishing the diversity and quality of wet prairie and sedge meadow. Periodic mowing of the suckering stems of this clonally growing plant can stop or reverse its outward spread. Targeted herbicide treatments can be effective but often cause damage to the surrounding native species. We took advantage of the dry summer conditions this year to mow large areas of willows earlier in the summer than would normally be possible, allowing grasses and sedges to regrow before fall on the Bernardin, Dale, Wysneinski North, Montavon, and Original Tracts.

We continue to become more effective and efficient at combatting invasive species as we refine our techniques. We monitor the scientific literature and maintain dialogue with colleagues to learn new methods and treatment options. We research and maintain vigilance against invasions of known problem species that have not yet become established at RWF. We have made outstanding progress controlling or suppressing invasive plants on this site, and the habitat we're able to offer wildlife is much the better for it.

Corn left standing for wildlife use

## FOOD PLOTS / AGRICULTURE PLANTINGS

We maintain wildlife food plots of corn, sunflowers, soybeans, oats, White Clover, other perennial forages, and Brassica to complement our native habitat in meeting the food requirements of wildlife. We replanted three clover and mixed perennial patches (0.7 ac) in the fall and began rehabilitation practices at seven patches by rotating to corn, beans, or fall annuals. We planted Glufosinate, Glyphosate, and 2,4-D herbicide–tolerant corn and soybeans to help combat Glyphosate-resistant Water Hemp weeds.

Final acreage figures for all wildlife food plots included twenty-two fields of corn totaling 54.3 acres, twenty-one fields of soybeans totaling 57.1 acres, one field of sunflowers totaling 3.2 acres, and fifty-nine plots of clover and/or mixed perennials totaling ~20 acres. Acreages are measured using GPS and mapping software and reported to the Farm Service Agency for crop certification.

Following soil testing conducted in 2024, we reconfigured our input program to our row crops and perennial forage patches. This resulted in cost savings and hopefully better growth for our crops. Optimizing nutrient inputs and increasing organic matter in our soils may help our soybeans, in particular, to grow faster in critical times of the season during which deer browsing has typically limited their ultimate size. In the spring we applied 125 pounds of potash and 75 pounds of pelletized calcium to all fields that would be planted to soybeans. We applied 32% Nitrogen on the corn and sunflower fields in the growing season. For weed control on corn acres we used Verdict preemergence, and a single treatment of Glyphosate, Atrazine, AMS, and Sotrion postemergence. For weed control in soybeans we made a preemergence treatment of Panther Pro, and postemergence treatments with Glufosinate, 2,4-D, Glyphosate, AMS, Outlook, and Methylated Seed Oil. Only about 20% of soybean fields required a second postemergence treatment. We regularly mowed our clover and perennial food plots for weed control and sprayed Clethodim for control of grasses. Weed control was excellent on corn and soybean acres, and better than average on sunflowers. **Despite drought and severe deer browse, both soybeans and corn produced at the highest bushels-per-acre rate we've seen in at least a decade.** In the fall we applied 125 pounds of potash, 75 pounds of pelletized calcium, and 50 pounds of cereal rye cover crop seed to perennial plots and to fields that will be planted to corn next year. As with any program at RWF, we continue to research potential methods to determine if there is a more effective way to manage row crops for production and wildlife use. After many adjustments to our weed control program over the last dozen years, the treatment regime we have used the last 2 seasons has yielded the best solution we've found to the problem of herbicide-resistant weeds.

Spring disking of rowcrop field prior to planting.

Controlled burn along the north edge of Main Lake

## MAIN LAKE

One of our primary management goals for Main Lake is to promote healthy populations of game fish for recreational fishing opportunities. To minimize encumbrances to fishing, we selectively treat the pond with several products to reduce algae and aquatic plant growth. We have been very satisfied with the improved control of filamentous algae since we replaced several of our summer treatments of Cutrine Ultra with Copper Sulfate crystals and increased our applications of Aquashade, a blue dye used to reduce the available light in the photo-spectrum used by algae and aquatic plants. This year, we added two small summer treatments of EutroSORB to our program to limit phosphorus availability at a time when algae can potentially grow explosively. This seemed to be a very effective addition. Late-summer planktonic algae blooms had been a significant issue for many years. The current treatment regime has helped diminish the severity of blooms over the last 4+ years. This year there was essentially no issue with problematic planktonic algae, despite drought-reduced water levels which tend to exacerbate blooms. The table below contains the pond management products we most often use, their purpose, timing of applications, and total annual amounts used.

| Product | Type | Target | Treatments | Timing | Amount |
|---|---|---|---|---|---|
| **Aquashade** | Dye | Algae & plants | 3 | April–July | 17.5 gal |
| **Aquathol K** | Herbicide | Aquatic plants | 1 | May | 10 gal |
| **Reward** | Herbicide | Aquatic plants | 0 | June–Sept. | 0 gal |
| **Copper Sulfate** | Algaecide | Algae | 2 | April–Sept. | 300 lb |
| **Cutrine Ultra** | Algaecide | Algae | 2 | May–July | 12 gal |
| **EutroSORB** | P Lock | Algae & plants | 2 | April–Sept. | 2.5 gal |

We performed annual maintenance on the aeration system to help balance the diffusers and keep them operating efficiently and replaced the vanes in the larger pump. We retrieved all diffusers from the lake bottom, cleaned them in a muriatic acid bath, reassembled them to the plastic tubing, and repositioned them on the lake bottom. We changed filters and graphite vanes on the compressors and adjusted control valves to balance the system. We shut the system down for winter in November following turnover of the water column and will restart it in early spring—or earlier if snowpack over ice becomes too severe during the winter.

In the absence of dense plant and algae cover, smaller fish can be left exposed to predation at an early life stage, thus reducing the number of prey species (Bluegill in this case) reaching a size that provides productive forage for the upper-size classes of Largemouth Bass. Over the last few years we have added several types of cover objects to address this need. As a result, the average size and girth of bass notably increased, and the numbers of forage-size Bluegill increased drastically. Cover objects break down over time. We will need to add more soon to continue to foster a productive fishery.

**This year we were able to achieve our management goals for aesthetics and the health of the fishery while continuing to reduce the number of algae treatments and total chemical use.** The Largemouth Bass spawn appeared to be more productive than that for Bluegill. Increased harvest of bass is warranted to maintain optimal balance. Fish and other aquatic organisms would benefit from more natural cover provided by emergent vegetation becoming established along a greater percentage of the lakeshore if we can find a way to bring that about. With that goal in mind, we will continue to try to spare the south shoreline from herbicide treatments next year.


A dump nest: multiple female Wood Ducks laid eggs in this box without brooding. None of the eggs survived.

## WOOD DUCK NEST SURVEY

We maintained a total of 71 nest box structures for Wood Ducks on or near wetlands and waterways across the property. Maintenance of duck boxes includes repairing structural damage, cleaning out any remains in the boxes, and putting in fresh wood shavings for nesting material. We have three types of nesting boxes available for Wood Ducks: Ducks Unlimited plastic boxes, cedar wood boxes, and galvanized round metal cone boxes.

This year 54% of available nest boxes produced a successful nest, which is well above our historical average of 47%. We observed a total of 437 eggs laid this year, of which 234 had hatched (54%). Taken as a whole, our survey indicates that fewer hen Wood Ducks nested, fewer eggs were laid overall, there were historically few dump nests, and there was a record rate of hatching. That all adds up to an above-average number of fledged chicks, but it does indicate that there was likely a below-average local Wood Duck population this past spring. That could be related to drought and early drying of many of our wetlands, larger-scale population issues such as Avian Influenza, or other factors.

The table below indicates Wood Duck usage and nesting success rates at each type of nest box as well as the total for this year and our historical averages. The number of "dump nests" (7) and the total number of eggs laid in "dump nests" (50) were both the lowest we've recorded. "Dump nest" refers to nests in which female Wood Ducks (frequently more than one) will lay eggs but not incubate or care for them. This occurs both in artificial nest boxes and natural nesting cavities. The behavior is a form of nest parasitism in which females attempt to sneak their eggs into an active nest to have another female raise the resulting chicks with her own brood.

| Type of Nest Box | # of Boxes | Usage by Wood Ducks | | Success Rate of Nests | |
|---|---|---|---|---|---|
| | | # | % | # | % |
| Metal Cone | 4 | 3 | 75% | 3 | 75% |
| Ducks Unlimited | 20 | 14 | 70% | 11 | 55% |
| Cedar Vertical | 47 | 29 | 62% | 25 | 53% |
| Total | 71 | 46 | 64% | 39 | 55% |
| Historical Average | N/A | N/A | 84% | N/A | 59% |

During this year's nest box inspections, we found several boxes that were usable but in need of replacement or repairs. A dozen boxes were damaged between the winter repairs and the nest survey and were unusable for nesting. We will carry out the necessary maintenance or replacement of these boxes prior to the upcoming nesting season.


First day of active trapping procedural walk-through with IDNR

## WOOD DUCK AND DOVE BANDING SURVEYS

This summer we were asked by the Illinois Department of Natural Resources to participate in banding programs for Mourning Doves and Wood Ducks on site. We were happy to help. Both programs involve trapping wild birds in their native habitat; recording sex, age, and demographic information; and applying metal leg bands with individual identification numbers that can be called in or reported online by hunters or biologists if that animal is harvested or captured later. The programs provide management agencies with invaluable data on migration, survivorship, and population health. Resultant data is used to inform population management and hunting regulation decisions.

After meeting and planning with our local IDNR Wildlife Biologist, we deployed premade dove traps on locations over gravel and concrete, and we constructed and deployed swim-in traps constructed of welded wire mesh, plastic netting, and PVC posts at 3 wetlands for Wood Ducks. Each trap had a floating Styrofoam bait platform anchored with a post through the middle. For several weeks before trapping in earnest, traps were regularly baited but left wide open so that birds could come and go freely, getting used to the bait and trap materials. Traps were baited with Sunflower seeds for doves and shelled corn for ducks. When the birds seemed acclimated to the traps and were using the bait, we set the traps by closing the funnels enough for entry with little room for exit. We actively trapped for each species for just over a week. We captured, recorded demographic info for, and banded +/- 5 Mourning Doves and 16 Wood Ducks. The traps were effective, but we identified some weaknesses in our trap deployment that could be improved upon if we participate in this program in the future. Several doves and ducks were able to escape the traps before they were secured and in hand. This is a valuable program, and we would be very interested to learn where birds tagged at RWF are ultimately reported from if possible. In a year with more precipitation and longer wetland durations, we could likely turn out a much greater number of Wood Ducks than we did in this one, perhaps the driest year on record for our wetlands.

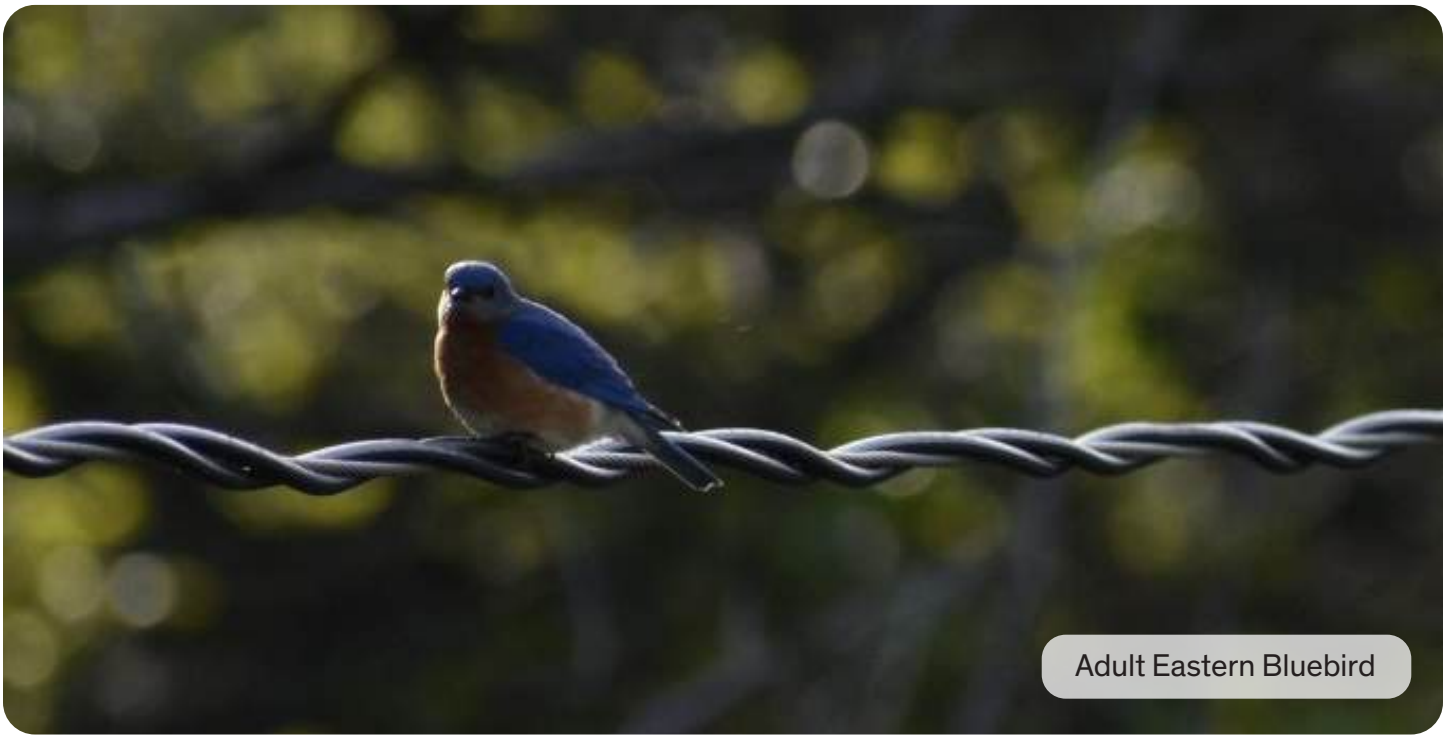
Adult male Wood Duck with a newly placed leg band

Bluebird chicks in a nest box

## EASTERN BLUEBIRD NEST SURVEY

On September 1st we inspected the 47 Eastern Bluebird nest boxes on site for use during the nesting season. Six of the boxes had been damaged before or during the nesting season. Eastern Bluebird nests were observed in 53% of the remaining 41 boxes, 20% higher than last year. As in recent years, we observed multiple cases (11) in which House Wrens constructed nests over Bluebird nests. House Wrens ultimately nested in 24 of the 41 available nest boxes. We conducted this year's survey much later in the season than we typically do because of a staffing change and available hours. By that point in the season, it was impossible to estimate the number of Bluebirds that had hatched and fledged with any accuracy. Our approximation of the number of fledglings has always been a rough estimate based on egg fragments observed and other subjective factors. In recent years the trend has been a decline in Bluebird fledging, coinciding with a rise in House Wren use of nest boxes. We are likely to continue to see significant fluctuation in Bluebird recruitment dependent upon local or regional habitat, weather patterns, competition for nesting sites (with species such as House Wrens), changes in habitat structure, or other factors. As the oak trees and savannas restored on the property mature, we expect conditions to become more favorable for Eastern Bluebirds. Bluebirds prefer grassland groundcover that is more sparse than our tallgrass prairies provide. It is likely that introducing large herbivores that graze on prairie grasses and increasing prescribed burns in oak woodlands would benefit Eastern Bluebirds.

Other species that used Eastern Bluebird nest boxes this year included mice (7%), House Wren (58%), ant nests (9%), and Tree Swallow (1%). Nest boxes were found to be empty on 24% of inspections. In addition to replacing and repairing aging boxes, we continue to adjust nest box placement to try to favor Bluebirds, especially over their chief competitors, House Wrens. Even so, intense competition for nesting sites may be an unavoidable effect of our woodlands reaching a shrubby stage of succession preferred by House Wrens.



Adult Eastern Bluebird

A mature buck

## WHITETAIL DEER SURVEYS

Following a protocol we established years ago, we conducted three ground censuses for Whitetail Deer early in the evenings of February 4th, 17th, and 20th of 2025. They were conducted from a vehicle traveling a predetermined route along roads and lanes that run through our site. Two observers recorded deer seen from the vehicle. The census route and schedule of dates are consistent from year to year. The total numbers of deer seen for each census were 108, 78, and 116, respectively, for an average of 101 deer sighted per survey. One of the reasons we monitor ongoing trends in deer numbers is that when deer populations become excessively high, the herd, individual deer, and the quality of local habitat will suffer. This year's survey was below our 32-year average, on the heels of well-above-average surveys in the prior 4 years. It is worth noting that these road survey numbers are a "noisy" dataset as they are simple observations of deer made over three days in the winter from a limited vantage point. There are a number of variables that can skew results one way or the other despite our efforts for consistency. They are only one index of the size of the deer herd and are one of many metrics taken into consideration for devising our deer management strategy. As you will read below, deer had eaten 100% of the crop we left standing for winter wildlife use. At the time of our 2025 survey, there was little reason for deer to be in open ag fields (where they are more observable) and were more likely to be found foraging on woody browse in heavier wooded cover (where they are far less detectable by our survey methods).

We use trail cameras to survey wildlife use of the property, and they are especially effective when deployed to monitor deer. A total of 17 cameras were strategically placed across the property to gather information on the movement patterns, reproductive parameters, concentrations, and general presence of deer and other wildlife. Information collected with these cameras can be used to estimate deer recruitment rates, buck-to-doe ratios, numbers of mature bucks, and movements and patterns of deer and other wildlife with more nocturnal or secretive behavior. Among the observations gleaned from trail camera surveys in 2025 were multiple sets of triplet fawns, Badger sightings in multiple locations, below-average doe-to-fawn ratios, and an adult sex ratio that skewed heavily male.

On February 21st we surveyed all corn and soybean food plots planted in 2024 to determine utilization by deer and other wildlife. It is important to note that these numbers refer to the food crop that was available over the winter of 2024–2025 and do not reference the crop we planted this year. Our surveys reflected that severe drought conditions in all growing months besides June and July of 2024 reduced yields on well-drained fields, especially for soybeans. Corn production was adequate and even strong on darker soils. Browsing pressure on soybeans by deer during the growing season (another indicator of population size) continued to increase in scope and severity. All cornfields produced ears this year (which has not always been the case). Taken as a whole, in food plots property-wide, 79% of corn stalks still had cobs attached (the same as our previous survey) but essentially no kernels remained on those cobs, indicating extremely heavy wildlife use and high numbers of deer. In addition to corn, we left about 15% of our soybeans standing for wildlife use. In recent corn surveys, we've made it a point to record information on soybeans as well. Similar to what we found with corn, this year's survey showed near total utilization by wildlife of the beans that we left standing. Only one field had any beans remaining and those were buried under drifted snow. In spite of the heavy utilization of the row crops we left for wildlife use, there was no evidence this year of deer foraging on "hunger foods" such as Red Cedar, Arbor Vitae, or Yew shrubs in landscaping during the late-winter months. Winter had been significantly colder than in recent years, but there was little snow. Native browse appeared to provide more-than-adequate forage through the winter.

A bedded fawn

## WHITETAIL DEER SURVEYS (cont'd)

We monitor many aspects of the local deer population through cooperative efforts with hunters, who fill out a log sheet upon completion of each deer hunt on site. They record numerous factors and observations on deer and other wildlife, which are entered into a database by Foundation staff for analysis. This dataset helps us identify trends in population demographics that influence subsequent population numbers and give us invaluable information that strongly informs our deer-management strategy.

Our hunters also provide us access to sample material from harvested animals, which we collect and deliver to the Illinois Department of Natural Resources to be tested for Chronic Wasting Disease. RWF has provided the Department with the majority of samples taken from Lee County over the years. Unfortunately, since 2020 we have had one or more deer test positive for CWD each year including 3 adult bucks and 5 does this year. In response to the presence of CWD on site, we have increased our efforts to harvest and test adult deer for this fatal disease. Moving forward, the presence and observed prevalence rates in our area will heavily influence our decisions as we develop our management goals for Whitetail Deer.

Most years, Foundation employees will hand-capture Whitetail Deer fawns when the opportunity presents itself incidental to other work. During this year's fawning season we were not at full staffing and were stretched to keep up with spring workload. We made the decision to forego any fawn tagging opportunities in order not to lose ground in other priority work during the busy spring season. In years that we do tag fawns, we equip them with individual ear tags containing I.D. numbers, the acronym "RWF," and our office phone number. To date, we have tagged 104 deer (54 male, 49 female, and one unknown). Of these, 23 have yielded valuable post-capture information regarding local population demographics, mortality factors, and movement patterns. We have recovered 11 females on site: 9 harvested by hunters and 2 killed by vehicle collision. We have recovered 5 males on site: 2 killed by vehicle collision (both <1 year old), 1 evidently predated in its first month, and 2 harvested (both at 4.5 yrs. old). In addition 3 males (one 1.5 and two 2.5 yrs. old) and 4 females (1.5, 2.5, 3.5, and 8.5 yrs. old) have been phoned in after being harvested off site by hunters. These deer were from <1 mile to 25 miles from the Foundation when harvested. The data collected from this tagging program provides useful information that we incorporate when developing our deer management strategies.

A doe and bucks feeding on soybeans and clover

A Fox Snake in restored savanna habitat

## HERPETOLOGICAL SURVEY

Foundation staff survey reptiles and amphibians using cover boards, aquatic hoop traps, and visual and audio searches. With our Ecologist position unfilled during most of the spring, we had less time for surveys than typical but we did monitor amphibians calling from wetlands during breeding and ran aquatic hoop traps for a brief time in late May. Amphibians observed on site this year included Tiger Salamander, Boreal Chorus Frog, Blanchard's Cricket Frog, Grey Tree Frog, Northern Leopard Frog, Green Frog, American Bullfrog, and American Toad. Reptiles observed this year included Fox Snake, Eastern Garter Snake, Eastern Hognose Snake, Brown Snake, Six-Lined Racerunner, Painted Turtle, Common Snapping Turtle, Ornate Box Turtle, and Blanding's Turtle. Unfortunately, the only Ornate Box Turtle observed was a male that had been killed by a vehicle on Shaw Road. No Spring Peepers, Spiny Softshell Turtles, Smooth Green Snakes, or Plains Garter Snakes were recorded this year.

Whenever feasible, turtles that we capture are assigned and marked with a code so that they can be identified if they are caught in the future. This provides us with valuable information on growth rates and population demography. This year we caught 5 juvenile Blanding's Turtles that had been previously marked and used their individual codes to determine that 4 had been released as part of our head-starting program and one had been directly released after emerging from a nest we had protected with a wire cage. We also captured a juvenile that was unmarked. Its age, as determined by counting annuli on the scutes, was estimated at 7 or 8 years. This turtle may have been from the first nest we protected under our program in 2018, or it may be the rare natural recruit that survived without our assistance. After capture, we marked this turtle, recorded its location and various size measurements, and released it at the site of capture. Confirming survival of these juveniles is an important bit of very positive information. We marked 35 newly hatched Blanding's Turtles that hatched from eggs we had recovered and incubated. These hatchlings were directly released into wetlands after taking measurements and marking. Read more about our Blanding's Turtle study and conservation efforts in the "Research and Study Projects" section of this report.

All species of amphibians at RWF breed in wetland habitat but each has its own specific requirements of hydrology, plant cover, etc., and different species mate at different times of year to maximize the chances that their eggs and larvae have the conditions they need for success. Most, but not all, of our local amphibians thrive in ephemeral wetlands, which tend to dry down in the summer and recharge with cool-season precipitation. Periodic drying of breeding pools reduces populations of many upper-level aquatic predators of amphibian eggs and larvae such as fish and leeches. Drying also spurs plant growth on exposed mudflats in the late summer and fall, which expands the base of the food chain for larval amphibians. On the other hand, if wetland water levels drop quickly and early in the summer, amphibian larvae may not have time to complete their metamorphoses to an adult stage before being stranded by receding waters. Different species have different maturation rates. Chorus Frogs and American Toads, for example, mature quickly and can leave ponds as small versions of their adult stage in early summer. Tiger Salamanders require a much longer duration and may not mature until September or later.

Ongoing years of dry and drought conditions led many of our wetlands to enter the amphibian breeding season below their full capacity, and water levels continued to drop over the course of the summer. A record 24 of our wetlands dried completely, but the rest maintained a puddle or pool. Our observations suggested that this may not have been a particularly strong breeding year for any species of amphibian on site. We saw a few juvenile Tiger Salamanders in the fall, though a scant few; that species is typically the last to metamorphose of our local amphibians. American Bullfrogs and Green Frogs require more permanence to their wetlands, with larvae overwintering in the pond and emerging the following summer. Wet years favor these species and we have not had a wet year in some time.

Hooded Merganser chick

## WILDLIFE OBSERVATIONS

The Foundation maintains records of wildlife observations and reproductive parameters of various species. The following are notes on selected observations. Our spring waterfowl migration on site was relatively weak, possibly having been less pronounced due to the mild winter and low water levels regionally. With many of our wetlands dry or low, and similar conditions throughout our area, the fall migration of waterfowl was below what we would consider average as well. All observations suggested it was a near-bonanza breeding year for Ring-Necked Pheasants. The number of Wild Turkey broods seen was average to slightly below, though adult numbers remain historically high. We've been pleased to see turkeys utilizing all parts of the property more than in the past as our tree plantings mature and our woodland management actions come to fruition. Disappointingly, Bobwhite Quail were sparse. Few coveys were seen and we heard less calling in the breeding season than typical. Sandhill Cranes continue to nest on site in strong numbers and several chicks were seen with parents this year. Low summer water levels in wetlands did not help the Sandhills rear chicks. We had no indication that any of the recently hatched chicks we saw in the early season survived to flight stage.

American Beaver and Eastern Cottontail populations continue to boom. Removing beaver dams from wetland control structures and culverts was a chore until water levels receded below capacity earlier in summer than normal.

Members of the Illinois Audubon Society surveyed RWF during the IAS's Spring and Christmas Bird Counts and Global Big Days. In 2025, they added Lincoln's Sparrow and Hermit Thrush to the eBird list for RWF, bringing it up to 144 total species currently. We have historical records of 229 bird species on site and hope to continue to add species to the eBird list as they are observed.

Sightings of Endangered or Threatened species included Whooping Crane (read more in the "Research and Study Projects" section of this report), Osprey, Northern Harrier, Starhead Topminnow, Ornate Box Turtle, and Blanding's Turtle. Other species of interest included Blanchard's Cricket Frog, Tiger Salamander, Red-Headed Woodpecker, Northern Shrike, Rough-Legged Hawk, Pied-Billed Grebe, Hooded Merganser, Trumpeter Swan, Whip-Poor-Will, Bald Eagle, Eastern Screech Owl, and American Badger.

Nymph stage of one of the Leaf-Footed Bugs

Northern Leopard Frog

Adult male Ornate Box Turtle

## RARE TURTLES RECOVERY PROJECT

Blanding's and Ornate Box Turtles are Endangered and Threatened, respectively, in Illinois and have drastically declined in number in the state and in many places across their native ranges. They are among the most imperiled full-time resident species on our site; both are primarily prairie species. Blanding's Turtles are a species evolved to exist in a prairie pothole wetland ecosystem. Ornate Box Turtles are a terrestrial species and do not have the same wetland requirements as Blanding's Turtles. Open, relatively sparsely vegetated sandy soils are preferred nesting sites for female turtles of both species. The loss of historical prairie habitat—and especially of large, unbroken blocks of prairie—has been a leading factor in the decline of both species. At RWF we have restored many acres of prairie and wetlands, which has certainly benefited the small remaining populations of these two turtle species. Even so, when we began to seriously analyze their status our surveys showed an age structure that indicated declining populations of both species. The most limiting factor for turtles in this region today other than habitat loss is nest and hatchling predation by mesopredators, primarily Raccoons. Raccoons are a species that benefits from and exists in larger numbers on today's agricultural landscape than they did in days before plowing and successional forest regeneration.

For several years we have taken actions meant to foster a recovery of these populations on our site. In the initial phases we were able to identify some nesting areas for both species, allowing us to conduct informed habitat management practices. Later, through much trial and error, we learned to follow female Blanding's Turtles during their nesting forays to protect their nest and eggs from predation with wire baskets. We would then release resultant hatchlings directly to shallow, vegetated wetland habitat following their emergence, saving them from the risks of "running the gauntlet" to find suitable habitat on their own. At times we've been able to work with partner agencies to incubate eggs and/or give the hatchlings a year or more in a head-starting program, further increasing their odds of survival. An exotic fungal pathogen detected in certain head-start facilities has curtailed our access to head-starting programs for the time being. We are hopeful that with increased biosecurity and testing protocol, more of those programs will resume and that we will find a partner agency willing to include RWF hatchlings.

We continue to refine our approach to Blanding's Turtle conservation measures into a repeatable annual process. Our efforts begin in early spring, by locating any turtles that overwintered with radiotelemetry transmitters affixed to their shells. Knowing where these turtles are successfully overwintering gives us valuable information, applicable to habitat management practices and the next step in our process: trapping for additional females. Starting in April or May, prior to the turtle nesting season, we usually deploy and monitor aquatic hoop traps and conduct visual searches in and around wetlands, with the primary goal of finding gravid (pregnant with eggs) adult female turtles. Capture rates can be frustratingly low. With few adult Blanding's Turtles and many acres of wetland habitat, the needle in the haystack analogy applies. When we capture adult females, we palpate (feel for eggs) to determine if they are gravid, take size measurements and health observations, and affix a radio transmitter to their carapace, allowing us to monitor them by triangulating the signal from their transmitter picked up by a telemetry receiver. The turtles are then released at the site of their capture.

We began this year with four females "on-air." We often trap in spring, hoping to capture additional females to monitor, but were limited in our attempts this year due to reduced spring and summer staffing. We trapped for 4 days at 2 wetlands, capturing 12 Painted Turtles, 3 Snapping Turtles, and 6 juvenile Blanding's Turtles, but no adult Blanding's. Four of the juveniles were marked and had been released as head starts that hatched in 2020 and were released in 2022. One had been direct released following hatching in 2022 (without head starting). Another was unmarked. This was either an entirely natural recruit or a direct release

Female Blanding's Turtle returned to her wetland with a new transmitter

## RARE TURTLES RECOVERY PROJECT (cont'd)

from the first nest we protected under this program in 2018, when we released hatchlings without marking. Confirming survival of these juveniles is very encouraging and demonstrates that our goal of protecting this species from local extirpation is obtainable.

Typical nesting season is late May into late June. Beginning in mid-May we regularly locate the female turtles in evenings to determine if they remain in a wetland or are moving overland, potentially on a nesting foray. Sometimes overland movements are "false alarms" as it is common for Blanding's Turtles to move from one pond to another. Regardless, we have learned to keep a close watch on a gravid turtle. We check her status approximately every 3 hours around the clock until she either nests or returns to a wetland. If we are able to follow a female through her nesting process, we either protect the nest with a welded wire basket or collect the eggs, carefully store them in sealed containers with some of the sand substrate from the nest, and deliver them to our partners for incubation.

Even with the additional protection afforded to hatchlings by nest caging and direct release or head-starting, they remain at significant risk of predation by mesopredators such as Raccoons, Opossums, Mink, Coyotes, and other species for several years. Additionally, we cannot expect to capture all female Blanding's or Ornate Box Turtles every year nor protect all nests from predators. To address this threat to our imperiled turtle populations, we were granted a special permit from the Illinois Department of Natural Resources to trap mesopredators outside of the typical furbearer trapping season. Our goal has been to trap before and during the turtle nesting season, primarily targeting Raccoons. From May 12th to June 13th we deployed as many as 74 dog-proof style reach-in traps to help avoid non-target species. Traps were expertly placed and baited along Raccoon trails and checked 7 days a week. Over 2,361 total trap nights (1 trap night = 1 trap set for 1 night minus any false triggers), we removed 170 Raccoons, 18 Opossums, and 1 Striped Skunk. The local Raccoon population is impressive and apparently quite resilient. Despite our trapping almost a thousand over the last five years, following our trapping session this year we still observed adult and juvenile Raccoons occasionally in person and frequently in our trail camera surveys.

We were able this year to track 4 gravid female Blanding's Turtles and protected 3 nests. Bill Graser, Wildlife Biologist with the Kane County Forest Preserve District, generously offered to take our eggs into his lab for incubation and we very gratefully accepted. Like certain other turtles, Blanding's Turtles exhibit Temperature-Dependent Sex Determination (TSD) rather than a genetic, chromosomal determination of sex. In this species cooler incubation temperatures lead eggs to develop into male hatchlings while warmer temperatures result in female hatchlings. This interesting aspect of their development affords us a level of control over the sex of the eggs when we incubate. Because Blanding's Turtles exhibit delayed sexual maturity (>14 years for females, ~12 years for males), because reproductive females are so desperately needed to foster a recovery, and because in the previous 3 years we had not had the opportunity to incubate, we opted this year to incubate at temperatures to generate 100% female hatchlings. All 35 of our eggs hatched and the resultant hatchlings looked healthy and vigorous.

We measured, marked, and released all 35 hatchlings directly to the relative protection of wetlands. We currently have transmitters on the same 4 adult females we followed this year. We replaced 2 of their transmitters in October due to battery life expectancy. We hope to capture more adult females in our spring trapping season next year.


We track the females through their nesting season. Eggs are collected then incubated. After hatching, we measure, weigh, and individually mark the hatchlings before releasing them into shallow wetland habitat.

## RARE TURTLES RECOVERY PROJECT (cont'd)

| Year | Adult Females with Transmitters | Nests Protected | Hatchlings Direct Released | Head-Started Juveniles Released |
|---|---|---|---|---|
| 2018 | 4 | 2 | 22 | - |
| 2019 | 3 | 3 | - | - |
| 2020 | 1 | 1 | - | 37 |
| 2021 | 2 | - | - | - |
| 2022 | 3 | 3 | 33 | 23 |
| 2023 | 4 | 3 | 24 | - |
| 2024 | 4 | 4 | 48 | - |
| 2025 | 4 | 3 | 35 | - |

Interventive nest protection is more difficult for Ornate Box Turtles than for Blanding's Turtles for a variety of reasons. Box Turtles rarely lay more than 2 eggs while Blanding's commonly lay more than 10. It is difficult to definitively conclude whether a Box Turtle is gravid or not because of the challenges of palpating them due to their small size and ability to close their plastron on probing fingers. Box Turtles are entirely terrestrial so there is no cue to look for as an indication that they are soon to nest, as there is when Blanding's Turtles leave their wetland. We are currently only aware of 2 female Ornate Box Turtles on site and one male that has not been seen in several years. Unfortunately one male that we had not previously encountered was found dead on Shaw Rd, killed by a vehicle. Bad news unequivocally, but it was not a particularly old male (<15 years) and its existence may provide some hope that the few remaining turtles have had some success breeding in the recent past and that there may be others that we haven't encountered yet. Currently, our best conservation approaches for this species are to create quality habitat and reduce nest predators in areas known to harbor Box Turtles.

The road to recovery for either of these turtle species will be slow and labor-intensive. The hard-earned successes and lessons we've learned to this point have been due primarily to collaboration and partnerships, as will be any future success. Discussions, planning sessions, cooperation, and mutual support from colleagues have been critical to scaling up our efforts efficiently. Across northern Illinois these turtles face many of the same threats and require the same types of interventions to remain part of the animal community as on our local landscape. We are very fortunate and very grateful to have found the partnerships we have formed over the last few years, and we look forward to continuing to work together on this important effort.

Subadult Blanding's Turtle in emergent wetland vegetation

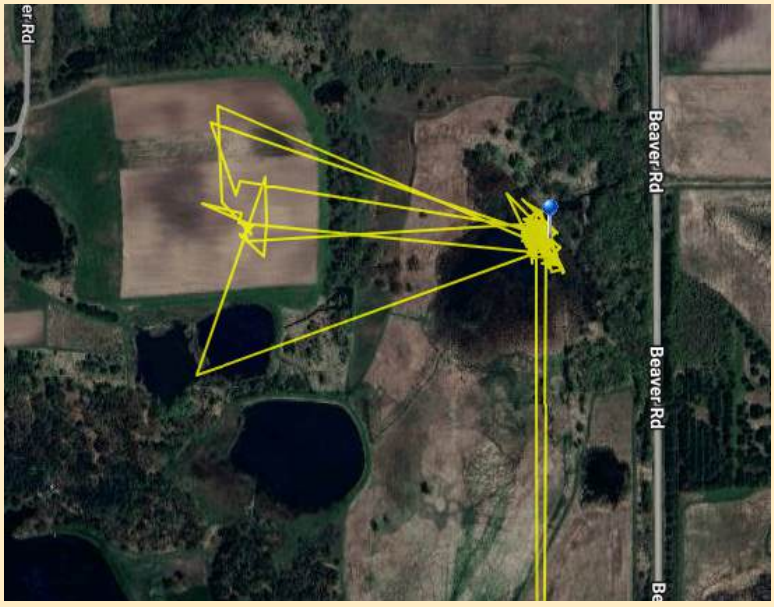
Whooping Cranes 4-14 and
7-17 with a Sandhill Crane

## WHOOPING CRANE MONITORING

*RWF coordinates with researchers at The International Crane Foundation (ICF) to monitor reintroduced Whooping Cranes that use the site seasonally. ICF is dedicated to conserving cranes and the ecosystems, watersheds, and flyways on which they depend. ICF researchers track survival rates, mortality events, nesting activity, chick survival, and behavioral and migration patterns.*

We've become quite attached to a mated pair of Whooping Cranes that have made RWF their spring and fall refuge for the last half decade or more. We always keep an eye out, hoping to see them during their brief stops in spring on their way north to their nesting grounds in Wisconsin. We also look forward to the month or more they spend here in the fall, roosting in the shallows in our wetlands, until winter conditions eventually persuade them to take back to the air to continue to their wintering grounds in Kentucky. We sometimes see other Whoopers, but this pair has spent the most time at RWF.

Tragically, in November we began seeing the male of this pair flying or feeding without his mate, and upon investigation found that the female was ill or injured, remaining on their roost wetland instead of venturing out to feed. We alerted our colleagues at the International Crane Foundation, but she died before they arrived to assess her condition. It is unlikely that any intervention could have helped her and there was no available indication of what caused her health to decline. Life is hard in the wild. Injury by accident or predator attack is possible. Avian Influenza has become a significant concern for many bird populations and there are other diseases that cranes can succumb to. The list of threats is long. The loss of this female feels to us like losing an old friend, but more important than how we feel about it is the loss of her potential to the broader population. From a conservation standpoint, the loss of any individual from a population as threatened and rare as Whooping Cranes is tragic. The efforts of the International Crane Foundation, other groups, and agencies to reintroduce Whooping Cranes to our part of their historical range have been Herculean—audaciously ambitious even. Survival and successful reproduction by the birds they've nurtured and released is key to bringing about what we can hope will be one of the great conservation accomplishments of our times. We'll lament the loss of this female, known as 7-17, but we will hope that the reintroduction program survives and thrives. In the days following the death of 7-17, two other female Whooping Cranes stopped at RWF and were seen feeding with the male 4-14, her surviving mate. We'll keep an eye out next spring for him, and hope that he will survive and find a new mate before long. The great hope remains to see one or more trios: adult pairs showing their migration route to their offspring of the previous summer. The instinctual imperatives of wildlife share a viewpoint with our own grand pursuits of Conservation and Restoration. It's always about the future.




Male crane 4-14's GPS movements during the period his mate was unable to fly

Andy demonstrating his methodology with his research quadrat

## EFFECTS OF LANDSCAPE MATRIX AND CONSERVATION MANAGEMENT ON TALLGRASS PRAIRIE ECOSYSTEMS IN NORTHERN ILLINOIS

*Andy Sima has recently graduated from Stockholm University, Sweden with a master's degree in landscape ecology. He received a bachelor's degree in environmental sustainability from the University of Illinois. For his thesis project, he studied the effects of landscape matrix and conservation management on tallgrass prairie ecosystems in northern Illinois. He completed this research project and earned his master's degree in June of 2025 and hopes to eventually publish his thesis in a scientific journal. He is currently searching for a job in Sweden, and hopes to work in environmental consulting, sustainability planning, or natural resources management. The following is Andy's summary of his project.*

North American tallgrass prairie is one of the world's most endangered ecosystems. In Illinois alone, less than 0.1% of the original twenty-two million acres of tallgrass prairie remain intact today. Tallgrass prairies are unique ecosystems, evolved to withstand extreme heat and cold, wildfire, and drought. They are home to hundreds of unique plant species, which form complex floral communities. What remains of the tallgrass prairie today are typically highly conserved and often surrounded by human-made environments, such as suburbs or farmland. Regardless of whether a prairie is an original remnant or a modern restoration, all Illinois prairie ecosystems today require active management efforts to maintain biodiversity.

To the best of my knowledge, there are very few studies that compare prairie diversity and quality to factors that change across distinct sites. As such, my research aimed to answer questions like "how does plant biodiversity differ between tallgrass prairies that are situated within suburban versus rural landscapes? How do variations of management intensity, age of restoration, and resource expenditure affect prairie floral biodiversity?"

I collected floral data on local plant communities from thirty prairies during August and September of 2024. Richardson Wildlife Foundation graciously allowed me to include their prairie as one of these sites. At each site I visited, I waded into the grass and sampled ten random locations. By using a one-square-meter quadrat at each sample location, I identified, logged, and estimated coverage for every unique plant species within each given space. In this way, I collected a representative cross-section of the plant biodiversity, frequency, and abundance of plant communities.

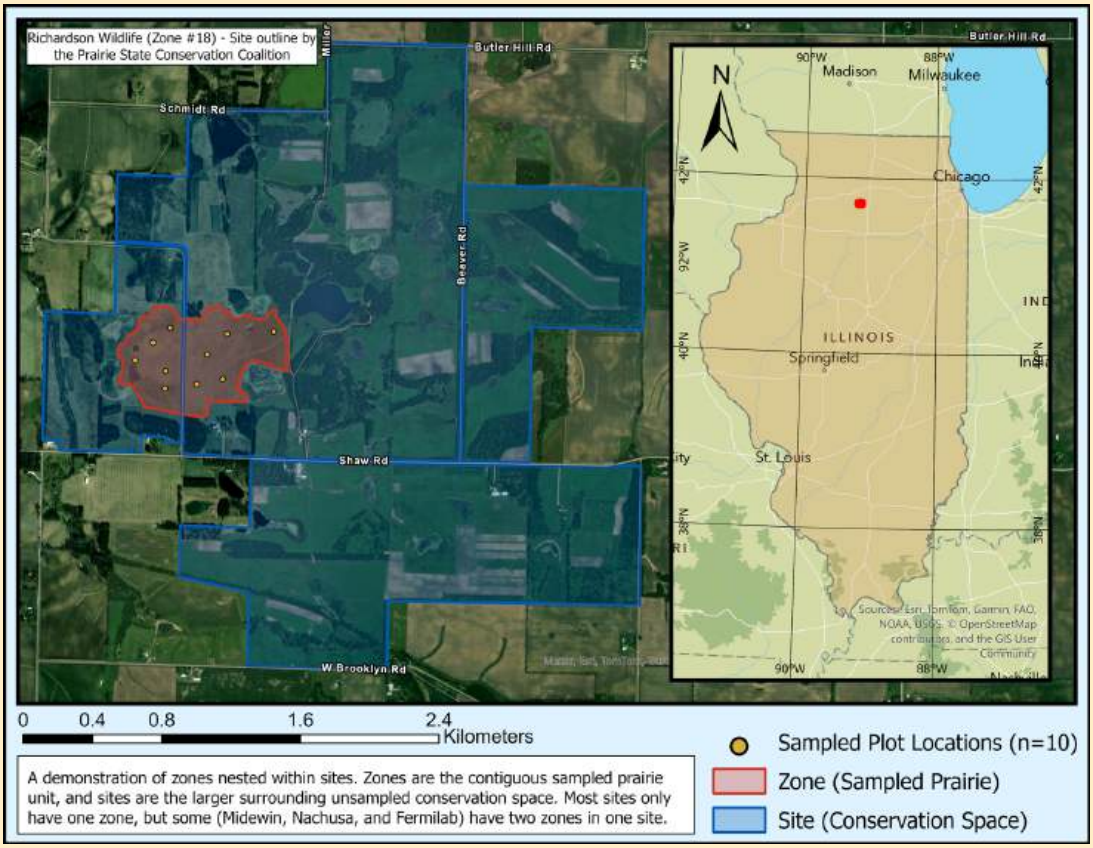
In addition to this, I sent out surveys to land managers at each of the sites to assess what kinds of management practices and site history factors may be affecting plant communities. Richardson's land manager, Brian Towey, was one of the land managers who responded to my survey request. I also used plant-specific values, such as Coefficient of Conservatism and native-invasive statuses, to calculate further descriptive values of site quality. I pulled landscape data from the USGS National Land Cover Database.

Between field data, manager surveys, and calculated values, I built up a robust dataset of hundreds of variables. Using a combination of Python coding and statistical analysis in R, I was able to find statistically significant relationships between variables. In many cases, the significance was present but relatively low, suggesting that these results are more indicative of general prairie trends than strict rules. However, these trends are still statistically and ecologically meaningful.

## EFFECTS OF LANDSCAPE MATRIX AND CONSERVATION MANAGEMENT ON TALLGRASS PRAIRIE ECOSYSTEMS IN NORTHERN ILLINOIS (cont'd)

The most interesting results indicated that, on average, prairies surrounded by rural/farmland landscapes have higher species richness and overall plant community quality than do prairies surrounded by suburban landscapes. Additionally, I found that, in general, plant community quality did tend to increase as land managers utilized a wider range of management techniques. Specifically, sites that used four or more management techniques were significantly more likely to have fewer invasive species. Sites which included hand weeding as part of their management techniques were also more likely to have higher-quality prairies. Conservation sites which utilize higher levels of management and greater inputs of human labor generally have higher-quality prairies than sites utilizing lower intensities of management. While these findings largely fall within expected results, this is one of few studies to compare these variables across many disparate sites and landscape types.

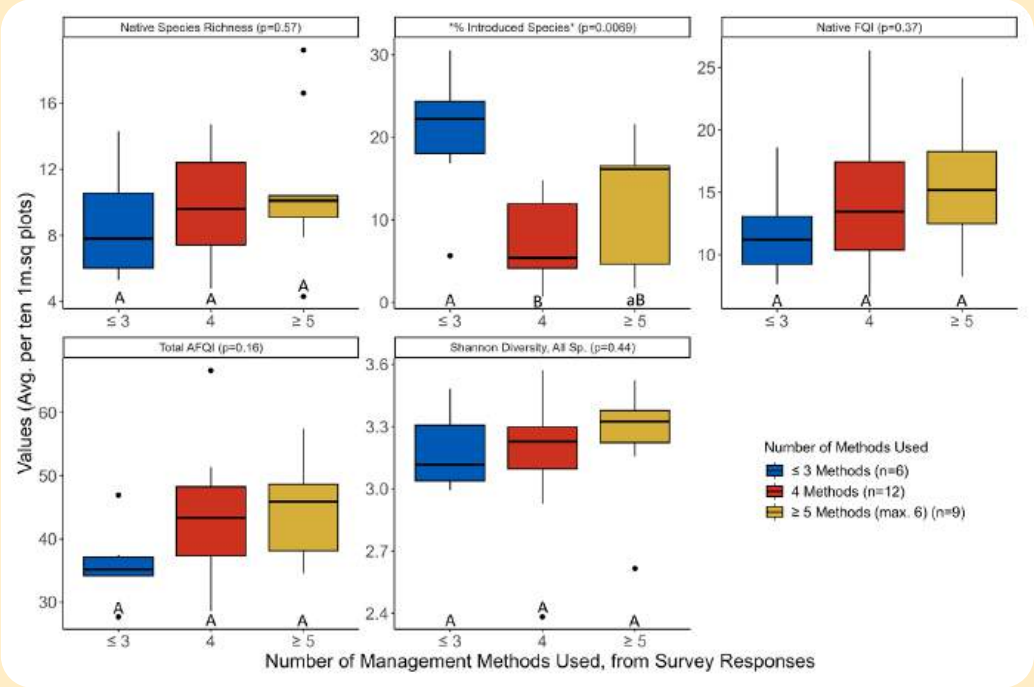
Having strong statistical evidence suggesting that landscape and intensity of management does influence prairie quality can help prairie sites and land managers plan conservation efforts accordingly. It is my hope that these findings will also guide landowners and governmental agencies towards increased efforts at restoration and management. Protecting the prairies is a job for all of us, and I am grateful for the crucial work that land managers, volunteers, and organizations like Richardson Wildlife Foundation do to protect and enhance our remaining tallgrass prairies.

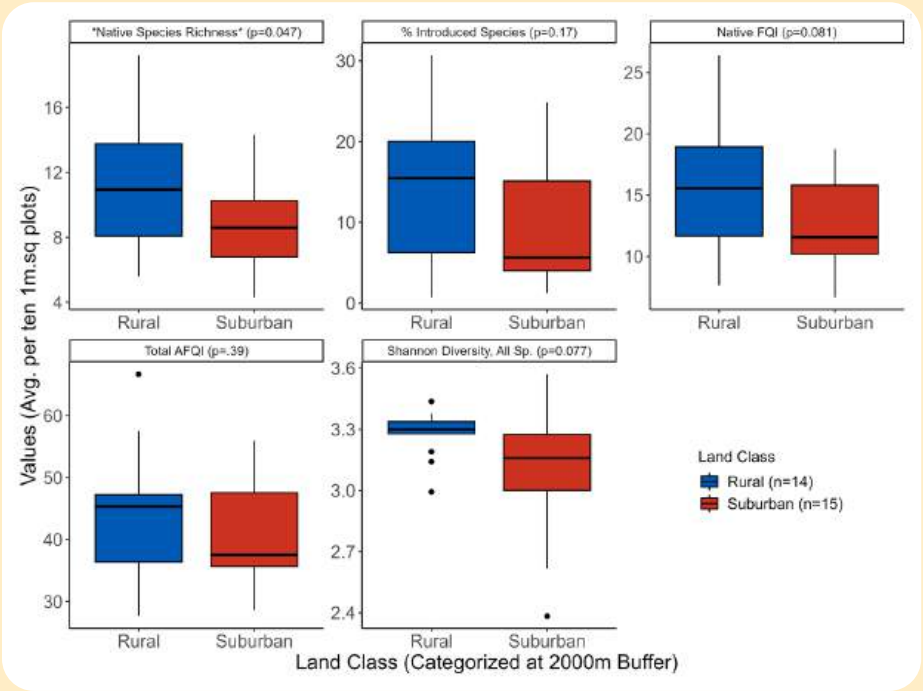



A map of RWF demonstrating the plot and zone location methodology carried out for this study

## EFFECTS OF LANDSCAPE MATRIX AND CONSERVATION MANAGEMENT ON TALLGRASS PRAIRIE ECOSYSTEMS IN NORTHERN ILLINOIS (cont'd)

A graph demonstrating the responses of various floral quality measurements to the number of utilized management techniques




A graph demonstrating the responses of various floral quality measurements to rural vs. suburban landscapes


Young angler Crew Slawkin with a nice Main Lake Largemouth Bass

# CONSERVATION EDUCATION

## EDUCATION

Whenever possible, the Wildlife Foundation hosts educational and community groups of all ages and backgrounds, fosters interest in our mission and methods, and supports local education and research efforts however we can. As in any given year we oriented guests, students, and researchers to RWF; presented our museum specimens to interested groups; and provided some history and context to the Foundation: our mission and methods, successes and challenges, and how we fit into the regional conservation picture. We provided temporary housing to researchers working on site and in our area. Through our participation in the Illinois Recreational Access Program (IRAP), we provided state-administered spring access to turkey hunters to help young people and first-time turkey hunters learn safe, responsible hunting techniques and gain experience with and appreciation for wildlife and the natural world. Boy Scouts from the Sandwich, IL, troop visited the Foundation for an annual overnight camping trip and fishing on Main Lake.

Continuing education for staff personnel was provided via participation in Pesticide Applicator Training Clinics, meetings with our partners in conservation projects, and meetings with Illinois Department of Natural Resources Wildlife Biologists on the status and management of Chronic Wasting Disease in Whitetail Deer.

## MUSEUM COLLECTIONS AND STUDY SPECIMENS

The Foundation maintains museum collections of plants, insects, fish, herps, and mammals for educational and research purposes. Our herbarium consists of 979 plant specimens representing 78 families, 261 genera, and 455 species matted on acid-free paper. Our seed collection includes 82 native prairie and wetland species displayed in glass vials. The insect collection exhibits thousands of pinned and labeled specimens in glass-topped drawers. Our fish collection is comprised of 185 specimens of 13 genera and 21 species preserved in jars of alcohol. The herp collection includes 35 specimens representing 15 genera and 17 species in the form of preserved turtle shells and specimens preserved in jars with alcohol. The mammal collection represents 30 species in the forms of hides stretched on wire frames, skulls displayed in a glass-topped case, and taxidermied mounts. We maintain databases on our collections and species records on site. Informational brochures illustrating species lists for the Foundation property are available for educational and research purposes.

## INTERNSHIP / SEASONAL EMPLOYEE PROGRAM

Most years we offer one or more internships during the summer and/or fall months. We challenge our interns with some taxing work—often in hot, wet, or buggy conditions—but we also give them a lot of opportunities to learn the whys behind the work and we hope that it is a rewarding experience. Our interns' typical responsibilities include invasive species control, collecting and processing native plant seed, shop maintenance, assisting with Wood Duck and Bluebird nest inspections, turtle surveys, and other wildlife surveys. This year we did not hire an intern but hope to do so in 2026—qualified applicants are encouraged to apply.

## VOLUNTEERS

The Foundation has benefited over the years from the help of volunteers who donate their time to assist with our conservation projects. This year Tess Wilson edited and proofread copy such as this report and we had help with seed collection from Dan, Kristine, and Katie Bielski. We greatly appreciate the work that volunteers put towards our projects. We continue to seek and encourage other potential volunteers of various skill, knowledge, and experience levels, as there is no shortage of valuable habitat work to be done throughout the year. If you have interest in volunteering, please contact us!


Greasing the dozer during winter timber work

# EQUIPMENT, PROPERTY, AND BUILDING IMPROVEMENTS

Equipment maintenance and repairs account for a significant percentage of total employee hours each year. The following list details repairs or improvements made to implements, tractors, and trucks this year:

**S770 Bobcat**

- Replaced cab lift shock cylinder
- Repl. hydraulic boom hoses
- Repaired cracked Bobtach plate

**Grapple Bucket**

- Replaced skid shoes
- Replaced fittings
- Replaced hydraulic lines
- Replaced hyd. couplers
- Welded cracked steel
- Replaced rod & seal of cylinder

**John Deere 1435**

- Replaced blades
- Replaced fuel filter

**J.D. 920 Grain Platform**

- Replaced broken gathering fingers on auger

**John Deere 450H Dozer**

- Replaced left front idler
- Replaced 3 left bottom track rollers

**John Deere 331 Disk**

- Replaced left front gang axle on main frame

**John Deere 7200 Planter**

- Replaced 8 down pressure springs
- Replaced row 4 seed sensor

**Woods Batwing 180**

- Welded main axle
- Replaced hydraulic hose

**Kewanee Cultipacker**

- Replaced axle brackets and bolts

**John Deere Gators**

- Repaired flat tires
- Replaced engine and clutch

**Western Snowplow**

- Replaced control pad

**Pickup Trucks**

- Replaced driver's door hinge bolts, '07 GMC
- Replaced fuel tank straps, '07 GMC
- Replaced 2 exhaust hangers, '07 GMC
- Replaced tires, '11 Chev
- Replaced battery, '11 Chev
- Replaced passenger door handle, '11 Chev
- Replaced low-beam lights, '11 Chev
- Replaced Battery, '16 Ford

In addition to the specifics listed above, we changed filters, fluids, and grease for all tractors and trucks; sharpened mower blades; made numerous repairs to small equipment including the chainsaws, backpack sprayers, snow blower, leaf blower, pressure washer, and air compressor; and patched or otherwise repaired tires of implements, tractors, and trucks as needed.

Making roof repairs following storm damage from a fallen tree

New culvert installed under entrance lane

# EQUIPMENT, PROPERTY, AND BUILDING IMPROVEMENTS

For quite a while a culvert under our lane, just north of our main entrance gate, had been degrading and developing holes as it corroded. As those holes allowed the substrate to slowly fall through and wash out, the raised grade of the lane eroded along the east and west flanks, becoming steep and uneven. Eventually this would have led to a collapse of the lane. Complicating our options for repair, utility lines run underground, parallel to the lane in the same raised grade. Rather than excavating the entire grade and removing the unsound culvert, we ran a longer, smaller-diameter, dual-walled plastic culvert through the former culvert. We filled the space around the new culvert with rock and gravel to prevent the void from backfilling with soil and added a large amount of topsoil to extend both flanks of the grade and give it a gentler pitch. As a source for topsoil, we took advantage of a concurrent habitat project in an area close by where we have been treating to kill Reed Canarygrass in a section of prairie just to the east. We moved numerous loads of soil with an earth scraper behind our 8650 tractor. We then graded the slope repeatedly with a dozer, pulled a drag for a final smooth surface, and planted lawn grass seed in September. As dry as this year was, the new grass required frequent watering, which we accomplished with our burn tanker and transfer pump from the bed of a pickup.

In early summer, we power washed the truck barn and butler building near the office on the Original Tract, our shop building and the northern lean-to barn on the Martin Tract, and the dairy barn and heavy equipment barn on the Wysneinski South Tract. Following power washing we repainted the walls of the truck barn and the roof of the lean-to barn. At the Wysneinski farmhouse we stripped and re-shingled the south half of the roof, replaced aged cedar siding on the south-facing portion of the dormer with vinyl, replaced a window and aluminum casing, and painted walls and trim in the 3-season porch.

At the lodge we had the chimney swept and treated with a moisture barrier; re-caulked around the flashing where the chimney meets the roof; removed dead and dying pine trees; cleaned gutters; power washed and painted the deck and exterior; cleaned windows; replaced ballast in fluorescent lighting; made plumbing repairs to dishwasher, sinks, and toilets; applied a crabgrass preventer; and rolled the lawn.

This spring the top half of a large White Pine on the southeast side of the Sanctuary fell during a storm, coming down on the roof and catwalk deck. The damage was significant but didn't impact longer-term structural integrity. Immediately after the damage, we removed the fallen treetop, built and installed a temporary waterproof cover for a broken skylight, removed damaged shingles, and replaced roofing underlayment that had been punctured. Those mitigations kept the building weatherproof while we sourced and replaced about 100 concrete shingles, had a damaged skylight custom built and replaced, and repaired and painted damage to the deck. In addition to storm damage repairs, we power washed the entire building, stone walkways, and decks; performed touch-up painting; cleaned gutters; re-caulked and washed windows; and purged 2 well pressure tanks and replaced their Schrader valves.

We maintained fruit trees with annual pruning and by following a recommended pest control program from Stark Brothers Nursery. We controlled insect pests, blight, and Cedar Apple Rust with one application of a dormant-oil spray and periodic applications of Home Orchard Spray and Ferbam. Pest control measures were generally effective and fruit production was mixed. Several of our trees have become less productive with age and from being shaded out by growing pines.

Property maintenance included the jobs listed above as well as applying pest control measures at buildings; mowing and maintaining lawns and landscaping; grading, spreading gravel, patching potholes, and clearing snow on lanes; pruning trees near buildings; removing diseased trees or those brought down in storms; repairing and maintaining cable gates and posts; posting property boundary signs; clearing overhanging limbs from trails and firebreaks; repairing broken field tile lines and blowouts; and removing Beaver dams where necessary for proper drainage.

Prescribed burn in the LaFox prairie

# LAFOX PROPERTY MANAGEMENT

## PRAIRIE AND SAVANNA MANAGEMENT

On March 26th and 27th we conducted successful controlled burns on approximately 46 acres of prairie, savanna, and creek banks. With a crew of 5 people, 2 drip torches, 2 John Deere Gators, and a John Deere tractor—each machine with a 50-gallon pumper unit—we established a blackened safety zone around the perimeter of each unit prior to head firing. A total of seven units were safely and successfully burned.

## POND MANAGEMENT

We controlled aquatic vegetation and algal blooms using various chemical applications over the course of the growing season. For control of rooted aquatic vegetation, we applied Aquathol K once in May and Reward once each in August and September. We made 13 treatments with Cutrine Ultra and 3 treatments of Copper Sulfate to control algae from April through October. We applied EutroSORB, a relatively new product which binds to phosphorus in the water table, limiting that nutrient's availability to plants and algae. We made one EutroSORB treatment in July. In all, we used a total of 5 gallons of Aquathol K, 6.13 gallons of Reward, 12.5 gallons of Cutrine Ultra, 75 lbs. of Copper Sulfate, and 1.25 gallons of EutroSORB. The continued use of Aquashade—an EPA-approved pond dye which limits the amount of light available in the water column—has helped us reduce the severity of blooms and therefore the amount of herbicide and algaecide needed to manage the pond. We applied a total of 12.5 gallons of Aquashade dye in 5 treatments across the growing season.

We performed regular maintenance on the aeration system to help balance the diffusers and keep them operating efficiently. In August we retrieved all diffusers from the pond bottom, cleaned them in a muriatic acid bath, reassembled them to the plastic tubing, lowered them to the pond bottom, and balanced the pressure to diffusers from the pump.

LaFox Pond

Banding Wood Ducks on Kingfisher Wetland

# ADMINISTRATIVE SERVICES

## ADMINISTRATION

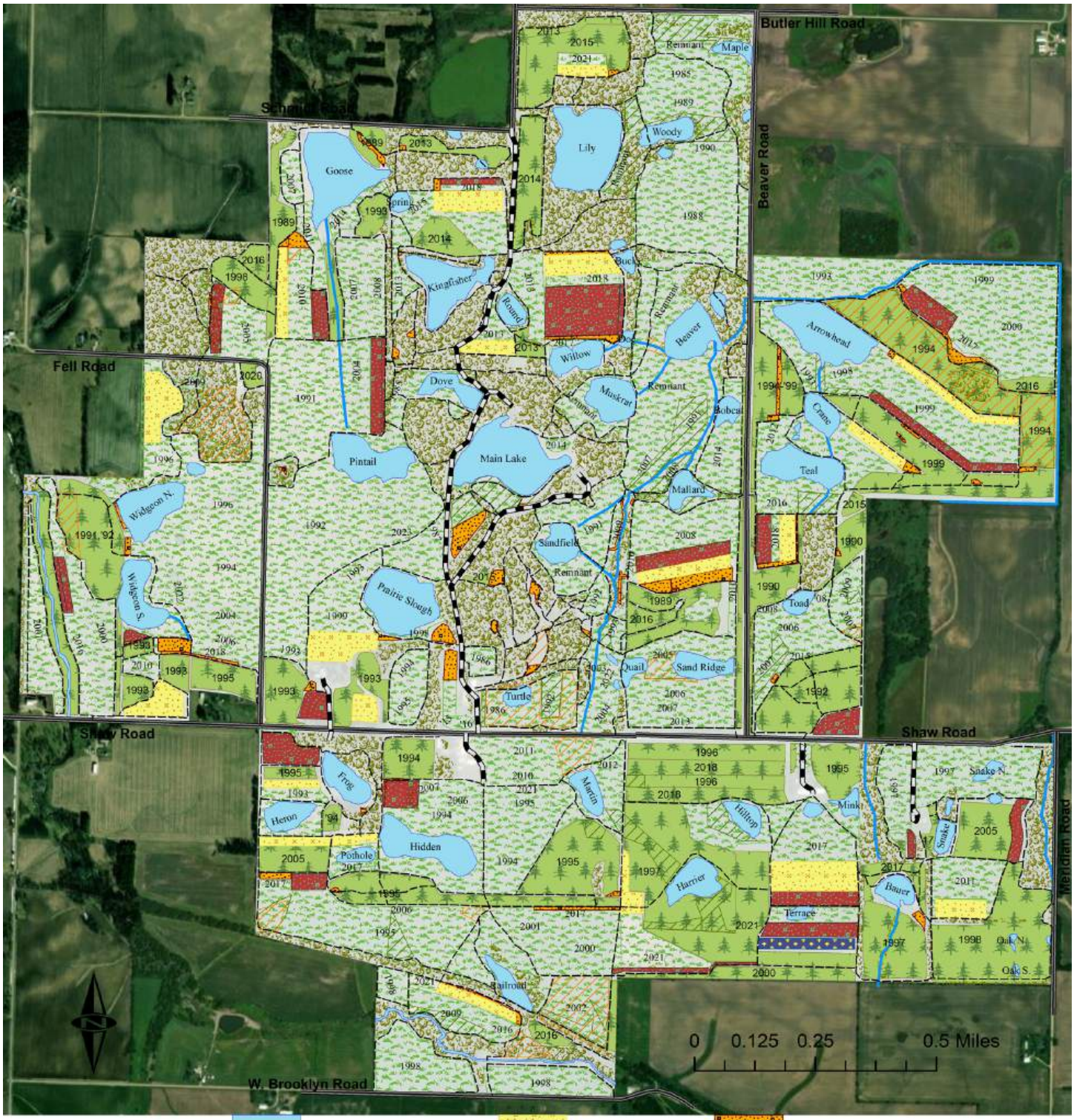
The following is a brief list of administrative support services involved with the daily operation of the Wildlife Foundation:

- Habitat planning, layout, mapping, and evaluation of annual land management practices
- Budgeting, payroll, task code, and programmatic accounting
- Maintenance of a website representing the Wildlife Foundation
- Representing RWF at meetings and conferences for the advancement of the Foundation
- Coordination of investigations, surveys, and research projects
- Literature review and research of management practices and conservation issues
- Completion of required state and federal reports for continued operation
- Applying for miscellaneous permits and licenses needed for continued operation
- Complying with reporting requirements for federal crop programs
- Ordering and purchasing supplies needed for operation and project implementation
- Conducting staff meetings and training sessions
- Devising work plans, project lists, and scheduling
- Conducting annual employee evaluations and reviews
- Technical support services
- Seeking and interviewing potential employees and/or internship applicants
- Maintaining professional and business contacts
- Legal searches and review of operations
- Program evaluation and review
- Correspondence and miscellaneous office duties
- Preparation of an annual report of Wildlife Foundation accomplishments

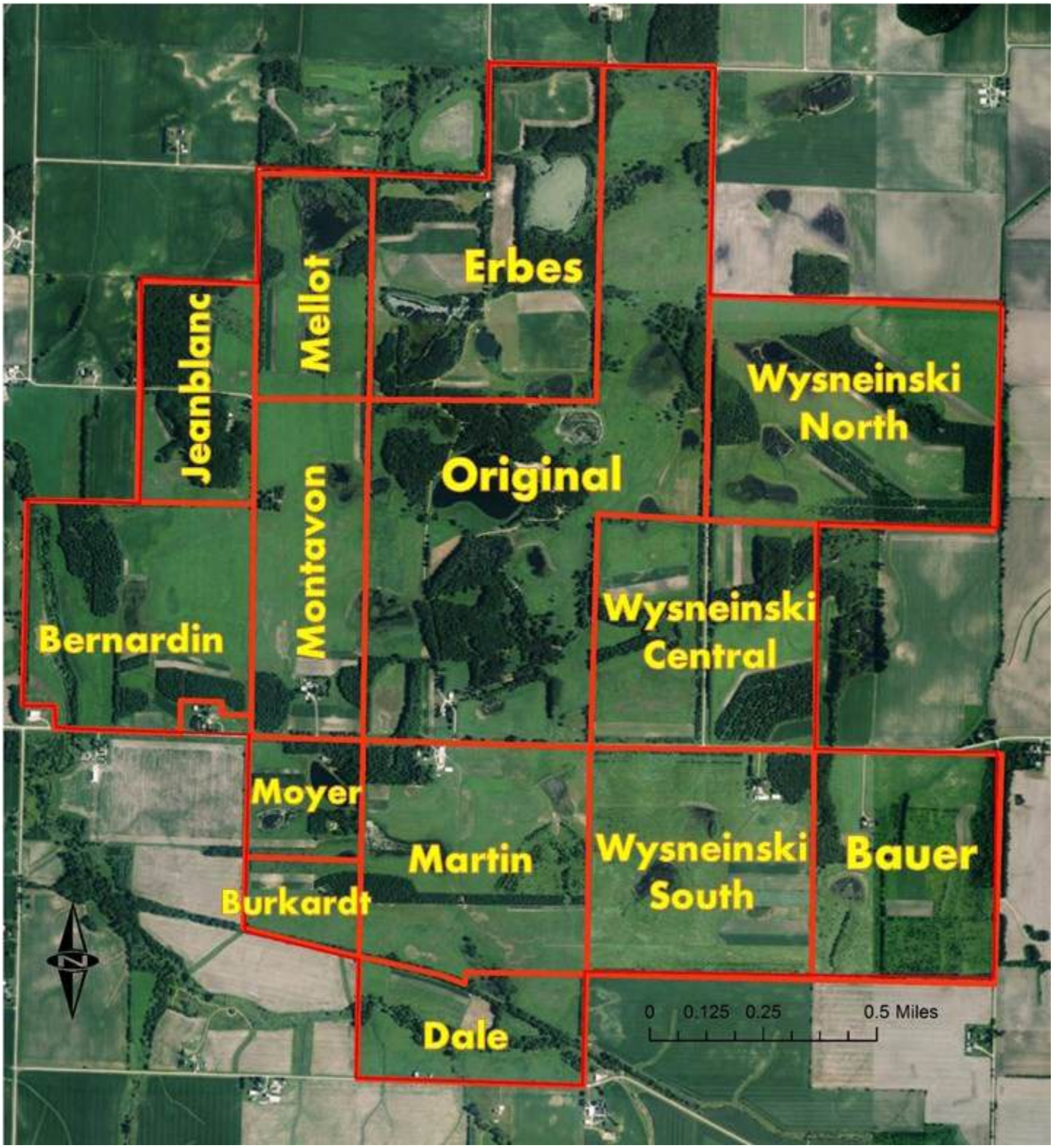
## PHOTO CREDITS

The following individuals contributed photographs for this year's annual report: Brian Towey, Justin Pitzer, Kenny Bielski, Nicki Gordon, and Andy Sima.

# MAP OF HABITAT MANAGEMENT PRACTICES



# LAND TRACT MAP



# 2025 ACREAGE FIGURES

**RICHARDSON WILDLIFE FOUNDATION**

| Prairie Restoration | Acres | % of Total |
|---|---|---|
| 1985 | 21.2 | |
| 1986 | 13.3 | |
| 1987 | 8.2 | |
| 1988 | 19.3 | |
| 1989 | 6.9 | |
| 1990 | 15.5 | |
| 1991 | 38.8 | |
| 1992 | 39 | |
| 1993 | 45.9 | |
| 1994 | 38.5 | |
| 1995 | 52.2 | |
| 1996 | 25.2 | |
| 1997 | 24.6 | |
| 1998 | 33.1 | |
| 1999 | 36.73 | |
| 2000 | 51.2 | |
| 2001 | 25.2 | |
| 2002 | 10.9 | |
| 2003 | 3.6 | |
| 2004 | 15.3 | |
| 2005 | 17.1 | |
| 2006 | 26.5 | |
| 2007 | 27.93 | |
| 2008 | 20.2 | |
| 2009 | 12.6 | |
| 2010 | 18.52 | |
| 2011 | 23.65 | |
| 2012 | 16.1 | |
| 2013 | 30.5 | |
| 2014 | 19.2 | |
| 2015 | 9.2 | |
| 2016 | 12.13 | |
| 2017 | 19.08 | |
| 2018 | 2.05 | |
| 2019 | 0.25 | |
| 2021 | 13.85 | |
| 2022 | 6.3 | |
| 2023 | 9.05 | |
| 2024 | 0.19 | |
| **TOTAL ACRES-** | **809.0** | **40.9%** |
| | | |
| **Remnant Prairie -** | **40.4** | **2.0%** |
| | | |
| **Tree Plantings** | | |
| 1989 | 13.8 | |
| 1990 | 7.4 | |
| 1991 | 16.7 | |
| 1992 | 23.8 | |
| 1993 | 16.2 | |
| 1994 | 51 | |
| 1995 | 39.7 | |
| 1996 | 15.1 | |
| 1997 | 46.4 | |
| 1998 | 23.7 | |
| 1999 | 23.8 | |
| 2000 | 2.2 | |
| 2001 | 1.7 | |
| 2002 - (625*) | — | |
| 2003 - (300*) | — | |
| 2004 - (452*) | — | |
| 2005 | 15.2 | |
| 2013 | 9.2 | |
| 2014 | 11 | |
| 2015- (28*) | 14.2 | |
| 2016- (37*) | 8.9 | |
| 2017- (108*) | 8.65 | |
| 2018- (81*) | 12 | |
| 2019- (242*) | — | |
| 2020- (241*) | 1 | |
| 2021- (400) | 9.2 | |
| 2022- (485) | 9.23 | |
| 2023- (273*) | 2.75 | |
| 2025- (386*) | — | |
| **TOTAL ACRES-** | **382.8** | **19.4%** |

** Potted trees planted within existing woodland plantings.*

| | | |
|---|---|---|
| **Pre-existing Timber** | **291.2** | **14.7%** |

| Wetlands | Acres | % Of Total |
|---|---|---|
| Beaver | 5.5 | |
| Main Lake | 14.2 | |
| Woody | 2.4 | |
| Dove | 3.2 | |
| Muskrat | 5.1 | |
| Sandfield | 3.8 | |
| Goose | 13 | |
| Teal | 6.5 | |
| Mallard | 2.6 | |
| Pintail | 7.1 | |
| Wigeon North | 5.2 | |
| Wigeon South | 5.4 | |
| Prairie | 8.2 | |
| Hidden | 7.6 | |
| Pothole | 1.3 | |
| Hilltop | 2.7 | |
| Bauer | 2.5 | |
| Martin | 3.5 | |
| Railroad | 2.2 | |
| Terrace | 0.75 | |
| Harrier | 5.2 | |
| Turtle | 1.5 | |
| Crane | 2.8 | |
| Arrowhead | 6.8 | |
| Bobcat | 1.5 | |
| Lily | 13.4 | |
| Willow East | 2.3 | |
| Willow West | 1.8 | |
| Round | 1.6 | |
| Kingfisher | 8 | |
| Spring | 1.3 | |
| Mink | 1.1 | |
| Snake | 2.7 | |
| Sand Ridge | 2.1 | |
| Toad | 2 | |
| Buck | 1.65 | |
| Doe | 0.5 | |
| Maple | 2 | |
| Oak | 0.59 | |
| Quail | 1.5 | |
| Mink West | 1.2 | |
| Oxbow | 0.27 | |
| Dugouts (6) | 1 | |
| **TOTAL ACRES-** | **165.6** | **8.4%** |
| | | |
| **Cool Season Grasses** | | |
| **TOTAL ACRES-** | **8.6** | **0.4%** |

| Food Plots | Acres | % Of Total |
|---|---|---|
| Corn | 54.30 | |
| Soybeans | 57.10 | |
| Oats | 1.0 | |
| Sunflowers | 3.20 | |
| Winter Wheat | 0.0 | |
| Clover / Perennials | 15.58 | |
| Brassica / Perennials | 6.50 | |
| **TOTAL ACRES-** | **137.68** | **7.0%** |
| | | |
| **Drainages** | | |
| Bauer | 1.2 | |
| Bernardin | 1.1 | |
| Dale | 1.3 | |
| Sandfield | 0.5 | |
| Wysneinski | 1.6 | |
| **TOTAL ACRES -** | **5.7** | **0.3%** |
| | | |
| **Trail \ Firebreaks -** | | |
| Total Length - 47.87 miles | **70.3** | **3.6%** |
| | | |
| **Road \ Ditch Easements** | **45.9** | **2.3%** |
| Total Length - 6.6 miles | | |
| | | |
| **Building and Home Sites -** | **18.9** | **1.0%** |
| | | |
| **TOTAL ACREAGE -** | **1,976** | |

# WILDLIFE HARVEST REPORT

## HUNTER HARVEST

The following table represents hunting activity for the past calendar year. One hunter trip is defined as a hunter going afield for one specific hunting activity. For example, a hunter may have hunted deer in the morning and hunted pheasants in the afternoon, or hunted deer in the morning and again in the afternoon. Both of these examples would count as two hunter trips for the same day.

| SPECIES | HUNTER TRIPS | HARVEST |
|---|---|---|
| Dove | 6 | 56 |
| Waterfowl | 6 | 7* |
| Pheasant | 5 | 5 |
| Deer (Archery) | 183 | 33** |
| Deer (Firearm) | 12 | 8** |
| Turkey (Spring) | 21 | 7*** |
| Turkey (Fall Archery) | **** | 1*** |
| Coyote | **** | 2 |

* The waterfowl harvest included 1 Canada Goose, 5 Ringneck and 1 Goldeneye.

** The deer harvest included 36 does and 5 bucks with the following breakdown: 31 adult females, 5 juvenile females, 4 adult males, and 1 juvenile male.

*** The turkey harvest included 5 Toms, 1 Jake, and 1 bearded hen harvested in the spring season and 1 hen harvested in the fall archery season.

**** Hunter trips were incidental to deer or turkey hunting.

## TRAPPING HARVEST

| SPECIES | HARVEST |
|---|---|
| Raccoon | 170 |
| Opossum | 18 |
| Striped Skunk | 1 |
| Muskrat | 0 |
| Mink | 0 |
| Fox Squirrel | 0 |
| Eastern Cottontail | 0 |
| Beaver | 0 |
| Badger | 0 |
| Coyote | 0 |

Two Toms and a yearling buck

# NOTES

Fog over prairie and corn foodplot on the Montavon Tract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