



## **Open Space 2023 Annual Report**

Libertyville Township Open Space District owns over 1,500 acres of Open Space. The Township has 4 full-time employees who are responsible for all maintenance and restoration efforts. In 2023, the Township applied 2,376 gallons of herbicide, sowed 154.9 pounds of native seed and 750 lbs. of cover crop, collected 30 lbs. of native seed, conducted prescribed burns on 200 acres, rough-cut mowed 76 acres, burned 24 brush piles, installed 6 hen houses, 10,000 plugs were planted, held 13 volunteer workdays, and 32 individuals volunteered.

### **Special Projects**

#### **Donnelley Prairies & Oaks Mitigation Bank Construction Project**

In November 2023, construction of the Donnelley Prairies and Oaks Wetland Mitigation Bank broke ground. Hey & Associates, Inc. has provided the engineering service and technical assistance and HGS, LLC dba RES Environmental Operating Company, LLC is responsible for the construction of the bank. The project includes the realignment of the trail, 17 water control berms, the disablement of 2.3 miles of drain tile, the installation of erosion control measures, and planting of native seed and plugs. It is anticipated the construction will be completed early summer 2024.

#### **Kildare Ave Parcel Restoration Project**

The nine-acre site was completely cleared of buckthorn, brush, and other invasive species. There were four loads of scrap metal and five loads of tires and trash removed from the site. The Township received a ComEd Green Region Grant for the purchase of seed and plugs. Volunteer workdays were held on June 24 and 25, 2023. In addition to restoration, public access to the site has been improved.

#### **Lindholm Park Solar Panel Gate**

To reduce the potential of after-hours activity in Lindholm Park, Gate Systems installed a solar powered gate at the parking lot entrance.

#### **Restructured Open Space District Staffing**

The Township reviewed and updated the positions, structure, job descriptions, and number of full-time and seasonal employees for the Open Space District. The new positions are: Natural Areas Manager, Natural Areas Crew Chief, and Natural Areas Technician. In 2023, there were 4 full-time employees and 1 seasonal employee. The hiring of seasonal employees will be determined as needed.

#### **Rt. 45 Parcel Restoration Project**

The Illinois General Assembly has not awarded the 2<sup>nd</sup> round of DCEO's grants. The Township continues to work with Lake County Stormwater Management Commission and Gewalt Hamilton to determine if the project can move forward.

#### **Rt. 137 Wetland Restoration & Beaver Activity**

The restoration efforts of the Rt. 137 property continue as does the monitoring and managing of beaver activity. There has been further thinning of undergrowth, dead and diseased trees, and invasive species.

With the additional clearing, there is increased light penetration through the canopy to the understory which is promoting the establishment of prairie and savanna vegetation.

The beavers continue to construct lodges and dams and migrate up stream, the Township has partnered with USDA's APHIS Wildlife Services to manage the situation and prevent resource damage through population reduction and removal of structures.

### **Casey Trail Improvement Project**

The Township engaged Pearson Brown and Associates for engineering to resurface the Casey Trail from Oak Openings to Liberty Prairie. The project will address the current erosion and washout issues the trail experiences during rain events. The project will require the approval of the Illinois Nature Preserve Commission. It is anticipated the work will begin Summer of 2025.

### **Volunteer Herbicide Class for Open Space Volunteers**

On January 21, 2023, Libertyville Township and Dave Eubanks from Eubanks Environmental partnered to provide an in-person herbicide training class to 7 volunteers interested in obtaining a volunteer herbicide license. The license allows open space volunteers to participate in herbicide activities under the supervision of Township staff and Dave Eubanks.

### **Volunteer Workdays**

Most of the volunteer workdays are held the second Saturday of each month from 9:00 to Noon and are typically held at Oak Openings, Liberty Prairie, or Donnelley Oaks and Prairies. In 2023, the Township held 13 volunteer workdays which included 32 individual volunteers.

### **Conservation Easement Data**

In 2010, Libertyville Township began documenting baselines and conducting annual monitoring for the conservation easements it holds on 6 privately owned properties. This provides an opportunity for the Township to partner with the landowners to ensure the integrity of each conservation easement is maintained. In 2023, the Township completed the following monitoring activities:

- Bleck Easement – During the construction of a barn, the site was regularly monitored. The annual easement monitoring was conducted on October 2, 2023.
- Bott Easement – Completed annual easement monitoring on October 10, 2023.
- Brennan Easement – Completed annual easement monitoring on October 16, 2023.
- Getz Easement – This easement covers three separate properties. Separate baselines have been created for each property. In 2016, all 3 properties were purchased by a single owner.
  - Completed annual easement monitoring for Getz 1 on October 3, 2023.
  - Completed annual easement monitoring for Getz 2 on October 3, 2023.
  - Completed annual easement monitoring for Getz 3 on October 3, 2023.
- Maxey Easement – Completed annual easement monitoring on October 3, 2023.
- Pritzker – Completed annual easement monitoring on November 1, 2023.

On October 4, 2023, Openlands conducted their annual monitoring of the easements they hold on Township property.

### **Site Specific Activities**

In 2023, the Libertyville Township Open Space District applied 2,376 gallons of herbicide, collected 30.5 lbs. of native seed, sowed approximately 154 lbs. of native seed and 750 lbs. of cover crop, cleared 26 acres of invasive species, burned 24 brush piles, mowed 76 acres, planted 10,000 plugs, and conducted prescribed burns on 200 acres. These numbers will fluctuate based on each property's needs over time.

#### **Atkinson**

- Applied 214 gallons of herbicide to invasive species.

- Cleaned storm grate along the berm.
- Conducted property inspections and monitored encroachments: January, March, May, July, September, and November.
- Installed and/or repaired signage as needed.
- Installed 1 hen house.
- Mowed trail edges.
- Mowed .87 acres.
- The trail was monitored following rain events for potential drainage issues.
- Removal of fallen and & dead branches over trail.
- Removed trash.
- Rolled trails as needed.
- Sowed 3lbs of native seed and 25 lbs. of cover crop.

#### **Butterfield/Canterbury**

- Applied 607.44 gallons of herbicide to invasive species.
- Conducted property inspections and monitored encroachments: January, March, May, July, October, and November.
- Cut fallen tree.
- Installed signage as needed.
- Installed 2 hen houses.
- Mowed 1.93 acres.
- Removal of fallen and & dead branches over trail.
- Removed Seavey ditch log jam.
- Removed trash.
- Repaired sections of trail and rolled trail as needed.
- Sowed 3 lbs. of native seed and 25lbs. of cover crop.
- Site of Carmel High School's October 21st Volunteer Workday which collected 5lbs. of native seed.

#### **Casey North/Oak Openings & Donnelley Prairies & Oaks**

- Applied 315.425 gallons of herbicide to invasive species.
- Burned 11 brush piles.
- Collected 2 lbs. of native seed.
- Completed frontage road clearing.
- Conducted property inspections and monitored encroachments: February, April, June, August, and December.
- Conducted a prescribed burn on 128.85 acres.
- Conducted streambank assessment.
- Continued ongoing monitoring and maintenance of 319 grant: biannual inspections, mowing, and herbicide applications as needed.
- Installed firebreak.
- Installed 1 hen house.
- Installed signage as needed.
- Maintenance and repairs to kiosk as needed.
- Monitored ice in parking lot & spread stone for traction.
- Monitored Oak Openings Bluebird Trail.
- Mowed 49.94 acres.
- Planted 250 plugs.

- Porta-potty delivered & removed.
- Removal of fallen and & dead branches over trail.
- Replaced and repaired fencing as needed.
- Repaired sections of trail and rolled entire trail.
- Sealcoat asphalt apron.
- Sowed 5lbs. of native seed and 25lbs. of cover crop.
- Three volunteer workdays were held at Oak Openings: 2/11 4/8, & 8/12. Two volunteer days held at Donnelly Prairies and Oaks: 5/13 & 7/8. Activities included applying herbicide, planting 250 plugs, and removing invasive species.

#### **Casey South/Liberty Prairie & Donnelley Oaks & Prairies**

- Applied 182.5 gallons of herbicide to invasive species.
- Burned 1 brush pile.
- Collected 7 lbs. of native seed.
- Conducted a prescribed burn on 67.41 acres.
- Conducted property inspections and monitored encroachments: February, April, June, August, & December.
- Installed 2 hen houses.
- Installed signage as needed.
- Mowed 3.05 acres.
- Sowed 3 lbs. of native seed and 25 lbs. of cover crop.
- Delivered and removed porta-potty.
- Repaired sections of trail and rolled entire trail.
- Removal of fallen and & dead branches over trail.
- Two volunteer workdays were held at Liberty Prairie: 9/10 & 11/12. Three volunteer workdays were held at Donnelley Prairies and Oaks: 5/13 & 7/8. Activities that included applying herbicide, collecting 3lbs. of seed, and removing invasive species.

#### **Kildare**

- Applied 415 gallons of herbicide to invasive species.
- Continued clearing.
- Conducted property inspections and monitored encroachment: February, April, June, August, & December.
- Installed signage as needed.
- Monitored drainage.
- Mowed 6.9 acres.
- Planted 3,250 plugs.
- Removed trash.
- Replaced property markers.
- Sowed 59.91 lbs. of native seed and 500 lbs. of cover crop.
- Stump grinding.
- Two volunteer workdays were held on 6/24 & 6/25 in which 6500 plugs were planted.

#### **Lindholm Park**

- Applied 131.535 gallons of herbicide to invasive species.
- Burned 1 brush pile.
- Conducted ball field maintenance.
- Conducted playground equipment inspection.

- Conducted property inspections & monitored encroachments: January, February, March, April, May, July, September, & November.
- Coordinated, managed, and awarded ballfield permits.
- Installed firebreaks.
- Installed signage as needed.
- Installed solar powered gate at the parking lot entrance.
- Mow as needed.
- Removal of fallen and & dead branches over trail.
- Repaired and replaced fencing as needed.

#### **Milwaukee Road**

- Applied 80 gallons of herbicide to invasive species and sidewalks.
- Conducted a prescribed burn on 1.37 acres.
- Conducted property inspections & monitored encroachments: January, February, March, April, July, September, & November.
- Installed firebreak.
- Installed signage as needed.
- Monitored Egidi Lane Drainage project.
- Mowed 1.28 acres.

#### **Old School**

- Conducted property inspections and monitored encroachments: January, March, May, July, September, and November.
- Replaced property markers as needed.

#### **River Road**

- Applied 127.43 gallons of herbicide to invasive species.
- Conducted maintenance and rolled trails as needed.
- Conducted property inspections: February, April, June, August, and December.
- Installed signage and property markers as needed.
- Mowed trail edges.
- Mowed .64 acres.
- Removal of fallen and & dead branches over trail.
- Sealcoat asphalt trailheads.

#### **Rt. 45**

- Applied 70 gallons of herbicide to invasive species.
- Burned 1 brush pile.
- Cleared .52 acres.
- Conducted a prescribed burn on 2.05 acres.
- Conducted property inspections and monitored encroachments: January, February, March April, June, July, August, September, November, and December.
- Installed firebreak.
- Installed signage and property markers as needed.
- Met with Lake Stormwater Management and Gewalt Hamilton to discuss DCEO grant.
- Mowed and widened foot paths.
- Removed garbage and debris.

**Rt. 137**

- Applied 25.25 gallons of herbicide to invasive species.
- Burned 10 brush piles.
- Collected 7.5 lbs. of seed.
- Conducted maintenance and rolled trails as needed.
- Conducted property inspections and monitored encroachments: February, April, June, August, and December.
- Conducted streambank assessment.
- Continued clearing activities.
- Cut fallen tree.
- Installed signage and property markers as needed.
- Maintenance of birdscaping plantings.
- Maintenance and repairs to kiosk as needed.
- Mowed 1.56 acres.
- Removal of fallen and & dead branches over trail.
- Removal of dead tree.
- Removed garbage and debris.

**St. Mary's**

- Applied 164 gallons of herbicide to invasive species.
- Conducted property inspections and monitored encroachments: January, February, March, April, May, July, September, & November.
- Installed fire break.
- Installed signage as needed.
- Mowed .78 acres.
- Removal of fallen and & dead branches over trail.
- Repaired and replaced fencing as needed.
- Sealcoat asphalt trailheads.

**Township Grounds**

- Applied 3.5 gallons of herbicide to invasive species.
- Hauling & spreading mulch on landscape beds.
- Snow removal.

**Winchester Rd/Libertyville Township Soccer Complex (LTSC)**

- Conducted property inspections and monitored encroachments: January, February, March, May, June, July, September, and November.
- Cut fallen tree.
- Installed signage as needed.
- Removed downed trees and buckthorn.

**Seasonal Maintenance Activities****Winter:**

- Clearing of buckthorn and other invasive trees.
- Burning of brush piles.
- Monthly volunteer workdays.

- Assist Road District in weather related events as needed.
- Open Space employees assist with the maintenance of Township grounds.
- Assist with food pantry activities as needed.

**Spring:**

- Herbiciding invasive plants.
- Planting native species.
- Trail maintenance and repairs.
- Burning is done on a rotating basis as site and weather conditions allow. Sites are prioritized and are burned in accordance with the prescribed burn management plan.
- Clean and inspect water control structures for wetlands. The water control structure is closed for the spring.
- Weekly activities: mowing, weed whacking, raking of baseball diamonds.
- Monthly volunteer workdays.
- Open Space employees assist with the maintenance of Township grounds.
- Assist Road District in weather related events as needed.
- Assist with food pantry activities as needed.

**Summer:**

- Grading of dirt along trail edges.
- Herbiciding invasive plants.
- Trail maintenance and repairs.
- Weekly activities: mowing, weed whacking, raking of baseball diamonds.
- Monthly volunteer workdays.
- Open Space employees assist with the maintenance of Township grounds.
- Assist with food pantry activities as needed.

**Fall:**

- Seed collection.
- Planting native species.
- Herbiciding invasive plants.
- Trail maintenance and repairs.
- Clean and inspect water control structures for wetlands – open for fall.
- Burning is done on a rotating basis as site and weather conditions allow. Sites are prioritized and are burned in accordance with the prescribed burn management plan.
- Weekly activities: mowing, weed whacking, raking of baseball diamonds.
- Monthly volunteer workdays.
- Open Space employees assist with the maintenance of Township grounds.
- Assist with food pantry activities as needed.

**Public Communication and Outreach**

K. O'Connor served on the ComEd Green Region Advisory Grant Committee.

K. O'Connor attended Annual Libertyville Township Soccer Complex Meeting – January 24, 2023

J. Happ attended the North Branch Watershed Workgroup General Meeting – February 8, 2023

K. O'Connor presented update on the Open Space District at Countryside Manor's HOA Meeting – March 23, 2023

J. Happ & K. O'Connor met with representatives from the Savanna Institute regarding land use and restoration opportunities on the Rt. 45 property – August 17, 2023

K. O'Connor attended The Farm Foundation's Groundbreaking Ceremony – August 18, 2023

K. O'Connor attended Openlands Annual Meeting – October 17, 2023.

K. O'Connor met with representatives from The Center for Humans and Nature – November 16, 2023

J. Happ attended the Des Plaines River Watershed Workgroup Meetings – November 29, 2023

K. O'Connor met with stakeholders from the Liberty Prairie Reserve – December 15, 2023

### **Professional Development**

J. Happ successfully completed the University of Illinois Extension Center's Forestry Webinar Series on the Oaks of Illinois – April 12, 2023

J. Happ successfully completed the University of Illinois Extension Center's Forestry Webinar Series on the Aquatic Invasive Species – April 26, 2023

J. Happ successfully completed the University of Illinois Extension Center's Forestry Webinar Series on the Tree Physiology – May 3, 2023

J. Happ & M. Cardenas successfully completed the University of Illinois Extension Center's Forestry Webinar Series on Birds, Moths, and Bees – May 5, 2023

A. Cabanas successfully passed the Illinois Department of Agriculture's Pesticide Online Exam – May 30, 2023

A. Cabanas, M. Cardenas, J. Happ, K. Slaybaugh, & K. O'Connor successfully completed CPR & AED Training – July 20, 2023

K. Slaybaugh successfully passed the Illinois Department of Agriculture's Pesticide Online Exam – August 4, 2023

M. Cardenas, J. Happ, & K. Slaybaugh successfully completed Prescribed Fire Science and Management Workshop – August 29 – August 31, 2023

K. Slaybaugh successfully completed the Chicago Wilderness Alliance Midwest Ecological Prescription Burn Crew Member Training Class – September 29, 2023