

# **Open Space 2019 Annual Report**

Libertyville Township Open Space District owns over 1,500 acres of Open Space. The Township now has 3 full time employees who are responsible for all maintenance and restoration efforts. In addition to the staff, Libertyville Township has a long-standing established partnership with Conserve Lake County that has now merged with Openlands. They have linked the Township to grant opportunities, coordinated volunteer workdays and provided professional assistance in a variety of areas.

In 2019, the Township planted 11,470 plugs, applied 3,593 gallons of herbicide, sowed 3,843 pounds of native seed, mowed 226 acres, conducted a prescribed burn on 266 acres, cleared 9.68 acres of invasive species, 23 brush piles were burned, planted 4 trees, held 15 volunteer workdays, and 63 individuals volunteered.

# **Special Projects**

#### **319 Grant**

The Township received an Illinois Environmental Protection Agency 319 matching grant for the reduction of nonpoint source pollution and the funds received were provided in part through Section 319 of the Clear Water Act. The grant was administered by the Lake County Stormwater Commission. The project site was 42 acres of retired agricultural land north of Casey Road. The goals of the project were to eliminate soil erosion, slow the movement of water through the site, reduce the amount of runoff, provide habitat for plants and animals, and promote downstream water quality. The plan included the installation of 18,658 square yards of erosion control blanket, the removal of 5,141 linear feet of drain tile, the 9,950 plugs were planted, sowed 2,662 lbs. of native seed, 14 grade control structures were constructed, and 2 culverts were replaced.

## **Native Seeding Projects**

1,181 pounds of native seed were sowed. Inter-seeding occurred at Bott Prairie, Liberty Prairie, Canterbury/Butterfield, Milwaukee Rd., and Rt. 137 as well as the newly restored areas of Liberty Prairie, River Road, and Lindholm Park.

At Liberty Prairie, a retired pasture between Liberty Prairie Nature Preserve and Casey Road was restored to bridge the gap between the north and south restoration areas of Casey Road. The work included frontage clearing, a prescribed burn, herbicide application, seeding, plug planting and mowing.

## Rt. 137 Wetland Restoration

The Township hired Integrated Lake Management to conduct a prescribed burn and treat invasives on the Rt. 137 Property. Thirty acres were burned for the first time. The activity allowed for the discovery of the site's natural features and exposed downed debris. In addition, 32 acres received four (4) machine applications for the treatment of phragmites.

The site received additional thinning of undergrowth, the removal of dead and diseased trees and invasive species. The work increased the ability of light to penetrate through the canopy to the understory. The restoration efforts promoted the establishment of prairie and savanna vegetation.

## Egidi Lane Drainage Project

The Township hired the engineering services of Pearson, Brown, & Associates to address flooding and drainage concerns with the associated issues of erosion, ice build-up, and sediment. Construction will occur in 2020.

# St. Mary's Road Property Drainage Project

The Township hired the engineering services of Pearson, Brown & Associates to evaluate the functioning of a berm and assess the impact of repairing it to its original condition. The goal of the project is to assist in addressing a flooding and drainage concern.

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

On January 11, 2019, Libertyville Township and Dave Eubanks from Eubanks Environmental partnered to provide an herbicide training class to 8 volunteers interested 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 Donnelly Oaks and Prairies. In 2019, the Township held 15 volunteer workdays with participation from 63 individual volunteers. Activities included applying herbicide, clearing invasive species, collecting seed, pulling garlic mustard and/or clover and participating in prescribed burns.

#### **Conservation Easement Baseline Data**

In 2010, Libertyville Township began documenting baselines and conducting annual monitoring for the conservation easements it holds on 6 privately owned properties. The work is being carried out with the assistance of Openlands. This provides an opportunity for the Township to partner with the landowners to ensure the integrity of each conservation easement is maintained. In 2019, the Township completed the following monitoring activities:

- Brennan Easement Completed annual easement monitoring on September 30, 2019.
- Bott Easement Completed annual easement monitoring on May 23, 2019.
- 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.
  - o Completed annual easement monitoring for Getz 1 on May 23, 2019.
  - o Completed annual easement monitoring for Getz 2 on May 23, 2019.
  - o Completed annual easement monitoring for Getz 3 on May 23, 2019.
- Maxey Easement Completed annual easement monitoring on September 30, 2019.
- Bleck Easement In 2018, the Bleck property was sold to a new property owner. The Township met with the new the property owners to discuss the Township's desire to begin monitoring of the conservation easement. In 2019, the new owners requested an amendment to the conservation easement. The Township worked with Counsel and the property owners to finalize the baseline document and consider the amendment request.

# **Site Specific Activities**

In 2019, the Libertyville Township Open Space District applied approximately 3,593 gallons of herbicide, planted 4 trees, spread approximately 3,843 pounds of seed, cleared 9.86 acres of invasive species, 23 brush piles burned, mowed 226 acres, and conducted prescribed burns on 266 acres. These numbers will fluctuate based on each property's needs over time.

#### **Atkinson**

- The Township assumed oversight of the mitigation bank.
- Applied approximately 309.12 ounces of herbicide to invasive species.
- Rolled trails as needed.
- Conducted property inspections and monitored encroachments.
- Removed debris from encroachments.
- Installed and/or repaired signage as needed.
- Painted bollards.
- Reconstructed trail was monitored following rain events for potential drainage issues.

## **Butterfield/Canterbury**

- Applied approximately 640.58 ounces of herbicide to invasive species.
- Planted 448.25 lbs. of seed on 52.6 acres.
- Planted 2 shrubs.
- Conducted property inspections and monitored encroachments.
- Conducted prescribed burn on 129.5 acres.
- Collected 9 lbs. of native seed.
- Burned 2 brush piles.
- Installed 1 bench.
- Installed 2 knox boxes.
- Removed 2 trees.
- Repaired sections of trail and rolled entire trail.
- Replaced one (1) garbage can.
- Installed signage as needed.

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

- Applied approximately 1,205.74 ounces of herbicide to invasive species.
- Applied 1,536 lbs. of cover crop.
- Burned 10 brush piles.
- Cleaned out underpass drainage and creek culvert.
- Collected 5 lbs. of native seed.
- Conducted property inspections and monitored encroachments.
- Conducted a prescribed burn on 37.69 acres.
- Installed signage as needed.
- Mowed 93.81 acres.
- Planted 1 tree and 9,950 plugs.
- Replaced and repaired fencing as needed.
- Repaired sections of trail and rolled entire trail.
- Spread 3,074.57 lbs. of native seed on over 41 acres.
- Site of 7 volunteer workdays and activities included applying herbicide and removing invasive species. Volunteer Workdays were held: 2/9, 4/13, 6/22, 6/29, 8/10, 10/12, & 12/14.

# **Casey South/Liberty Prairie**

- Applied approximately 2,050.85 ounces of herbicide to invasive species.
- Applied 275 lbs. of cover crop.
- Collected 5 lbs. of native seed.
- Burned 1 brush pile.
- Cleared 5.78 acres.

- Conducted property inspections and monitored encroachments.
- Installed 5 signs and additional signage as needed.
- Mowed 99.68 acres.
- Planted 3 trees, 4 shrubs, and 1,520 shrubs.
- Spread 239.96 pounds of seed on approximately 6.23 acres.
- Repaired sections of trail and rolled entire trail.
- Held volunteer workdays: 3/9, 5/11, 9/14 & 11/9.
- Applied for grants and explored other funding opportunities to support restoration activities.

#### Kildare

- Conducted property inspections and monitored encroachments.
- Cut 1 fallen tree.

#### Lindholm Park

- Applied approximately 473.44 ounces of herbicide to invasive species.
- Applied 30 lbs. of cover crop.
- Burned 1 brush pile.
- Conducted ball field maintenance and installed 1 ton of Turface.
- Conducted property inspections & monitored encroachments.
- Installed signage as needed.
- Mowed 3.5 acres.
- Painted bollards.
- Sowed 6 lbs. of native seed.

#### Milwaukee Road

- Applied approximately 26.92 ounces of herbicide to invasive species.
- Conducted prescribed burn on 1.4 acres.
- Conducted property inspections & monitored encroachments.
- Mowed .1.9 acres.
- Sowed approximately .5 lbs. of native seed on approximately .2 acres.

## **Old School**

- Applied approximately 27.52 ounces of herbicide to invasive species.
- Conducted property inspections and monitored encroachments.

#### **River Road**

- Applied 1,934.08 ounces of herbicide to invasive species.
- Applied 98.29 native seed on approximately 6.95 acres.
- Burned 2 brush piles.
- Conducted property inspections.
- Installed signage and property markers as needed.
- Mowed 3.5 acres.
- Painted bollards.
- Trail maintenance as needed.

#### Rt. 45

- Applied approximately 9.6 ounces of herbicide to invasive species.
- Applied .25 lbs. of native seed to approximately .1 acres.

- Installed signage and property markers as needed.
- Conducted a prescribed burn on 1.2 acres.
- Conducted property inspections and monitored encroachments.

## Rt. 137

- Applied approximately 8542.1 ounces of herbicide to invasive species.
- Burned 6 brush piles.
- Cleared 2.68 acres.
- Conducted a prescribed burn on 30 acres.
- Conducted property inspections and monitored encroachments.
- Installed signage and property markers as needed.
- Installed protective fencing for 1 tree.
- Mowed 6.08 acres.
- Spread 450 lbs. of cover crop over 6.7 acres.
- Spread 475.8 lbs. of native seed to approximately 3.86 acres.

## St. Mary's

- Applied approximately 2,005.12 ounces of herbicide to invasive species.
- Burned 1 brush pile.
- Conducted property inspections and monitored encroachments.
- Installed signage as needed.
- Mowed 18.95 acres.
- Painted 1 bollard.
- Planted 5 trees.

# **Township Grounds**

• Applied approximately 110.1 ounces of herbicide to invasive species.

# Winchester Rd/Libertyville Township Soccer Complex (LTSC)

- Applied approximately 8 ounces of herbicide to invasive species.
- Monitored repairs to the berm.
- Installed signage as needed.
- Conducted property inspections and monitored encroachments.

#### **Seasonal Maintenance Activities**

#### Winter:

- Clearing of buckthorn and other invasive trees
- Burning of brush piles
- Monthly volunteer workdays.
- Open Space employees assist with snow removal in the unincorporated areas of Libertyville Township.
- 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 during March and April. Sites are prioritized and are burned in accordance with the prescribed burn management plan.
- Clean and inspect water control structures for wetlands close 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 during the month of November. 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
- D. Cederberg, J. Happ, and K. O'Connor hosted the Open Space Volunteer Appreciation Event January 12, 2019
- K. O'Connor attended Eagle Scout Award Ceremony for B. Brown April 7, 2019
- K. O'Connor attended Land Preservation Partners Meeting September 16, 2019
- K. O'Connor participated in Lake County Forest Preserve District's Strategic Planning Meeting held at the Greenbelt Cultural Center October 3, 2019
- K. O'Connor attended Openlands Annual Luncheon October 31, 2019

# **Professional Development**

Andrew Lindquist successfully completed herbicide application exam – January 8, 2019

- J. Happ attended the Des Plaines River Watershed Workgroup Meeting February 2 and August 15, 2019
- D. Cederberg, J. Happ, and A. Lindquist attend the Prescribed Fire Symposium: Illinois Prescribed Fire Council May 8 & 9, 2019
- D. Cederberg attended the North Branch of the Chicago River Watershed Workgroup Meetings August 14, 2019
- D. Cederberg and J. Happ attended the Grassland Restoration Network Workday August 20 & 21, 2019
- D. Cederberg, A. Lindquist and A. Rodriquez attended Lake County Stormwater Management Commission's deicing workshop October 1, 2019
- D. Cederberg attend the S212 Wildland Fire Chainsaw Training Class October 29, 30, and 31, 2019
- D. Cederberg attend the S212 Wildland Fire Chainsaw on the fire line training November 1, 2019
- D. Cederberg attended The Illinois Arborist Association Conference November 5 & 6, 2019
- D. Cederberg, J. Happ, and A. Lindquist attended Lake County's GIS Day Training November 11, 2019