# Building and Grounds Committee Meeting 5.28.24

Regina Sharp called a Building and Grounds Committee Meeting
on Tuesday May 28, 2024 at 6:00 pm
Attendees: Committee members; Regina Sharp, Pax Lindell
Village Administrator/Chief of Police Jerry Hayhow, Chief Fiscal Officer/Clerk of Council Katie Lyons, Rich Cogen representing Ohio River Foundation and resident Bill Hayes.

Meeting called to order 6:07pm

Ms. Sharp explained that tonight's meeting is to better understand the proposed project for Miami Grove Nature Preserve. Representative Rich Cogen of Ohio River Foundation is here to discuss removal and maintenance of invasive species in Miami Grove and how their organization can assist.

Rich Cogen from Ohio River Foundation explained that the foundation offers 3 programs, one of which is Habitant Restoration. Habitant Restoration clears invasive species from a set location within a 1-acre lot. The Ohio River Foundation receives a grant from the State of Ohio, that money is then used for communities in need. The initial clearing is free, the foundation provides staff and relies on volunteers within the community to help do the work. Any work after the first year will be minimum of $5000.

Ms. Sharp asked about pesticide use. Rich Cogen explained that the village would be responsible for buying and storing the pesticide while the staff at ORF would be responsible for applying it. Rich insured that the pesticide would not go into the water. The pesticide to be used would be Roundup.

Mr. Lindell stated that while it is a great idea he had concerns about ongoing maintenance and leadership of the project. Mr. Lindell then explained that one funding option would be to see if Shawn Crowley would like to add this to a proposed memorial that he is working on for his late wife Kristen.

Ms. Sharp suggested the Mariemont High School Environmental Club as possible volunteers as well as potential service hours for other students.

Rich Cogen stated that if we are unable to commit right now, we could write a letter of interest to the Ohio River Foundation and decide after talking to Council.

Chief Hayhow expressed a concern about staffing, but the volunteers mentioned earlier may be able to alleviate that.

The committee will present the project to council at the next Council Meeting.

Meeting adjourned at 6:57PM

**TERRACE PARK Service Contract**

THIS AGREEMENT is made by and between the Village of TERRACE PARK, OH ("TERRACE PARK") and Ohio River Foundation ("CONTRACTOR"), who agree as follows:

1. SERVICES. Subject to the terms and conditions set forth in this Agreement, CONTRACTOR shall provide to TERRACE PARK the services described in Exhibit "A," which, by reference, includes the proposal submitted by CONTRACTOR. CONTRACTOR shall provide said services at the time, place, and in the manner specified in Exhibit "A."

2. PAYMENT. TERRACE PARK shall pay CONTRACTOR for services rendered pursuant to this Agreement at the times and in the manner set forth in Exhibit "B." The payments specified in Exhibit "B" shall be the only payments to be made to CONTRACTOR for services rendered pursuant to this Agreement. CONTRACTOR shall submit all billings for said services to TERRACE PARK in the manner specified in Exhibit "B."

3. MATERIALS, SUPPLIES, EQUIPMENT, TOOLS, SUPERINTENDENCE, LABOR AND INSURANCE. CONTRACTOR shall, at its sole cost and expense, furnish all materials, supplies, equipment, tools, superintendence and insurance, and other accessories and services, which may be required for furnishing services pursuant to this Agreement unless otherwise noted within Exhibit "A".

4. GENERAL PROVISIONS. The general provisions set forth in Exhibit "C" are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the other term or condition shall control only insofaras it is inconsistent with the General Provisions.

5. EXHIBITS. All exhibits referred to herein are attached hereto and are by this reference incorporated herein.

EXECUTED as of the day first above-stated.

City of TERRACE PARK, OH

By: _____ Date: _____

Ohio River Foundation

By: _____ Date: _____

**Scope of Services**
**Exhibit A**

TERRACE PARK is entering into an agreement with Ohio River Foundation (ORF) to identify, remove, and monitor invasive plant species located at _____ Park(s).

Area to be monitored and evaluated range from _____ over to_____. Map will be provided.

All above areas are to be evaluated and discussed with the park manager to develop a plan of action. ORF is to provide a timeline of all work to be performed once the evaluation of areas has been completed.

ORF will coordinate, schedule and supervise the necessary staff and labor force (volunteers etc.) to accommodate the removal of invasive species within these areas.

Village Administrator

All events must be scheduled during TERRACE PARK's regular office hours unless approved ~~by the Park Manager(s)~~. Once approved by the ~~parks manager~~, TERRACE PARK will provide necessary equipment/chemicals requested by ORF in order to help control the invasive species. Inconsistent with #3 above

Village Administrator

~~TERRACE PARK will be responsible for the final disposal of any plantings removed by ORF. Scope and methods of all activities must be approved by parks manager before proceeding.~~

~~When/If invoicing please itemize date, hours, and name of ORF staff working at _____ Park(s).~~

Village Administrator

Please have Jessica Tegge notify the ~~Park manager(s)~~; _____(513- - ), of arrival and departure times.

**Payment**
**Exhibit B**

1. The total contract price for services rendered by CONTRACTOR under this Agreement shall not exceed $0 for the approximate 1 acre of work.

2 . Payment shall be made to CONTRACTOR under the following terms:

N/A.

3. If applicable, invoices submitted to TERRACE PARK depending on the type of contract selected, should be detailed showing specific breakdowns of the following:

**A. Time and Materials** - Invoices shall be broken down by specific item or task, where applicable, listing the number of hours worked per task, whether straight time or overtime, labor rate. All labor rates shall be in accordance to those rates agreed upon and as referenced on the original proposal/estimate, verifiable documentation itemizing quantity, unit of issue, unit price, extended price, reconciled and cross-referenced to the applicable specification item number (if applicable), of all material utilized in performance of the contract work shall be attached or shown on invoice.

Delete

**B. Lump Sum** - Invoices shall show percent complete in proportion to services rendered, a summarized list of services completed to date, summarized list of services provided this period, invoice amount, total amount authorized for project, total amount previously invoiced, authorized amount remaining for task/project, total contract amount, total amount invoiced to date, and contract amount remaining.

**C. Unit Price** - Invoices shall show a line item for each item performed showing item number, description of work, scheduled value, work completed to date both from previous applications as well as this period in place, total completed to date, percent complete, balance to finish, and Retainage (if applicable).

4. Any additional work required beyond that set forth in Exhibit "A" shall be mutually agreed to by TERRACE PARK and CONTRACTOR, and shall be billed in accordance with any supplemental agreement and in accordance with terms set forth above.

**EXHIBIT C**
**General Provisions**

1. INDEPENDENT CONTRACTOR. At all times during the term of this Agreement, CONTRACTOR shall be an independent CONTRACTOR and shall not be an employee of TERRACE PARK. CONTRACTOR shall supervise and direct all work, using the CONTRACTOR'S best skill and attention and in accordance with industry standards. The CONTRACTOR shall be solely **responsible for, and have the control over the means, methods techniques, sequences, and procedures and for coordinating all portions of the work under the Agreement, unless terms of the Agreement direct otherwise.**

2. LICENSES; PERMITS; ETC. CONTRACTOR represents and warrants to TERRACE PARK that CONTRACTOR has all licenses, permits, qualifications and approvals of whatsoever nature which are legally required for CONTRACTOR to practice CONTRACTOR's trade(s). CONTRACTOR represents and warrants to TERRACE PARK that CONTRACTOR shall, at its sole cost and **expense, keep in effect at all times during the term of this Agreement any licenses, permits, and approvals which are legally required for CONTRACTOR to practice** CONTRACTOR's trade(s).

3. TIME. CONTRACTOR shall devote such services pursuant to this Agreement as may be reasonably necessary for satisfactory performance of CONTRACTOR's obligations **pursuant to this Agreement.**

4. INSURANCE.
(a) WORKERS' COMPENSATION. During the term of this Agreement, CONTRACTOR shall fully **comply with the terms of the law of Ohio concerning workers' compensation law. Said compliance shall include, but not be limited to, maintaining in full force and effect one or more policies of insurance insuring against any liability CONTRACTOR may have for workers' compensation. Said policy shall also include employer's liability coverage no less than** $1,000,000 per accident for bodily injury or disease.
(b) GENERAL LIABILITY INSURANCE. CONTRACTOR shall obtain at its sole **cost and keep in full force and effect during the term of this agreement commercial general liability insurance on an "occurrence" basis, providing coverage at least as broad as ISO Form** CG 00 01, including products-completed operations, with limits no less than $2,000,000 per **occurrence for bodily injury, personal injury, and property damage. If a general aggregate limit applies, either the general aggregate shall apply separately to this project location or the general aggregate limit shall be twice the required occurrence limit.**
(c) AUTOMOBILE LIABILITY INSURANCE. CONTRACTOR shall obtain at its **sole cost and keep in full force and effect during the term of this agreement, automobile liability insurance coveting Code 1 (any auto) with limits no less than $2,000,000 per occurrence for** bodily injury and property damage.
(d) ADDITIONAL INSURED. "TERRACE PARK", its officials, agents, **employees and volunteers" shall be named as Additional Insureds on the commercial general liability policy and automobile liability policy. To provide appropriate Additional Insured coverage for general liability, including liability arising out the products-completed operations hazard, CONTRACTOR agrees to use the following endorsement(s), or similar endorsements providing equal or broader Additional Insured coverage:**
I. ISO Form CG 201011 85, OR if later revisions are used:
II. ISO Form CG 20 10 10 01 AND ISO Form CG 20 3710 01.

(e) PRIMARY COVERAGE. For claims related to this project, CONTRACTOR's commercial general liability and automobile liability insurance coverage shall be primary as respects the Additional Insureds. Any insurance maintained by the Additional Insureds shall be excess of CONTRACTOR's insurance and shall not contribute with it.
(I) VERIFICATION OF COVERAGE. CONTRACTOR shall file with TERRACE PARK'S Director of Parks and Recreation or equivalent title upon the execution of this agreement, Certificates of Insurance evidencing the coverage(s) required herein. TERRACE PARK reserves the right to require complete, certified copies of CONTRACTOR's insurance policies, including endorsements, required by these specifications, at any time.
(g) NON-RENEWAL, CANCELLATION, OR MATERIAL CHANGE OF COVERAGE. The Certificates of Insurance shall provide that no cancellation, major change in coverage, expiration, or nonrenewal will be made during the term of this agreement, without thirty (30) days written notice to the Director of Parks and Recreation or equivalent title prior to the effective date of such cancellation, or
change in coverage. Further, if CONTRACTOR receives a non-renewal or cancellation notice from an insurance carrier providing coverage required herein, or receives notice that coverage no longer complies with these requirements, CONTRACTOR agrees to notify the Director of Parks and Recreation or equivalent title by fax or email within five (5) business days with a copy of such notice or written explanation of how coverage is no longer in compliance. CONTRACTOR shall cease operations on the occurrence of any such non-renewal, cancellation, or material change and shall not resume operations until insurance that complies with these requirements is in force.

5. ASSIGNMENT PROHIBITED. No party to this Agreement may assign any right or obligation pursuant to this Agreement or attempted or purported assignment of any right or obligation pursuant to this Agreement shall be void and of no effect.

6. PERSONNEL. CONTRACTOR shall assign only competent personnel to perform services pursuant to this Agreement. In the event that TERRACE PARK, in its sole discretion, at any time during the term of this Agreement, desires the removal of any person or persons assigned by CONTRACTOR to perform services pursuant to this Agreement, CONTRACT shall remove any such person immediately upon receiving notice from TERRACE PARK of the desire of TERRACE PARK for the removal of such person or persons.

7. STANDARD OF PERFORMANCE. CONTRACTOR shall perform all services required pursuant to this Agreement in the manner and according to the standards observed by a competent practitioner of the profession-and/or trades in which CONTRACTOR is engaged in the geographical area in which CONTRACTOR works. All work products of whatsoever nature which CONTRACTOR provides or delivers to TERRACE PARK pursuant to this Agreement shall be prepared in a substantial, first-class, and workmanlike manner, and shall conform to including, but not limited to TERRACE PARK standards, County Board of Health, Ohio Department of Agriculture, EPA, ODOT standards and the standards of quality normally observed by a person practicing in CONTRACTOR's profession and/or trades. TERRACE PARK shall be the sole judge as to whether the work products of the CONTRACTOR are satisfactory.

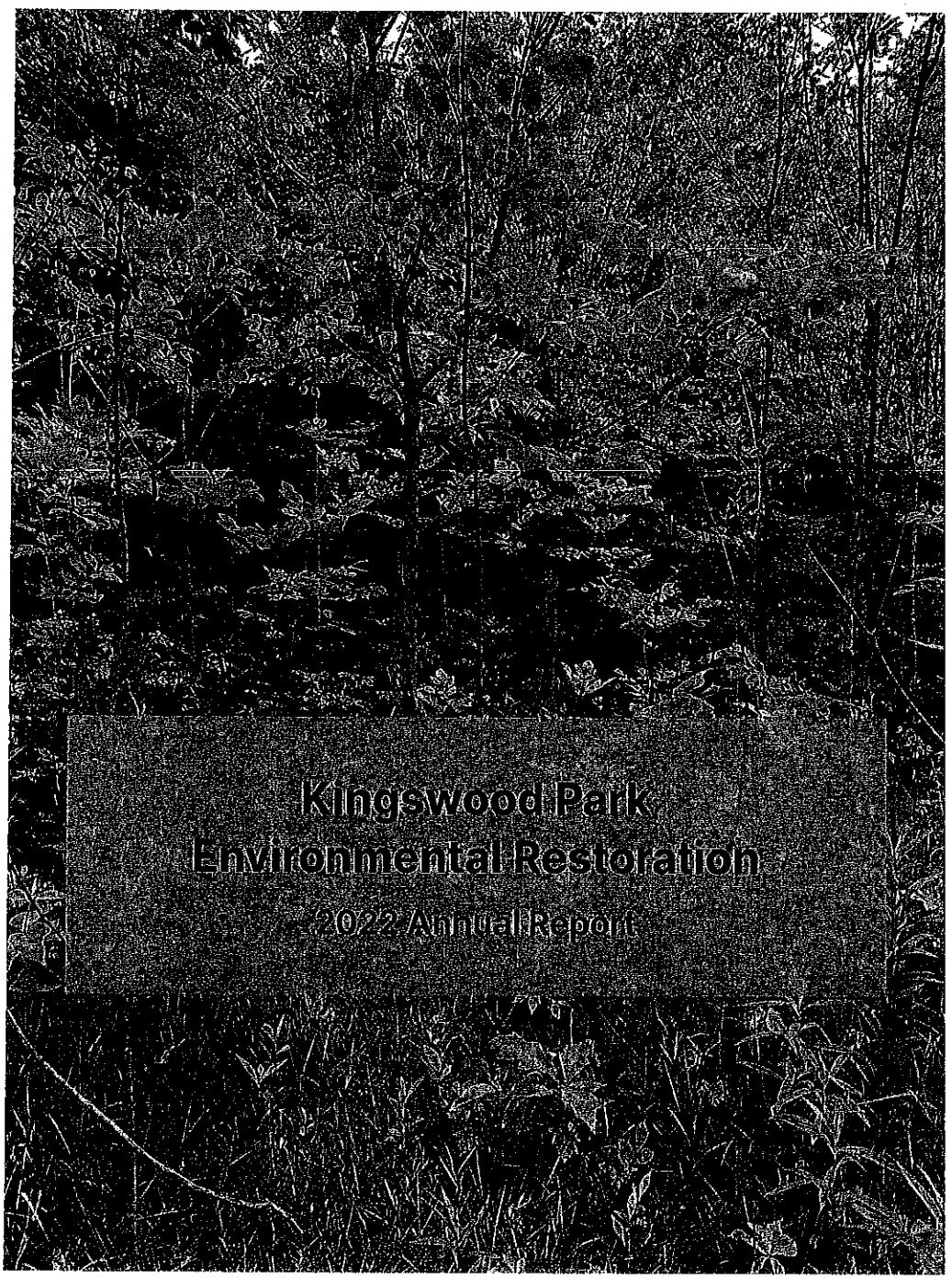
8. INSPECTION. All materials and each part or detail of any work product shall be subject to inspection by TERRACE PARK. TERRACE PARK shall be allowed access to all, or part, of work and shall be furnished with such information and assistance by the CONTRACTOR as is required to make detailed and complete inspections. Any work done or materials used without inspection by TERRACE PARK may be ordered, removed and replaced at the CONTRACTOR's expense. Failure to reject any defective work or material shall in no way prevent later rejection when such defects are discovered or obligate TERRACE PARK to final acceptance. The CONTRACTOR shall notify TERRACE PARK at least twenty-four (24) hours in advance of any operation requiring inspection.

9. GUARANTEE. CONTRACTOR shall guarantee that all labor and material furnished and work performed is in conformity with plans and specifications and/or as agreed upon within the scope of work and is free from imperfect workmanship and materials. CONTRACTOR agrees to repair at CONTRACTOR's expense all work under this contract which may prove to be defective for a period of one year from the date of final acceptance by TERRACE PARK. Furthermore, CONTRACTOR agrees to repair at CONTRACTOR's expense any work which may be affected, or areas disturbed, in making any necessary repairs.

10. CANCELLATION OF AGREEMENT. This Agreement may be canceled at any time by TERRACE PARK for its convenience, for any or no reason, upon written notification to CONTRACTOR. CONTRACTOR shall be entitled to receive full payment for all services performed and all costs incurred to the date of receipt of written notice to cease work on the project. CONTRACTOR shall be entitled to no further compensation for work performed after the date of receipt of written notice to cease work. All completed and uncompleted products up to the date of receipt of written notice to cease work shall become the property of TERRACE PARK.

11. INDEMNIFY AND HOLD HARMLESS. CONTRACTOR shall indemnify, defend, and hold harmless TERRACE PARK, its officers, agents, employees and volunteers from all claims, suits, or actions of every name, kind and description, brought forth on account of injuries to or death of any person or damage to property arising from or connected with the willful misconduct, negligent acts, errors or omissions, ultra-hazardous activities, or activities giving rise to strict liability by the CONTRACTOR or any person directly or indirectly employed by or acting as agent for CONTRACTOR in the performance of this Agreement, including the concurrent or successive passive negligence of TERRACE PARK, its officers, agents, employees or volunteers. Acceptance of insurance certificates and endorsements required under this Agreement does not relieve CONTRACTOR from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply whether or not such insurance policies shall have been determined to be applicable to any of such damages or claims for damages.

12. PROHIBITED INTERESTS. No employee of TERRACE PARK shall have any direct financial interest in this agreement. This agreement shall be voidable at the option of TERRACE PARK if this provision is violated.




*Produced by Ohio River Foundation for Deerfield Township*

## Introduction

An invasive plant species is a plant that tends to spread and cause damage to the local environment. Non-native invasive species are especially troublesome as they have no local natural competitors. Thus, without natural competitors, the non-native invasive species can quickly use up space and resources, inhibiting the growth of native species in the area. Along with interfering with park aesthetics and public enjoyment, they aggressively spread causing changes in soil chemistry, increased soil erosion, and loss of wildlife habitat.

Deerfield Township, with Ohio River Foundation (ORF), is working to control the non-native invasive species populations that have established themselves on the north side of Kingswood Park. This annual report addresses environmental restoration work that ORF completed in Kingswood Park in 2022.

The goals for this project in 2022 were to create healthy and sustainable natural areas to encourage native wildlife and engage community volunteers in the restoration process.

## Accomplishments

In 2022, Ohio River Foundation and community volunteers, protected 12.5 acres of land from the harmful effects of non-native invasive species (e.g. soil erosion and degradation, loss of wildlife habitat, overcrowding, and decreased public enjoyment).

- ORF protected a total of 12.5 acres from harmful non-native invasives, with the help of volunteers.
    - 10 acres of previously treated area were monitored for non-native invasive species regrowth.
    - 2.5 acres of additional park property were cleared of non-native invasive species.
- Approximately 34,000 non-native invasive plants and trees were removed by ORF staff and volunteers.
- 110 native trees were planted on land previously cleared of non-native invasive species.

**What was removed in 2022?**

**Callery "Bradford" Pear (*Pyrus calleryana*)**
**Amur Honeysuckle (*Lonicera maackii*)**
**Multiflora Rose (*Rosa multiflora*)**
**Japanese Honeysuckle (*Lonicera japonica*)**
**Privet (*Ligustrum spp.*)**
**White Sweetclover (*Melilotus alba*)**
**Yellow Sweetclover (*Melilotus officinalis*)**
**Common Teasel (*Dipsacus fullonum L.*)**
**Russian Olive (*Elaeagnus angustifolia*)**
**Autumn Olive (*Elaeagnus umbellata*)**
**Wintercreeper (*Euonymus fortunei*)**

- ORF held 7 community volunteer events, attended by 37 volunteers who logged 140 hours of service.

**Maintenance Acreage**

Throughout 2022, ORF restoration staff closely monitored all 10 acres of the previously-worked "maintenance areas" in Kingswood Park. Within these 10 acres, we saw a typical amount of non-native invasive re-growth. The regrowth of Honeysuckle, Pear, Sweetclover, Garlic Mustard, Teasel, and Multiflora Rose was removed or treated with herbicide. Fortunately, the presence of non-native invasive Garlic Mustard (a concern in woody areas cleared of Honeysuckle) was minimal and treatment was completed in spring 2022. This is a result of effective Garlic Mustard management since this project began and is a great sign for the entire ecosystem.

Also, within the 10 maintenance acres, we found many non-native invasive Common Teasel plants. Teasel is a very common non-native invasive species found in the area and its growth and spread were anticipated. Common Teasel is a biennial plant (2-year growth cycle) and produces seeds during second-year growth. Teasel treatment began in 2022 and seed heads were removed during the summer months, when they're nearly mature. To keep the population low and to further reduce the seed bank, teasel treatment will need to take place again during the summer of 2023.

The great news: There has been **significant** improvement in native vegetative growth following non-native invasive species removal. New species found this year: Great Blue Lobelia (forb), Allegheny Monkeyflower (forb), Purpletop Tridens (grass), Fragrant Sumac (shrub), Sassafras (tree), Blue Ash (tree), Cutleaf Toothwort (wildflower), Waterleaf (wildflower), Catalpa (tree), and White Pine (tree). These "new finds" tell us that native species are spreading and quickly finding a home at Kingswood. In addition, ORF and volunteers planted the following tree species: Pin Oak, Red Maple, Silver Maple, Sugar Maple, Sweet Gum, and Persimmons.

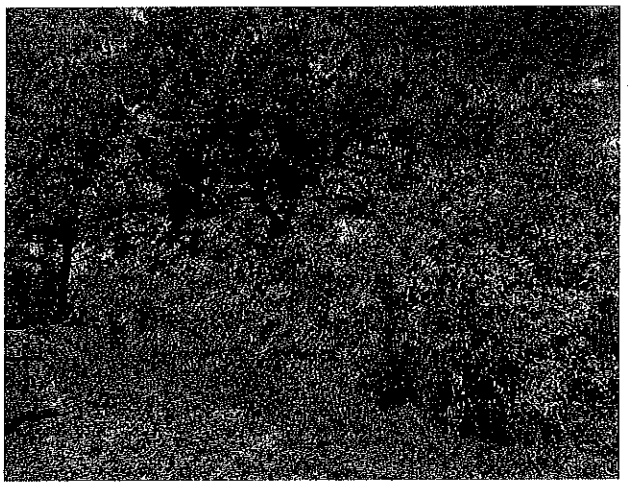
In addition to native vegetation, we've observed an increased amount of animals living at Kingswood. This is likely due to the creation of habitat piles, cleared understory, and increased food supply from increased native vegetation. Animals observed: White-tailed deer, Cooper's Hawks, Red Tailed Hawks, Black vultures, Turkey vultures, Robins, Blue Grey Nuthatch, Cardinals, Starlings, Mice, Chipmunks, Garter Snakes, Blue Jays, and Squirrels, among others.

Below is a timeline in three parts. All three photos were taken from the same spot, during the same time of the year. The area photographed did not receive any additional plantings. This time-lapse showcases how fast Kingwood can naturally recover after careful invasive plant removal.



## Summer 2020
**pre-invasive removal**

Very shaded/closed understory, dense forest structure, low light, and low airflow. This photographed location contains several hundred invasive plants (mostly honeysuckle and pear) but also many natives.



## Summer 2020
**post-invasive removal**

All invasives have been carefully removed at this point. The understory is open and lots of light is reaching the forest floor. The forest has a generally empty and spindly appearance—but not for long. With the non-native invasives removed, the remaining natives are receiving more sunlight, nutrients, and water than they have in the past.

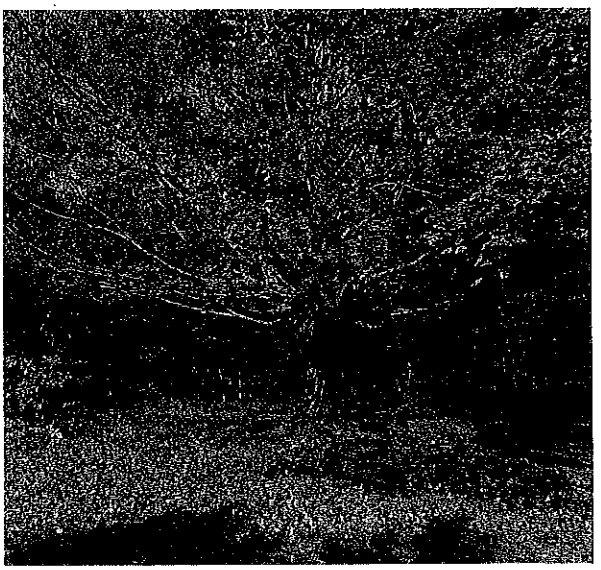


## Summer 2022
**2 years of invasive species management**

Lots of new native re-growth, well-balanced forest structure, lush with diversity. Native trees have gotten larger and filled out the empty space. Native undergrowth has taken hold, reducing the likelihood of non-native invasive repopulation. This is due to careful removal strategies and only when care is taken not to trample existing natives in the process of non-native invasive removal.

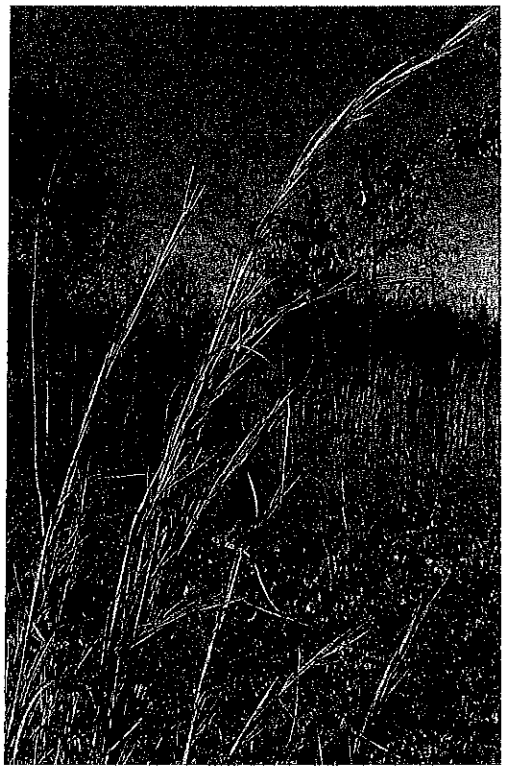


**Before Honeysuckle removal**

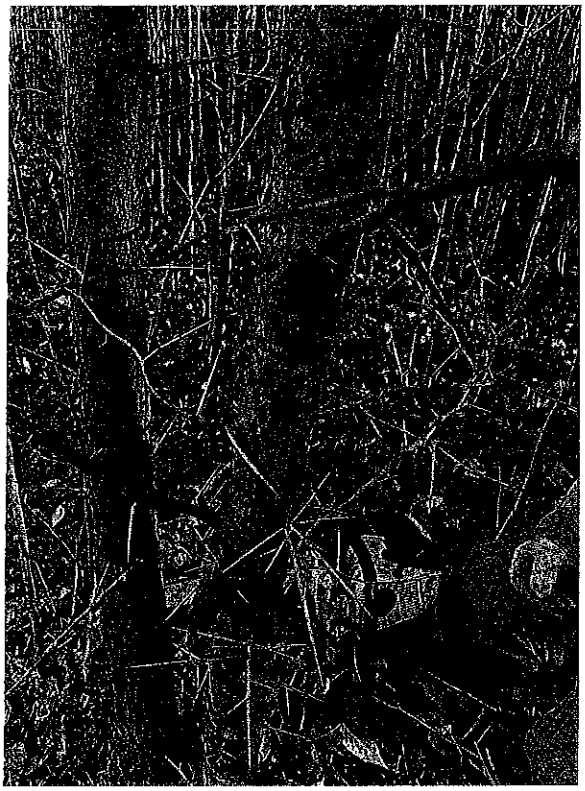


**After Honeysuckle removal**

ORF removes the 'bad' while not disturbing the 'good.' In 2021, hundreds of non-native invasive Honeysuckle plants were removed between the two photographs. Honeysuckle can smother trees, change soil pH, and steal water, nutrients, and sunlight from native plants. Since the Honeysuckle plants were removed, the Maple tree in the photo can now foster native seedlings, provide wildlife habitat, and help keep pollution and sedimentation out of Kingswood Park's creek.

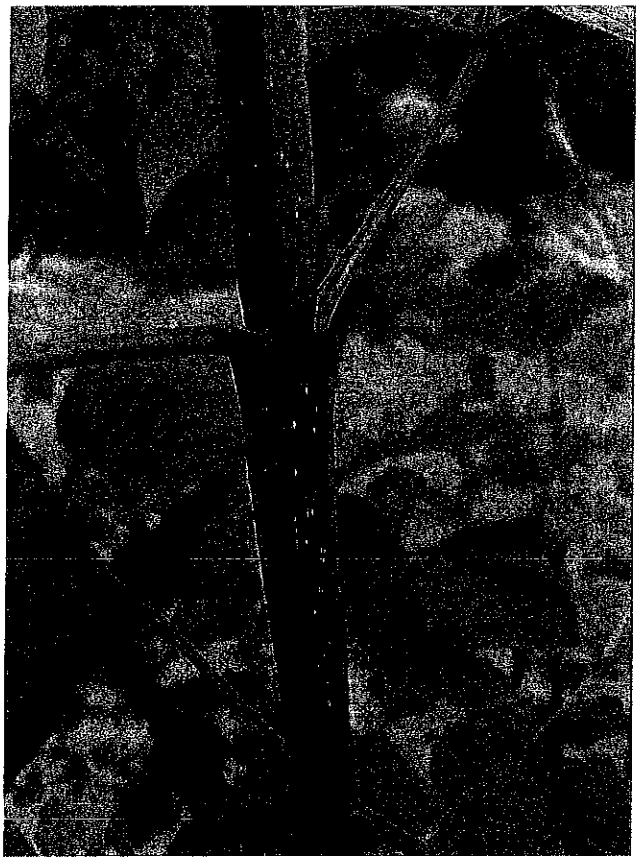


← **Broomsedge Bluestem** *(Andropogon virginicus)* has already found a home in Kingswood's new invasive-free areas! Native Broomsedge Bluestem was found for the first time in 2021 and growing in an area that was densely populated by invasive Callery Pear and removed by ORF. This species of grass is a common plant in prairie restoration and is well-known for its beautiful copper-colored leaves during the winter and fall months. It's known to attract birds and butterflies and is used for food and nest construction. Land managers often purchase seeds in bulk to plant this desirable grass species, but it's growing naturally at Kingswood Park. Park-goers can find this species off the paved path between the two Kingswood Park ponds. During 2022, Bluestem has spread to other parts of the park and is adapting nicely to the invasive-free space.

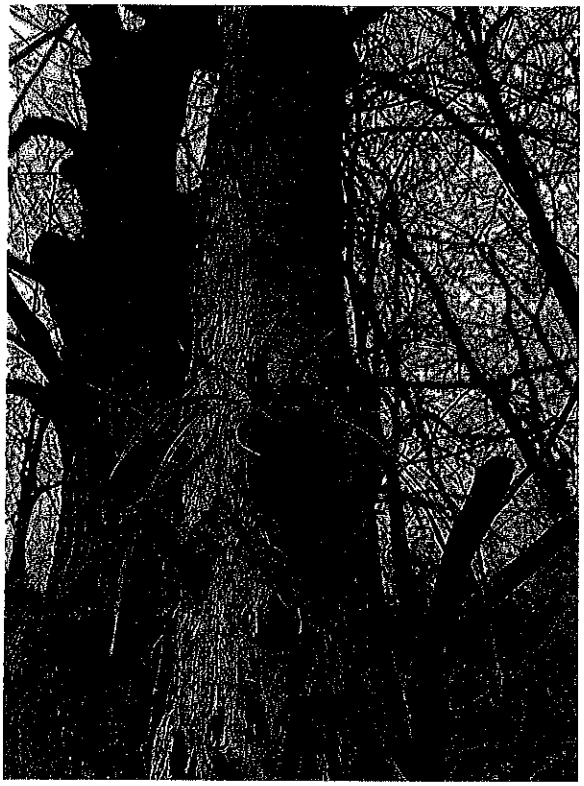


← A spikey surprise! Although it may look unfriendly, the ORF restoration team was happy to stumble upon a native **Honey Locust** tree. Restoration staff cleared the surrounding area of invasive Callery Pear and we anticipate Honey Locust saplings as early as next year to inhabit the newly cleared space.

Area K (map on page 13) contains a plethora of native tree species. Some examples include Oaks, Maples, Walnut, Hickory, Hackberry, Honeylocust, Sassafras, Cherry, Dogwoods, Willows, Juniper (Aromatic Red Cedar), Ash, Sweet Gum, Hawthorn, Cottonwood, Viburnum, Crab apple, and Tulip Poplar.



← A rare find, the ORF restoration team found a grouping of healthy **Blue Ash trees**, a species noticeable by the four "wings" on young stems. Blue Ash trees are considered to be highly valuable in the midwest because they are considered to be the most tolerant against the infamous Emerald Ash Borer. Emerald Ash Borer (EAB), originally from Asia, is an Ash tree-killing insect that was unintentionally introduced in the early 2000s but has ravaged Ash trees across the county. Many of the large dead trees at Kingswood Park have fallen victim to the EAB. Because of the Blue Ash's noticeably higher resistance to the insect, the tree species has been sought after in this region and can be difficult to purchase. Because of the healthy stand at Kingswood Park, they're likely to spread throughout the park. This photo was taken within area B on the map (page 13).



A species of **Woodland Sedge** (pictured top left) was found in an unlikely spot–10 feet off the ground. Sedges typically grow low to the ground, but only if there is room to do so. ORF, with Deerfield Township, is working to clear out non-native invasive plants so our natives (like the Woodland Sedge pictured) have room to grow and spread. In the 10 acres of maintenance areas, many more species of sedge, ground cover, and flowering species have been found. For example, in 2022, ORF staff found colonies of **Waterleaf** (bottom left) and **Cutleaf Toothwort** (bottom right) at Kingswood. Waterleaf grows in a variety of rich, moist, woodland habitats and creates beautiful displays whether just in leaves or flowers. Finding species like Waterleaf tells us that Kingswood has healthy soil with great water retention which will likely foster more native species in the future.





**Expanded acreage**

In addition to the 10 acres of maintenance work, ORF restoration team and volunteers expanded into the area labeled C on the map (page 13). This 2.5-acre area was dense with invasive pear and large honeysuckle, *but* it also contained a long list of native trees. ORF staff has estimated that with every one invasive tree removed, more than two native trees remain. These native trees now have room to spread and grow unhindered by invasive species. The natives no longer have to compete for nutrients, sunlight, or water and they produce food and shelter for the native wildlife that rely on them to survive. With the wide trails surrounding area C, and its close proximity to the new parking lot, area C provided convenient volunteer opportunities throughout 2022. Tree types found in area C are Hawthorn, Maple (several varieties), Oak (several varieties), Catalpa, Walnut, Green Ash, Cottonwood, Dogwood, Redbud, Aromatic Cedar, White Pine, Cherry, Apple, Sassafras, Willow (several varieties), and Honeylocust, among others.

The amount of new area is lower than it was in 2021, this is due to three different things.

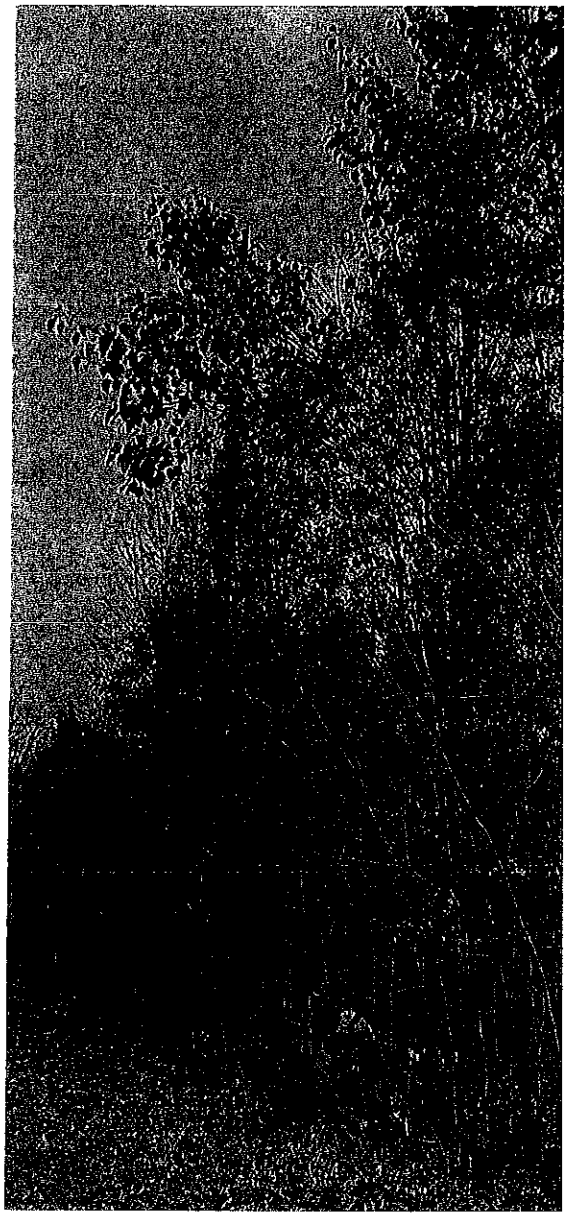
First, area C was densely populated with invasive pear trees and honeysuckle. Trees were often large (some up to 14 inches in diameter) and required careful removal in order to not damage healthy native trees during the removal process. Expert sawyer skills were required and the presence of large dead timber slowed invasive removal.

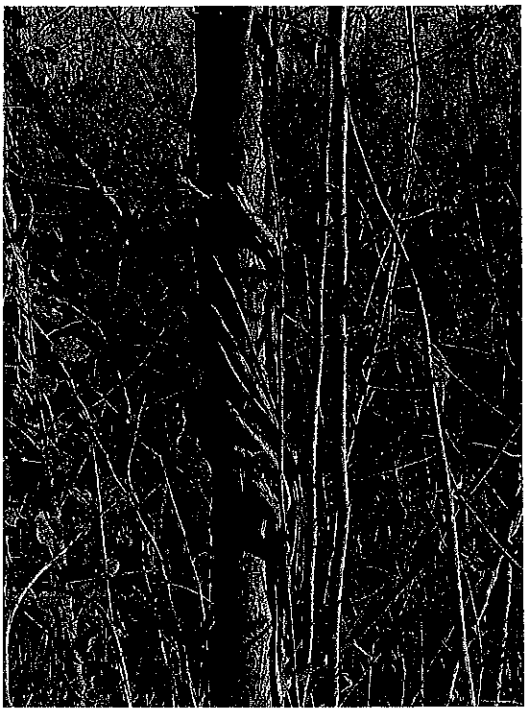
Second, the 10 acres of previously worked "maintenance" area required a significant amount of attention. Invasive species removal is a process that takes time and depends on the initial condition of the forested area. If there is a high density of natives in an area, less time is needed to keep non-native invasives at bay. If there is a high density of non-native invasives on a property, with few native species, more time will be required to keep invasives at bay because the native species will typically take longer to spread on their own (supplemental native plantings can assist with this.) Once native regrowth establishes itself in the newly invasive-free area and spreads, less time is needed to remove the invasive regrowth in these areas.



⬆Two sisters from Kings High School proudly present their cut invasive Callery Pear tree.

Lastly, as the total acreage to maintain increases, less funding is available for the treatment of new acreage.





↑ **Japanese Honeysuckle** is a major problem for our forested areas. If not controlled, this non-native invasive vining honeysuckle species will quickly climb, strangle, and shade out even the healthiest of trees. ORF removed hundreds of vines and small sprouts in 2020, 2021, and 2022. Due to the plant's fast-growing nature, previously infested areas that have now been cleared will need to be closely monitored.

↑ Work areas were often very dense, and progress can be slow. In these areas (see photo) care was taken to remove the invasive **Callery Pear** trees but keep the native and desirable saplings in the ground and undamaged. Each cut is done with extreme caution and planning. Some native tree species found at Kingswood are Oak, Maple, Walnut, Hickory, Hackberry, Honey Locust, Sassafras, Cherry, Dogwood, Willows, Juniper (Aromatic Red Cedar), Ash, Sweet Gum, Hawthorn, Cottonwood, Viburnum, and many more. Many of the saw cuts required extreme precision because invasive pear trunks and native tree trunks were less than an inch away in many cases. This attention to detail allows for Kingswood to quickly rebound and keep its forested appearance.

## Volunteer Participation

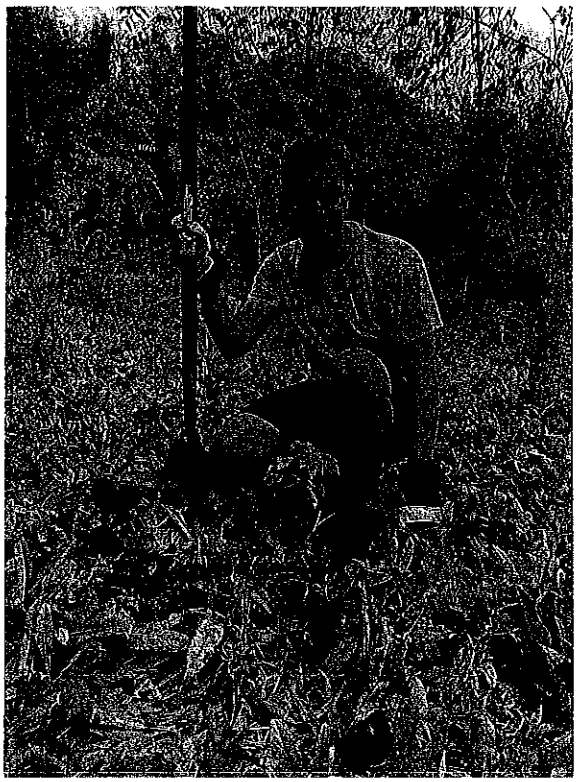


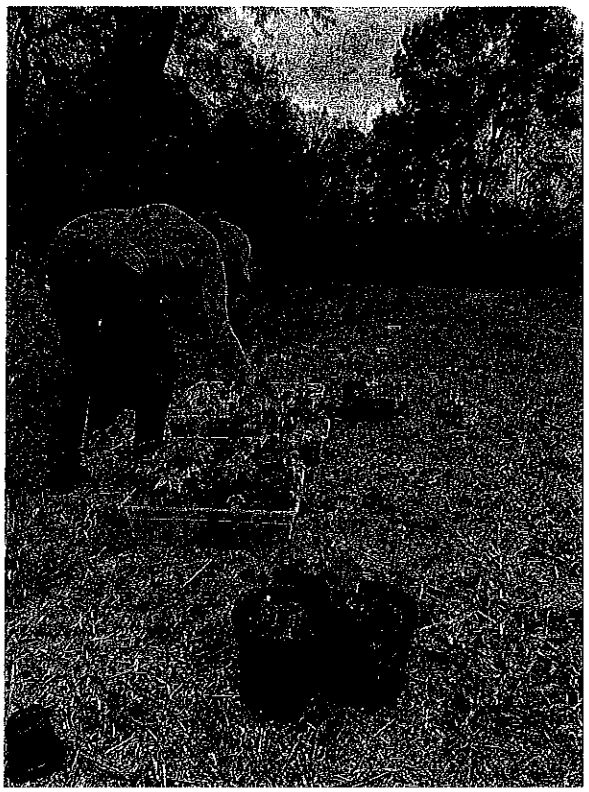



Volunteers are a crucial part of reestablishing Kingswood Park as a natural space. During an ORF volunteer day, attendees learned first hand how detrimental non-native invasive species, like Callery Pear and Amur Honeysuckle, are to an ecosystem. They practiced tree ID, made new friends and many earned volunteer hours for school, scout troops, work, or certifications. Kingswood Park's volunteer base is unique because volunteers will return again and again to help out, and often bring new volunteers along with them. During an ORF volunteer day, there are jobs for all types of activity levels. Our goal is to get everyone involved in a way they're comfortable.

In 2022, ORF held 7 community volunteer events, attended by 37 volunteers who logged 140 volunteer hours. This year volunteer participation was significant but it was lower than it was in 2021. In 2023, ORF plans on incorporating more corporate group volunteer days by contacting companies in the surrounding area while still keeping some general/community volunteer events on the schedule.

## Native tree planting volunteer day





On September 11, a group of five volunteers planted 110 native trees within Kingswood's forested area. One of those wonderful volunteers was Will Treadway (pictured left). Will, a sophomore at a local high school, began a service group with some friends with a goal of planting 1,000 native trees. Will started growing hundreds of native trees from seed, then watered and cared for them for two years. After running out of planting areas, he asked Ohio River Foundation for help.

With the help of his dad, Will delivered all of the 110 native seedlings and stayed to volunteer and plant them at Kingswood! The saplings were planted in two areas of section K that were previously cleared of invasive species and were slightly more barren-looking than other areas. Species planted were: Pin Oak, Red Maple, Silver Maple, Sugar Maple, Sweet Gum, and Persimmons.

Before the day was through, volunteers and ORF staff worked together to water the planted saplings to ensure a jumpstart on acclimating to their planting location. It was a great event with the community coming together to improve a beloved park. These new species will diversify the Kingswood Park habitat, provide more food and resources for native wildlife, and stand as a reminder that combining teamwork and community, we can improve our native forests and protect our land, air, and water.

# Conclusion

In 2022, Ohio River Foundation combed through 12.5 total acres of Kingswood Park and, with the help of volunteers, removed approximately 34,000 harmful invasive plants from park property. The 10 acres of park property considered "maintenance areas" have shown tremendous new growth already. Native trees, grasses, and flowers have begun to fill in gaps where non-native invasive plants were removed. Some example species include: Broomsedge Bluestem, Oaks, Maples, Walnut, Hickory, Hackberry, Honeylocust, Sassafras, Cherry, Dogwoods, Willows, Juniper (Aromatic Red Cedar), Blue Ash, Green Ash, White Pine, Cutleaf Toothwort, Waterleaf, Sweet Gum, Hawthorn, Cottonwood, Viburnum, Crab apple, Tulip Poplar, and many more.

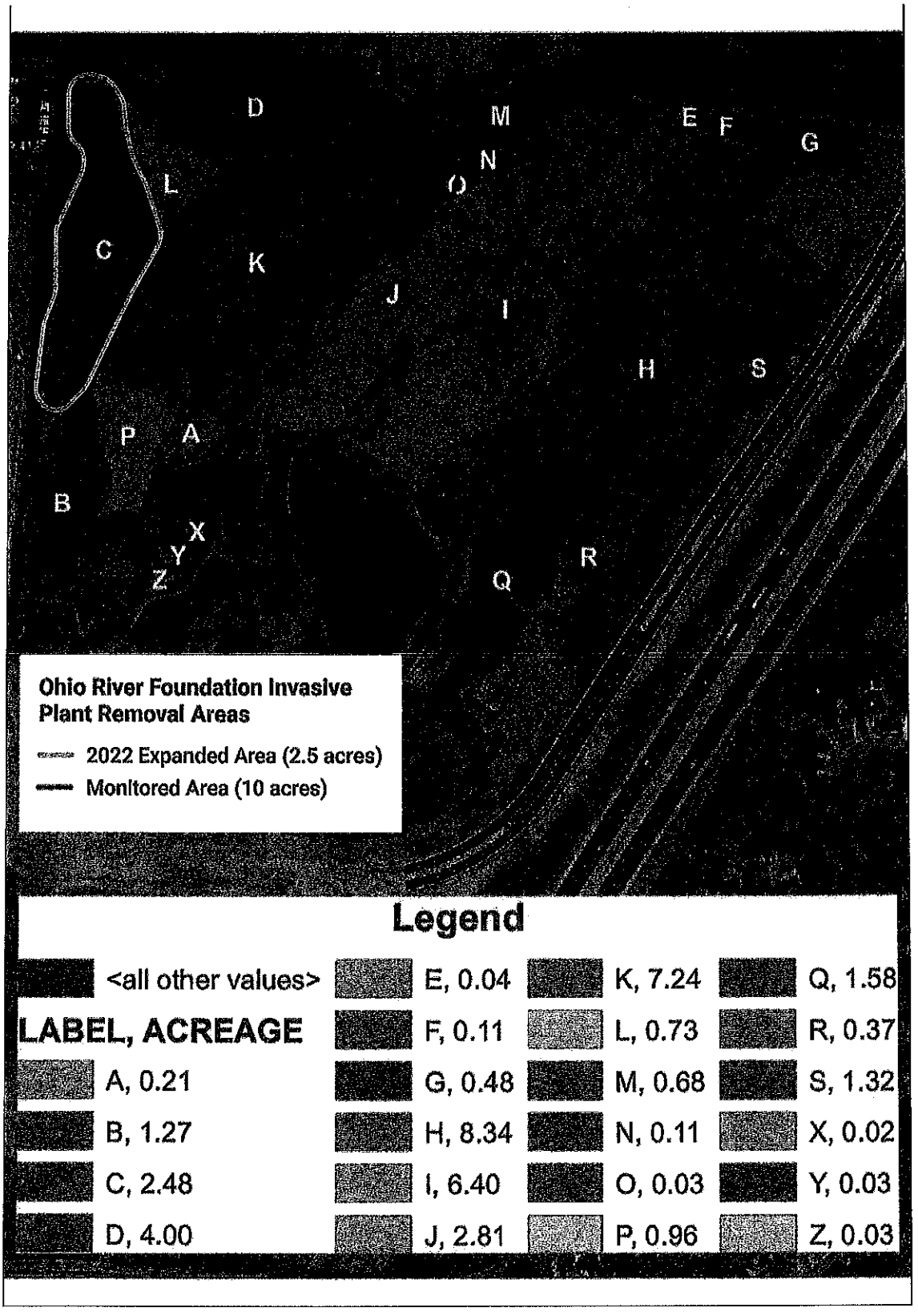
The 10 maintenance acres were monitored and treated throughout 2022 for invasive plant regrowth. The most prevalent invasive species removed from this area were Callery "Bradford" Pear, Amur Honeysuckle, Multiflora Rose, Japanese Honeysuckle, White Sweetclover, Yellow Sweetclover, and Common Teasel. In addition, 110 native tree saplings were also planted in this maintenance area, with volunteer help. Species include: Pin Oak, Red Maple, Silver Maple, Sugar Maple, Sweet Gum, and Persimmons.

An additional 2.5 acres (labeled "C" on map) were cleared of non-native invasive plants, and we anticipate native regrowth as early as Spring 2023. The additional 2.5 acres were dense with both native trees as well as invasive species. Extreme care was taken to remove the invasive species, and keep all natives. The most prevalent invasive species this year were: Callery Pear, Amur Honeysuckle, Japanese Honeysuckle, Multiflora Rose, and Autumn and Russian Olive.

Volunteer participation for 2022 was lower than it was in 2021, but still significant. Over the course of the year, ORF held 7 community volunteer events, attended by 37 volunteers, logging 140 hours of volunteer participation. We've had many repeat volunteers who are passionate about protecting and restoring Kingswood Park as well as making a positive environmental impact.

It's known that parks exist to serve their local community. However, with the conservation and restoration advancements taking place, Kingswood Park is quickly becoming a vital ecological hub that will benefit not only Deerfield Township's local community, but the ecology of the entire Tri-State area.

## Map


D
M
E
F
G
N
O
L
C
K
J
I
H
S
P
A
B
X
Y
Z
Q
R
Ohio River Foundation Invasive Plant Removal Areas
2022 Expanded Area (2.5 acres)
Monitored Area (10 acres)
Legend
<all other values>
LABEL, ACREAGE
A, 0.21
B, 1.27
C, 2.48
D, 4.00
E, 0.04
F, 0.11
G, 0.48
H, 8.34
I, 6.40
J, 2.81
K, 7.24
L, 0.73
M, 0.68
N, 0.11
O, 0.03
P, 0.96
Q, 1.58
R, 0.37
S, 1.32
X, 0.02
Y, 0.03
Z, 0.03