

# Ecological Restoration at Pathways Retreat

## Displacement and Degradation



Located in the St. Joseph River watershed, this landscape was once part of an oak-hickory forest ecosystem that supported a rich diversity of plants and animals. Miami and Potawatomi people who inhabited this area lived in harmony with the Earth and managed portions of this landscape for open prairie patches, enhancing its biodiversity.



However, in the early 1800's European settlers forcibly displaced Indigenous people from the land and eliminated wood bison, gray wolf, and white-tailed deer. The 1816 Seal of the State of Indiana illustrates this with its image of settlers removing trees and driving bison from the land. Settlers purchased this land from the United States in 1833 and cleared most of the land of native plants to raise crops, fruit, and livestock in unsustainable ways that further degraded the natural ecosystem.

Once farming was abandoned, the forest began to regenerate following ecological succession. However, this degraded land was invaded by over 40 species of non-native plants introduced by settlers like Asian bush honey suckle, privet, Norway maple, Siberian elm, white mulberry, and tall fescue.\* These invasive, alien plants displace native species, change soil chemistry, alter natural succession, impede forest regeneration, diminish biodiversity, disrupt food webs, and damage wildlife habitat. These factors of forceful displacement and environmental degradation have compromised this ecosystem.

## Example of One Project



*Stage 1: Previous area full of exotic, invasive shrubs and trees.*

## Vision for Restoration

The first efforts to restore this ecosystem occurred in the mid-1970s with afforestation tree plantings. Sustained work began in 2007 to restore the land and create a place of retreat. Seventeen acres are now being managed with the aim of establishing a naturalistic landscape that restores the ecosystem, people, and their relationship with the Earth and its Creator. While Indigenous people may not be restored on this land, small reparations are being made by supporting projects of Dismantling the Doctrine of Discovery and by seeking to live in harmony with the Earth. And while wood bison and gray wolf cannot be reestablished here, habitat for other wildlife is being restored.



*Stage 2: Area cleared of invasive plants in preparation for prairie.*

Most of the land is in the Indiana Department of Natural Resources Classified Forest and Wildlands Program with a stewardship plan to preserve the natural resources of this site for future generations.

In the language of faith, the aim is to restore the abundance, beauty, and biodiversity of this part of God’s creation within a larger vision of a healthy, vibrant planet where all forms of life thrive in God’s shalom from generation to generation.



*Stage 3: Patch of planted native prairie grasses and flowers.*



With these aims, the stewardship plan for this land has four goals.

1. Establish a healthy, functioning ecosystem.
2. Enhance wildlife habitat to support biodiversity.
3. Provide a space for re-creation and spiritual retreat.
4. Offer a site for environmental learning and service.

As for ecosystem benefits this landscape will provide, goals 1—2 relate to regulating services (for climate, air, water, and pollination) and supporting services (for soil formation, cycling of water, air, nutrients, and habitat) while goals 3 and 4 identify cultural services (for education, re-creation, and renewal). Special focus is on establishing trees,

especially white oak as a keystone species, for restoring this ecosystem and sequestering carbon as climate action.

In keeping with goals, land management activities include

- controlling exotic, invasive species,
- planting and establishing native species,\*\*
- editing for desired plant communities,
- burning and mowing to manage succession,
- creating wildlife habitat, and
- maintaining spaces for human use.



While tending our goals, we seek to pay attention to what nature wants and work with her. Rather than imposing our will *on* the land, we want to live *with* the land, co-operating with the “generative forces of creation” (Wisdom 1:14) so all forms of life may flourish here.



## Invitation to Participate

Come, join in restoration activities described above. We are not above or apart from but are part of this ecosystem. We are members of the community of God's creation, and as stewards are called to serve and protect the Earth (Genesis 2:15). According to Indigenous or traditional ecological knowledge, all things are part of the web of life, and everything is our kin to care for.

Robin Wall Kimmerer, Potawatomi professor of environmental science, observes that as we restore the Earth, we also restore ourselves. There are many opportunities to participate. Faith communities, schools, and other groups help with various projects, and many individuals serve according to their interests.



To help us carry out restoration work, contact [eventsatpathways@gmail.com](mailto:eventsatpathways@gmail.com).



\*Exotic invasive plants observed on the land that are being removed.

- Amur honeysuckle (*Lonicera maackii*)
- Asian bittersweet (*Celastrus orbiculatus*)
- Bell's honeysuckle (*Lonicera x bella*)
- Blunt-leaved privet (*Ligustrum obtusifolium*)
- Brome grasses (*Bromus spp.*)
- Bull thistle (*Cirsium vulgare*)
- Autumn olive (*Elaeagnus umbellata*)
- Canada thistle (*Cirsium avense*)
- Carolina horse nettle (*Solanum carolinense*)
- Common buckthorn (*Rhamnus cathartica*)
- Crown vetch (*Coronilla varia*)
- Dame's rocket (*Hesperis matronalis*)
- European highbush cranberry (*Viburnum opulus*)
- Fescue grasses (*Festuca spp.*)
- Field bindweed (*Convolvulus arvensis*)
- Garlic mustard (*Alliaria petiolata*)
- Glossy buckthorn (*Frangula alnus*)
- Hairy vetch (*Vicia villosa*)
- Japanese barberry (*Berberis thunbergii*)
- Japanese honeysuckle (*Lonicera japonica*)
- Jetbead (*Rhodotypos scandens*)
- Lady's thumb (*Persicaria maculosa*)
- Mahaleb cherry (*Prunus mahaleb*)
- Morrow's honeysuckle (*Lonicera morrowii*)
- Multiflora rose (*Rosa multiflora*)
- Musk thistle (*Carduus nutans*)
- Norway maple (*Acer platanoides*)
- Periwinkle (*Vinca minor*)
- Poison hemlock (*Conium maculatum*)
- Privet (*Ligustrum spp.*)
- Queen Anne's lace (*Daucus carota*)
- Siberian elm (*Ulmus pumila*)
- Siebold viburnum (*Viburnum sieboldii*)
- Tall fescue (*Festuca arundinacea*)
- Tatarian honeysuckle (*Lonicera tatarica*)
- Tree-of-heaven (*Ailanthus altissima*)
- White mulberry (*Morus alba*)
- Wintercreeper (*Euonymus fortunei*)

--Identified March, 2022

\*\*Select non-native species without invasive potential are being introduced for screening and beauty.

--December, 2022