Oak woodlands need our help. These critical habitats are in trouble across the eastern United States. One factor is that oaks are not regenerating in overly shaded areas. Sub-canopy and ground layer species are also impacted by a lack of sunlight. By opening the canopy in some areas, we can encourage young oaks to grow beyond the seedling stage and improve habitat for native plants and the wildlife they support.



Sandy Hollow oak savanna restoration at dawn. © The Wetlands Initiative

Managing for age and species diversity increases the habitat value of an urban forest and spreads out tree losses from mortality, pests and diseases. In developed urban areas a comprehensive tree inventory and a planned planting strategy can help develop a more diverse tree community.

Prescribed fire is an efficient, economical and essential tool for managing Chicagoland's natural communities. Without prescribed burns, invasive species can out-compete native plants and leaf litter accumulates, shading the ground.

Hydrology is the movement of water in relation to land, including how water cycles and moves through watersheds. Historically, the Chicago region had scattered wetlands and areas of standing water. As the land was cleared for agriculture, farmers buried drain tiles (clay pipes) to carry water away from their fields. Today, land managers remove drain tiles to rehydrate historic wetlands and restore a more natural flow of water across the land.

Contemporary development in watersheds has dramatically changed the pattern of flow in our rivers. Dam removal, riffle-pool restoration and reconnecting streams to floodplains are some techniques available to improve moving waters.



Learn more online at chicagorti.org/HealthyHabitats

HEALTHY HABITATS

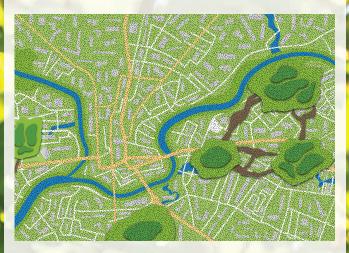
By developing a network of critical landscapes, everyone can work together to safeguard the natural resources and places that benefit people, wildlife and the economy.



(Cover photo) Barred owl in an oak tree at Captain Daniel Wright Woods Forest Preserve in Mettawa, Illinois. John D. Kavc

A Natural Tapestry

Two hundred years ago, the landscape of the Chicago region was a tapestry of prairies, oak and hickory savannas, wetlands, forests, bluffs, and ravines along the Lake Michigan shoreline. The rise of a great city, its attendant suburbs, and the farmland that surrounds it unraveled that natural tapestry. Where large-scale landscapes remain, we must manage them to be as healthy as possible.



Best Practices and Techniques

Invasive species are plants and animals that spread aggressively. These are often non-native species that overtake habitats. Invasive species have a negative effect on our natural areas and threaten the future of commercial, agricultural and recreational activities dependent on healthy ecosystems.

Control methods of invasive plants include early identification, mechanical removal, selective herbicide application, and periodic prescribed burns. Some invasive species, such as emerald ash borer, create unique challenges that require the cooperation of local, regional, and federal agencies to minimize the spread and reduce the damage of infestation.

Managing invasive species at a large scale is necessary to improve conditions for prescribed burns, reduce competition for native trees and shrubs, increase light levels that stimulate the ecosystem, and improve habitat for the native plants and animals that call our region home. Managing for wildlife habitat and the health of ecosystems creates vibrant communities of native species.

It's all connected.

Whatever happens to one parcel or woodlot influences neighboring properties.

These strategies provide food and homes to birds, butterflies and other wildlife on public and private lands alike.

chicagorti.org/HealthyHabitats

Fauna

Rusty Patched Bumble Bee Bombus affinis 1

This endangered pollinator has been spotted in backyard native gardens and restored natural areas alike.

Bees are active April through October. To provide habitat, gardeners should grow a variety of plants that bloom from early spring, through summer and into the fall.

Blanding's Turtle Emydoidea blandingii 2

This endangered reptile is a long-lived, semi-aquatic turtle in decline throughout much of its range. The species was designated as endangered in the state of Illinois in 2009. Partners throughout the region are tracking these turtles, monitoring their locations, and boosting populations with "head-start" programs.

Red-headed Woodpecker Melanerpes erythrocephalus 3

This priority bird species of the Chicago Wilderness region is making a comeback in restored woodland areas.

Leaving dead trees standing when they do not pose a safety risk encourages these beauties to nest in areas with canopy gaps and plenty of sunshine.

*Plants and wildlife shown are not to scale and represent various seasonal characteristics.

in the Chicago region are on private lands. Oak woodlands need our help.

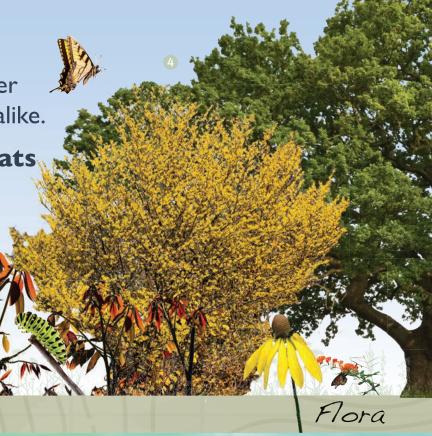
Oak Trees

Quercus spp. 4

Oak trees create an environment that maintains critical ecosystem processes and species diversity. Canopy gap thinning and planting oaks are great ways to help.

Background illustration courtesy Chicago Metropolitan Agency for Planning, Green Infrastructure Vision.

Full list of species shown (upper left to right): white oak, little brown bat, eastern gray squirrel, red-headed woodpecker, whitetailed deer, rusty patched bumble bee, prairie trillium, bloodroot, blue-spotted salamander, bur oak, shooting star, Blanding's turtle, blue dasher dragonfly, blue flag iris, cardinal flower, swamp milkweed, monarch butterfly, American hazelnut, tiger swallowtail caterpillar and butterfly, witch hazel, yellow coneflower, butterfly weed, bur oak, great blue heron (bottom left corner).



Native Shrubs Viburnum, hazelnut, winterberry and others 6

It is estimated that **70%** of all oak trees

Native shrubs are greatly lacking in the Chicago region's natural areas due primarily to changes in land management, development and the influx of invasive species. Consider removing invasive plants from yards and edges and replacing them with native alternatives that provide nesting habitat and food for wildlife.

Pollinator Waystations and Pocket Prairies 👩

Not every space is large enough to sustain a mighty oak tree. Invite bees, butterflies, and other pollinators to smaller spaces by planting native wildflowers, grasses, and sedges in diverse arrays. Blurring the lines between natural areas, backyards, and big businesses will go a long way toward creating more contiguous habitat.

chicagorti.org/ **HealthyHedges**