Why should exotic species be removed from my woods?

An exotic species by definition is one that is growing in a region or habitat where it does not belong. Often these invaders have been introduced either accidentally or intentionally from another part of the world, usually Europe or Asia. When an exotic species invades a habitat, it displaces native plants by outcompeting them or by preventing sunlight from reaching the forest floor.

Most McHenry County woods are dominated by oaks and hickories. The nuts of these trees require unlimited sunlight to germinate and grow. Once a woods is clogged by exotic brush there is no longer sufficient light for the oak and hickory seedlings to survive. Over time, the older trees will die and there will not be young trees to replace them. Both oaks and hickories are important food sources for many animals.

Native shrubs such as American Hazel (Corylus americana), Elderberry (Sambucus canadensis), Nannyberry (Viburnum lentago), Serviceberry (Amelanchier arborea) and Wild Plum (Prunus americana) also provide excellent food sources for birds and animals. Like oaks and hickories, native shrubs are quickly outcompeted by exotics.

Buckthorn (Rhamnus spp.), Honeysuckle (Lonicera spp.), and Multiflora Rose (Rosa multiflora) are some of the most common exotic shrubs in McHenry County. Their low branches leave many birds and animals open to predators. Buckthorn, Honeysuckle, and Multiflora Rose densely shade the ground blocking sunlight to native wildflowers and native tree seedlings. It is important to remove these non-natives in order to preserve native trees and plants and to provide the best food sources and shelter for birds and other animals.

What is the best way to remove exotic brush?

There are several effective ways to remove exotic trees and shrubs. The most common technique is to cut the tree as close to the ground as possible. It is very important to follow cutting with an application of herbicide; if not, they will re-sprout with multiple stems. The shrubs are not killed by cutting alone. If the brush is left untreated, in two to five years the woods will be just as overgrown as when you started.

There are several readily available herbicides designed for trees and shrubs. It is best to use one of these brush killers instead of a broad spectrum herbicide. Often the broad spectrum herbicide is ineffective on larger trees and shrubs.

If space allows it would be ideal to start by taking out the largest seed-producing shrubs first. These shrubs could also be killed by girdling them, cutting a ring through the bark and vascular tissue all the way around the trunk one to two feet above the ground. Then squirt herbicide into the cut. This is the quickest way to kill the shrubs, but it does leave an unsightly “tree graveyard” until the dead trees can be cleared.

As the removal process continues, there will be a substantial amount of wood produced. The easiest way to eliminate the wood is to stack the limbs and logs into brush piles and burn them (check local burn ordinances). If burning is not allowed, the wood could be chipped, allowed to dry out, then used for trails or mulch. Some bigger trees could be girdled and left as nesting sites. There are also many creative uses for the longer straight branches such as rustic fences or posts.

All the exotic brush is gone... now what?

After the exotic brush has been removed from all or a section of woods, some maintenance will be needed for a few years. There will still be some seedlings and seeds of the exotic species; these are best controlled through prescription burns. If burning is not an option, mowing or using a string trimmer is a good substitute. (Another reason to cut the stumps as low as possible.)

It is also very important to seed the cut area with a mix of native grasses, sedges and forb (flower) species. Usually the cut area has large areas of bare dirt which will erode and be a perfect spot for other exotic species such as garlic mustard. In your seed mix include faster growing woodland grasses such as Bottlebrush Grass (Hystrix patula), Silky Wild Rye (Elymus villosus), Woodland Brome (Bromus pubescens) which will help hold the soil in place, out compete most of the garlic mustard and brush seedlings, and allow the slower maturing native plants to become established. Native woodland wildflowers will blanket the forest floor with a continuous display of blooms and hold the soil in place. Native shrubs can be planted too. Good selections include: American Hazel (Corylus americana), Elderberry (Sambucus canadensis), Nannyberry (Viburnum lentago), Wild Plum (Prunus americana) and Serviceberry, also named Juneberry (Amelanchier arborea). For native wildflower selections, see the Conservation District’s Gardener’s Guide to Native Plants available by request from the District’s Plant Ecologist, (815) 678-4532.

After the clearing and seeding process has been completed, the woods will be more accessible to humans and animals alike. In addition, the woods will provide better homes and food sources for native insects, birds and other wildlife.
Invasive species pose a major threat to native plant communities. Conservation District staff and volunteer stewards are constantly fighting to stop the spread of these overzealous plants. Because plants know no boundaries, it is helpful for homeowners to be on the look out for these invasives as well to help control them from spreading.

**Common Buckthorn — Rhamnus cathartica**
- Woody shrub introduced from Eurasia
- Up to 25 ft. tall, branching from near base
- Mostly opposite or clustered, finely toothed leaves, small, black berries, spine-tipped twigs
- Inconspicuous green flowers in May–June
- Invades wooded areas and prairies
- Methods of control: cut stems and apply herbicide, burn area yearly for 5 or more years.

**Multiflora Rose — Rosa multiflora**
- Thorny shrub introduced from East Asia
- Invades shrub and wooded areas, forming impenetrable brambles
- Alternate, compound leaves; up to 8 ft. tall; flowers in June–July; fruits: small, rose hips
- Methods of control: pull by hand, cut stems and apply herbicide; burn area

**Honeysuckle — Lonicera spp.**
- Upright 10–15 ft. tall, woody shrub; introduced from Eurasia
- Invades a wide variety of natural areas
- Opposite leaves; white flowers in May-June, turning yellow; red berries, close to stem
- Pink or white flowers in May-June; orange berries, on long stems
- Leaf out early and remain on shrub into November
- Methods of control: cut stems and apply herbicide, burn area in spring

**Garlic Mustard — Alliaria petiolata**
- 1–3 feet tall biennial plant, introduced from Europe
- Spreads by seeds and invades wooded areas
- Triangular leaves, small white flowers, blooms April to June; garlic odor when leaves or stems are crushed
- Methods of control: pull plants, cut flower heads off before plant goes to seed; biocontrol is being researched

**Reed Canary Grass — Phalaris arundinacea**
- Perennial grass, introduced from Eurasia
- Extremely aggressive, forms large colonies in wet areas
- Up to 7 ft. tall, wide leaves, tan seed heads
- Methods of control: apply herbicide