

European or Wild Privet *Ligustrum vulgare*



This Best Management Practice (BMP) document provides guidance for managing European privet in the Oak Openings Region of Northwest Ohio and Southeast Michigan. This BMP was developed by the Green Ribbon Initiative (GRI) and its partners & uses available research & local experience to recommend environmentally safe control practices.

INTRODUCTION AND IMPACTS — European privet (*Ligustrum vulgare*), also commonly referred to as wild privet or common privet, is native to Europe and north Africa. European privet (E. privet) is a shrub in the olive family (Oleaceae) that grows from 10 to 20 ft. tall, with dense branching.

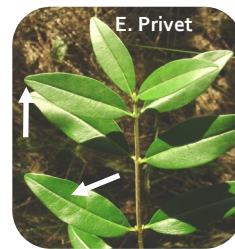
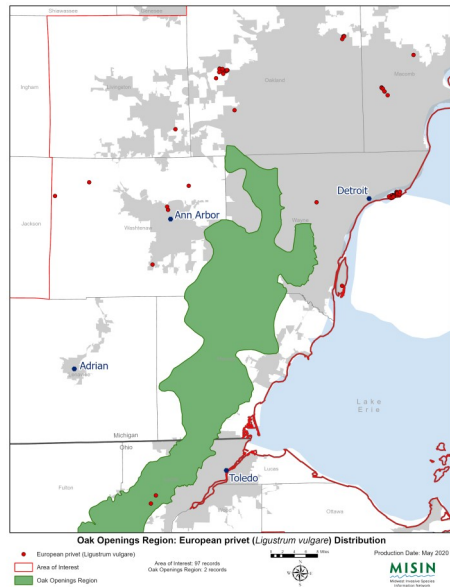
Historically, E. privet has been planted widely in the U.S.; today it has largely been recognized as problematic, though it is still occasionally used as ornamental shrubbery and planted hedgerows. Records show that E. privet began escaping cultivation in Michigan (St. Clair County) in 1896 (Michigan Flora Online). According to data in EDDMapS

(Early Detection & Distribution Mapping System), E. privet has been recorded in more than half of Ohio's counties, with about 2/3 of these records in the eastern half of the state. In Michigan, records are found in 19 of 83 counties (23%). Fifteen of these counties are found in the southern half of Michigan's lower peninsula. Presently, the number of records per county (density) is low (2-10 records/co. or less) for all but 2 counties in Ohio and Michigan (EDDMapS). The Midwest Invasive Species Information Network (MISIN) currently has 97 records of European privet (see map: red points) located just outside of the Oak Openings Region (OOR), with only 2 occurrences currently mapped within OOR boundaries (see map: green polygon). However, occurrences have been recorded in 5 of the 7 OOR counties (MI: 3 of 4, OH: 2 of 3)(EDDMapS). OOR land managers indicate that observations are significantly underreported.

European privet has several characteristics that contribute to its classification as an invasive weedy shrub. At maturity, it can produce hundreds of seeds every year. Wildlife, especially birds, disperse E. privet seeds and contribute to enhancing seed germination when fruits are consumed (i.e. dispersed as excrement). E. privet also readily regrows from root or stump sprouts and has the ability to survive a wide range of habitats, including dry to mesic (moist) soils as well as very sunny to shaded environments.

SIMILAR SPECIES - There are similar invasive privets in Michigan and Ohio (mainly *L. obtusifolium* or border privet); border privet is hairy (longer, dense hairs in comparison) on twigs, pedicels and flower bracts and also has a longer floral tube than European privet.

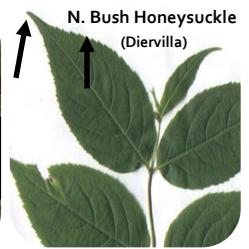
Without flowers or fruits, European privet resembles other shrubs with simple and elliptic, opposite leaves. With entire leaf margins, E. privet is different from native bush honeysuckle (*Diervilla lonicera*) which has serrated margins and acuminate (long and slender) leaf tips; also, *Viburnums* have serrated margins. However, native dogwoods and non-native bush honeysuckles both have entire margins, like privet. Lateral veins (on upper leaf surfaces) for both dogwoods and non-native honeysuckle, are more pronounced, whereas European privet often appears to have one prominent mid-vein (lateral veins less apparent). (see photos below)



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HABITAT— In the OOR, European privet prefers mesic to dry soils and tolerates a wide range of light, growing in shaded to sunny habitats. It has been found growing in natural communities like floodplain forests, mesic deciduous forests, wet prairies and upland prairies in the OOR, and particularly thrives in disturbed areas. Across its range in N. America, habitats also include glades and bottomlands.

IDENTIFICATION - Habit: A (tardily) deciduous shrub growing to heights of up to ~6m (20 ft), with spreading branches. Plants have thin gray-brown bark with lenticels. June-blooming shrubs have white flowers with a strong odor. Blooms are small with yellow centers; heads are dense and somewhat showy. Dark blue-black fruits.



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Leaves: Simple, opposite, elliptic to ovate, 3-7 cm (1.2-2.5 in) long, 0.5-1.5 cm (0.2-0.6 in.) wide; smooth margins, dark green above and paler beneath; early leaf out in spring; turns purplish in fall; leaves remain until late fall/early winter.

Stems: Young branches green, minutely puberulent, becoming smooth with age; thin, gray-brown bark with lenticels.

Flowers: Borne in terminal, branched clusters (pyramid-shaped/panicle); individual flowers are small, white with 4 petals; 2.5-7.5 cm (1-3 in) long, strong odor; blooms in mid-June.

Seeds/Fruits: sub-globose or ovoid drupe, 6-8 mm long, blue-black and lustrous; maturing in September thru October.

Roots: ability to easily regrow from root or stump sprouts

European Privet Timeline	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Life History	dormant; seeds persist, dispersal		leaf-out, stump sprouting		vegetative growth	flowering		fruiting	fruits mature; seed dispersal (birds/wildlife)		seeds persist, dispersal	
Hand Pull (small populations)					pull before fruiting, ensure root removal							
Herbicide (foliar)			most effective			if using glyphosate , may need to increase concentration			most effective			
Basal Bark or Cut-Stump w Herbicide	most effective		least effective		effective			most effective				
Mowing	avoid if overwintering fruit is plentiful; repeat/follow-up necessary				most effective in early summer: underground food reserves at their lowest; repeat/follow-up necessary							
Rx Fire or Cut-Only	- cutting not recommended without follow-up, removal or damage of above-ground stems can cause prolific asexual sprouting - Rx fire can achieve some top kill, though litter and foliage have low flammability											

REPRODUCTION AND DISPERSAL— Mature European privets can produce hundreds of seeds every year. Birds and other wildlife (deer) disperse E. privet seeds and contribute to enhancing seed germination when fruits are consumed (i.e. dispersed as excrement). E. privet also readily regrows from root or stump sprouts.

Thoroughly cleaning equipment is a critical prevention measure for E. privet in the OOR. Land managers should consider incorporating pre- and post-project equipment cleaning into contracts.

REPORTING— European privet is a **control** species in the OOR. Reporting locations of E. privet is essential for its management and control. In fact, with only 2 reported records in the MISIN database for the OOR, such limited reporting indicates an immediate need to document field observations through mapping tools; i.e. occurrences are known to be more numerous and widespread but observations have not been recorded or shared. To report or to find out specific ways you can help map occurrences, contact [MISIN](#), [GRI \(OO-CWMA\)](#) or your county CWMA or CISMA. Early detection of E. privet invasions will limit the future effort needed to reduce established populations.

CONTROL— Management efforts must focus on the prevention of seed production and dispersal. Keeping populations regularly mowed can prevent seeding for a few years, however stump sprouts are typical and although some repeat mowing may kill privet, it will be necessary in invaded areas to treat populations with herbicide. Cut-stump and basal bark treatments are relatively easy to conduct and provide a lower exposure to herbicides than treatments involving foliar application (spraying).

Chemical: It is the responsibility of the applicator to comply with herbicide labels and regulations when planning chemical treatment.

Herbicide	Trade Names	Concentration (by volume)
Glyphosate	Aquaneat® Rodeo® Roundup®	foliar: 2-3%
		cut stump: 20-50%
Imazapyr*	Polaris® Arsenal®	foliar: 1%
		cut stump: 5-25%
		basal bark: 6-9%
Triclopyr	Garlon 3A® Garlon 4 Ultra® Tahoe® Element 3A®	foliar: 2-4%
		cut stump: 20-30%
		basal bark: 10-30%

*imazapyr has longer soil residual time than other herbicides; will kill surrounding vegetation.

Where appropriate, use herbicides approved for aquatic areas. Also, use herbicides with the appropriate non-ionic surfactant.

Foliar: Backpack or Hand Spraying— This technique works best when the majority of branches and leaves are below chest height. If a foliar application is preferred and shrubs are too tall, mow/brush cut the area during the early to mid growing season and wait for stems and leaves to re-sprout.

Cut-stump or basal bark—

cut-stump: Apply herbicide immediately after cutting (water-based solution) with a wand or dabber.

basal bark— Apply an oil-based herbicide to the lower stems/base of the plant using a (backpack) sprayer (no cutting is necessary).

Mechanical: Pulling: Effective on small populations; focus on seedlings and small saplings.

Digging— Larger stems can be removed using uprooting tools like a weed wrench; the entire root must be removed since broken fragments may resprout.

Mowing— mowing or cutting of stands prior to seed maturation (before mid-Aug) can significantly reduce the overall seed production of a population. A follow-up foliar spray will provide control of any resprouts. If enough of a stump is left after mowing/cutting, a basal bark treatment may be effective.

Biological: No known biological control agents. Several insects and diseases have been observed on E. privet but few cause serious damage, however, it is vulnerable to anthracnose twig blight.

Prescribed Fire: Not recommended as a stand-alone treatment; damage of above-ground stems can cause prolific asexual sprouting; Fire can achieve some top kill, though litter has low flammability.

DISPOSAL— If seeds have not formed, allow stems and roots to dry out completely before disposing of them; remove all roots from soil to prevent resprouting; during fruit/seed stage, carefully put seed material in black plastic bags. Seal the bags tight and leave them to “cook” in direct sunlight for 1 -3 weeks.

