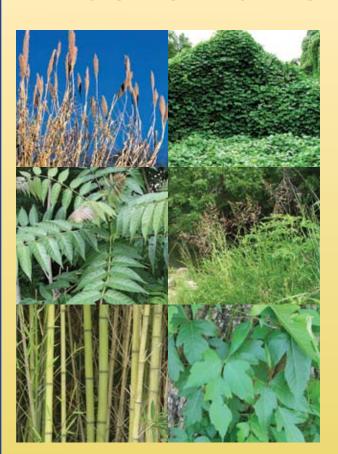
Central Texas **Invasive Plants**



Volunteer Field Guide



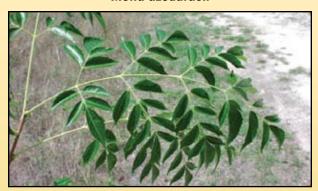
Central Texas **Invasive Plants**

Chinaberry **Chinese Parasol Tree Chinese Pistache Chinese Tallow Common Privet Common Water Hyacinth Elephant Ear Eurasian Watermilfoil Giant Cane Holly Fern** Hvdrilla **Japanese Honeysuckle Johnson Grass** Kudzu Mimosa, Silk Tree **Nandina Paper Mulberry Photinia Poison Ivy Pyracantha Running Bamboo Russian Olive** Tamarisk, Salt Cedar Tree of Heaven Vitex **Waxleaf Ligustrum White Mulberry** Wisteria Wisteria sinensis/W.floribunda

Firmiana simplex Pistacia chinessis Sapium sebiferum Liqustrum sinense/L.vulgare Eichhornia crassipes Alocasia spp, Colocasia spp. Myriophyllum spicatum Arundo donax Cvrtomium falcatum Hydrilla verticillata Lonicera japonica Sorghum halepense Pueraria lobata Albizia julbrissin Nandina domestica Broussonetia papyrifera Photinia spp. Toxicodendron radicans Pyracantha spp. Phyllostachys aurea Eleagnus angustifolia Tamarix spp. Ailianthus altissima Vitex agnus-castus Ligustrum japonicum Morus alba

Melia azedarach

Chinaberry *Melia azedarach*



Description:

- · Deciduous tree
- Multi-trunked with an open crown
- · Grows to 50'
- Alternate, musky-smelling dark green leaves
- Stems are glossy greenish-brown with light dots
- · Yellow fall foliage



Clusters of lavender flowers in spring



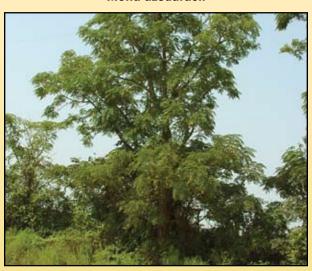
Mature fruit

TOXICITY WARNING

Mature fruits are poisonous

Chinaberry

Melia azedarach



Habitat:

Roadsides, older home sites and floodplains

Least Toxic Removal:

- · Pulls out easily when plant is young
- Use Weed Wrench™ for 2.5 diameter and smaller
- Cut trees to stumps remove sprouts as they appear

Non-Invasive Alternatives:

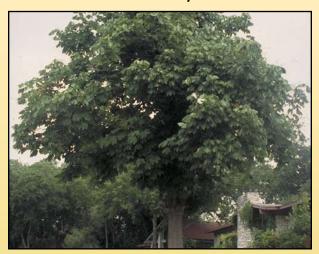
- Chinquapin Oak
- Texas Red Oak

DO NOT PLANT

Spread by seeds, root sprouts

Chinese Parasol Tree

Firmiana simplex



Description:

- Deciduous, upright tree with a narrow canopy
- Grows 30-40' tall
- Large (12") leaves with 3-5 lobes
- Leaves bright green above, fuzzy underneath
- · Yellow fall foliage
- · Green Bark



Green Bark

Leaf

Chinese Parasol Tree

Firmiana simplex



Flowers in mid-summer

Habitat:

Prefers moist areas

Least Toxic Removal:

- · Remove small plants by hand
- Use Weed Wrench[™] for 2.5 diameter and smaller
- Cut trees to stumps remove sprouts as they appear

Non-Invasive Alternatives:

- Bald Cypress
- Arizona Cypress

DO NOT PLANT

Spread by seeds

Chinese Pistache

Pistacia chinensis



Description:

- · Deciduous tree
- Grows to 35'
- Leaves are yellow, orange and red in fall



Red fruit appears in summer



Leaf

Chinese Pistache

Pistacia chinensis



Habitat:

Woodlands. open space, unmowed areas

Least Toxic Removal:

- · Remove small plants by hand
- Use Weed Wrench™ for 2.5 diameter and smaller
- Cut trees to stumps remove sprouts as they appear

Non-Invasive Alternatives:

- Chinquapin Oak
- Texas Red Oak

DO NOT PLANT

Spread by seeds

Chinese Tallow

Sapium sebiferum



Description:

- · Deciduous tree
- · Grows up to 60'
- Heart-shaped, alternate leaves



Flowers with long yellow, spike-like branches in fall



Three lobed, small clustered fruit splits to reveal popcorn-like seeds in spring

TOXICITY WARNING

Leaves, fruits and sap toxic to humans and most animals if ingested

Chinese Tallow

Sapium sebiferum



Fall folliage

Habitat:

Wetlands, streambanks and disturbed areas

Least toxic Removal:

- Remove seedlings by hand
- Use a Weed Wrench[™] for 2.5 diameter trunks or less
- Cut trees to stumps remove sprouts as needed

Non-Invasive Alternatives:

- Lacey Oak
- Bigtooth Maple

DO NOT PLANT

Spread by seeds, colonizes by root sprouts

Common Privet

Ligustrum sinense/L.vulgare



Description:

- Semi-evergreen shrub
- Often multi-trunked
- Leafy branches attached at near right angles
- Flowers spring thru summer



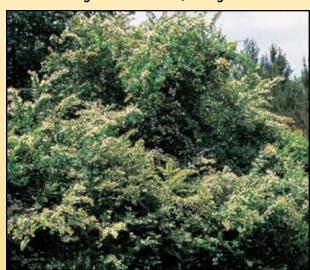
Opposite leaves



Fruit present summer through spring

Common Privet

Ligustrum sinense/L.vulgare



Habitat:

Fields and woodland understory

Least Toxic Removal:

- · Pull plants by hand when young
- Use Weed Wrench[™] for 2.5 diameter and smaller
- Cut trees to stumps remove sprouts as they appear

Non-Invasive Alternatives:

- Evergreen Yaupon
- Possumhaw Holly

DO NOT PLANT

Spread by seeds, root sprouts

Common Water Hyacinth

Eichhornia crassipes



Description:

- · Aquatic plant that floats on water
- Thick, shiny, bright green, kidney-shaped leaves: 1-5" in width



Large lavender flowers in groups of 8-15



Foliage

Common Water Hyacinth

Eichhornia crassipes



Habitat:

Found in all types of freshwater bodies. Grows anywhere it can avoid freezing temperatures

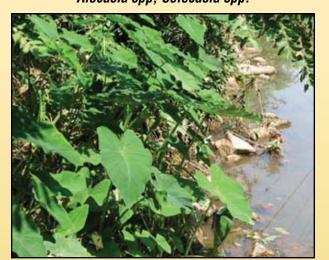
Least Toxic Removal:

- For small infestations, remove plants by hand or with a rake
- Larger areas may need harvester machines

DO NOT PLANT

Spreads by rhizomes and prolific seeds; population may double in 6-18 days.

Elephant Ear Alocasia spp, Colocasia spp.



Description:

- · Terrestrial and aquatic plant
- · Green, heart-shaped leaves
- · Berries are rare



TOXICITY WARNING

Can cause irritation if ingested raw; sap can irritate skin

Elephant Ear

Alocasia spp, Colocasia spp.

Habitat:

Along creek banks and ponds

Least Toxic Removal:

- Use a shovel or grubbing tool to remove
- When removing, care must be taken to keep plant intact and remove all fragments to discourage spread

Non-Invasive Alternatives:

- Arrowhead
- Crinum Lily
- Tuckahoe

DO NOT PLANTSpread by plant fragments

Eurasian Watermilfoil

Myriophyllum spicatum



Description:

- · Rooted, submersed, aquatic plant
- · Grows in 3-10' of water
- Grayish-green leaves in whorls around stem
- Feathery appearance



Eurasian Watermifoil and Hydrilla

Eurasian Watermilfoil

Myriophyllum spicatum



Habitat:

Spreads into disturbed water areas

Least Toxic Removal:

- For small areas remove by hand or with rake
- For large areas, use mechanical harvester at the peak of biomass in early summer
- · Better results with repeated harvesting
- All plant parts must be removed

DO NOT PLANT

Spread by plant fragments

Giant Cane *Arundo donax*



Description:

- Perennial grass with woody canes
- Grows to 20'
- Alternate leaves with parallel veins



Plume-like flowers in late summer



Alternate leaves

Giant Cane

Arundo donax



Habitat:

Riparian and floodplain areas

Least Toxic Removal:

- Hand pull small plants
- Hand-dig with a grubbing tool and remove all rootstalks

Non-Invasive Alternatives:

- Evergreen Yaupon
- Roughleaf Dogwood

DO NOT PLANT

Spread by rhizomes (underground stems), plant fragments; produces no viable seed

Holly Fern Cyrtomium falcatum



Description:

- Evergreen fern
- Grows to 3' tall
- Foliage resembles holly



Spores on bottom of leaf



New growth

Holly Fern Cyrtomium falcatum



Habitat: Woodlands understory

Least Toxic Removal:

• Dig up plants, getting all of the root system

Non-Invasive Alternatives:

River Fern

DO NOT PLANT

near creeks and preserves. Can be an appropriate plant in a managed yard

Hydrilla *Hydrilla verticillata*



Description:

- Rooted, submersed aquatic plant
- Forms dense mats in water
- Grows in 1'-20' of water
- 3/4" leaves grow in whorls
- Fine teeth on edge of leaves
- Tiny flowers



Foliage



Foliage

Hydrilla Hydrilla verticillata



Habitat:

Fresh water bodies

Least Toxic Removal:

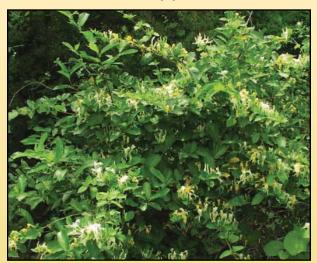
- Mechanical harvesters
- · Herbivorous fish such as grass carp

DO NOT PLANT

Spread by root crowns and plant fragments

Japanese Honeysuckle

Lonicera japonica



Description:

- · Semi-evergreen trailing or climbing vine
- Grows up to 80'
- · Elongated, opposite leaves



Fragrant white flowers



Small black berries in spring through fall

TOXICITY WARNING

Toxic if eaten in large quantities

Japanese Honeysuckle

Lonicera joponica



Opposite leaves

Habitat:

Disturbed areas, roadsides, woodland edges and abandoned fields

Least Toxic Removal:

- Remove small plants by hand including roots
- Mowing may slow vegetative spread

Non-Invasive Alternatives:

Coral Honeysuckle

DO NOT PLANT

Spread by seeds, runners and underground rhizomes

Johnson Grass

Sorghum halepense



Description:

- · Warm season perennial weed
- Wide leaf blade with white strip down the center
- · Can grow up to 6'
- Thick, creeping rhizomes (underground stems)



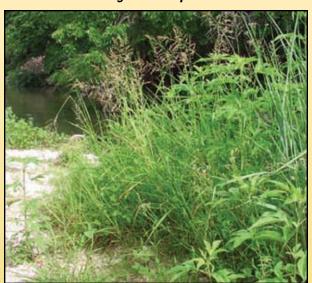


Young flower

Flower

Johnson Grass

Sorghum halepense



Habitat:

Roadsides and creeksides; tolerates all types of soils (sometimes brought in by soil from off site)

Least Toxic Removal:

- Manually remove as much of the root system as possible
- Persistent so may take several tries

DO NOT PLANT

This weed is spread by rhizomes (underground stems) and seeds

Kudzu Pueraria lobata



Description:

- · Deciduous vine
- Grows up to 100'
- Hairy stems
- · Three oval to heart-shaped leaflets
- Very aggressive, can grow up to 1' per day

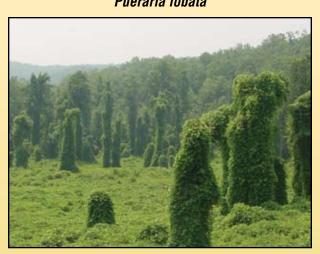


Purple pea-like clusters; grape smell



Messy, green or tan elongated fruit

Kudzu Pueraria lobata



Habitat:

Roadsides, abandoned lots and along stream banks

Removal:

• Call 974-2446 immediately if sighted

Non-Invasive Alternatives:

- Virginia Creeper
 - Coral Vine

DO NOT PLANT

Spread by seed, rooting at nodes and root fragmentation

Mimosa, Silk Tree

Albizia julibrissin



Description:

- Umbrella-shaped, often multi-trunked deciduous tree
- Grows to 40'
- 20" long leaves on alternate on stems
- Showy pink flowers bloom from spring to summer



Feathery foliage



Fruit ripens in fall

TOXICITY WARNING

Produces a neurotoxin in seed pods that can cause seizures and even death upon ingestion.

Pets especially susceptible

Mimosa, Silk Tree

Albizia julibrissin



Habitat:

Occurs on dry-to-wet sites and along streambanks

Least Toxic Removal:

- · Pull plants by hand when young
- Use Weed Wrench™ for 2.5 diameter and smaller
- Cut trees to stumps remove sprouts as they appear

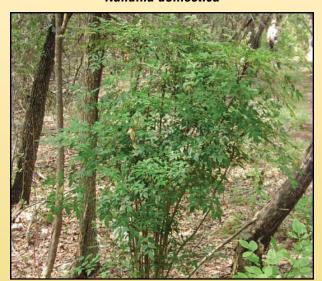
Non-Invasive Alternatives:

Desert Willow

DO NOT PLANT

Spread by seeds and root sprouts

Nandina Nandina domestica



Description:

- Erect, evergreen shrub
- · Grows up to 8' tall
- Glossy, bipinnately compound leaves
- Multiple stems that resemble bamboo

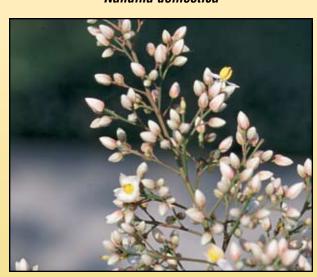


White to pinkish flowers in terminal clusters



Red berries in fall and winter

Nandina Nandina domestica



Habitat:

Shady areas of forests and wooded areas

Least Toxic Removal:

- Collect and destroy all fruit to prevent spreading
- Use a Weed Wrench™ to remove roots
- Replace with new varieties that don't produce seeds

Non-Invasive Alternatives:

- Non-berrying Nandinas
- Bush Germander
- Texas Sage
- Barbados Cherry

DO NOT PLANT

Spread by root sprouts and seeds

Paper Mulberry Broussonetia papyrifera



Description:

- · Deciduous tree with broad and spreading branches
- Grows to 50'
- Variable leaf shape
- Leaves fuzzy with serrated edges
- Milky white sap



Male flower in spring



Fruit in summer

Paper Mulberry Broussonetia papyrifera

Habitat:

Disturbed areas, woodland edges, roadsides

Least Toxic Removal:

- Remove small plants by hand
 Use a Weed Wrench™ for 2.5" diameter trunks and smaller

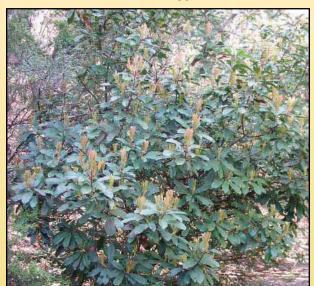
Non-Invasive Alternatives:

- Cherry Laurel
- Texas Persimmon

DO NOT PLANT

Spread by seed and root sprouts

Photinia Photinia spp.



Description:

- Evergreen shrub
- Grows up to 20'
- Large, glossy, dark green foliage
- Showy white flowers

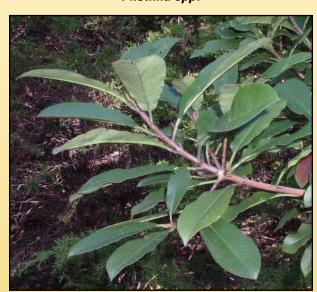


New growth is copperish-red color



Fruit clusters in fall

Photinia Photinia spp.



Habitat: Woodlands

Least Toxic Removal:

- Pull plants by hand when young
 Use Weed Wrench™ for 2.5 diameter and smaller
- Cut trees to stumps remove sprouts as they appear

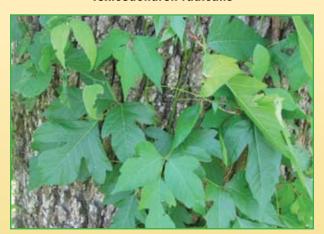
Non-Invasive Alternatives:

Evergreen Sumac

DO NOT PLANT

Spread by seed

Poison lvy Toxicodendron radicans



Description:

- Deciduous perennial
- Young plants are herbaceous and can be 1'-2' tall
- Mature plants can be woody and cover hundreds of square feet
- Can grow to be vine-like, shrubby or a groundcover
- Vine attaches to any object that will support it



New poison ivy growth



Leaflets with lobe variation

Poison lvy *Toxicodendron radicans*



Habitat: Prefers fertile, well-drained soil; most common in shady areas

Least Toxic Removal:

- Wear gloves, long sleeves and pants if removing plant (preventative blockers are also available pre-exposure)
- Pull small plants when soil is moist grab plants through a plastic bag and turn inside out over the plant to avoid rash
- Smother small plants with mulch
- If vine is growing up a tree, sever vine at ground level
- Use a sharp shovel or grubbing tool to remove established plant roots
- Do not mow or string trim plants
- Bag or bury the vegetation that is removed (do not burn – may cause severe injury if inhaled)

DO NOT PLANT

Spreads by rhizomes and seeds

Pyracantha *Pyracantha spp.*



Description:

- Evergreen shrub
- Grows to 20'
- Short, straight side stems end in a point creating a very painful thorn (sometimes called "fire thorn")



White flowers late spring through summer



Clusters of orange berries in fall through winter

Pyracantha

Pyracantha spp.



Habitat: Edge of wooded areas

Removal:

 Cutback to base of plant with loppers or a tree saw

Non-Invasive Alternatives:

- Evergreen Sumac
- Evergreen Yaupon

DO NOT PLANT

near creeks and preserves.

Can be an appropriate plant in a managed yard

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Running Bamboo

Phyllostachys aurea



Description:

- Evergreen
- Grows 16'-40' tall
- · Long, pointed leaves
- Dense and aggressive used for screening







Leaf

Running Bamboo

Phyllostachys aurea



Hahitat:

Old home sites and adjacent natural areas

Least Toxic Removal:

- Cut plants as close to ground as possible
- Repeat as plants resprout for several growing seasons until energy reserves of rhizomes are exhausted
- If digging, remove all the roots
- A 3' deep barrier enclosing the plant prevents spread

Non-Invasive Alternatives:

- Evergreen Yaupon
- Bamboo Muhly

DO NOT PLANT

Spread by aggressive rhizomes (underground stems)

Russian Olive Eleagnus angustifolia



Description:

- · Small, deciduous shrub or tree
- Grows up to 30'
- Lance-shaped leaves with greenish-gray color on top
- Thorny



Aromatic creamy yellow flowers in summer



Seeds in fall

Russian Olive Eleagnus angustifolia



Habitat:

Along creeks and river bottoms

Least Toxic Removal:

- Pull plants by hand when young
 Use Weed Wrench™ for 2.5 diameter and smaller
- Cut trees to stumps remove sprouts as they appear

Non-Invasive Alternatives:

- Cherry Laurel
- Texas Persimmon

DO NOT PLANT

Spread by seeds, root sprouts

Tamarisk, Salt Cedar Tamarix spp.



Description:

- Small tree/ large shrub
- 10-15' tall
- Deciduous or evergreen
- Narrow, thin, grey /green alternate leaves
- · Forms dense thickets



Scale-like leaves, reddish-brown stems and bark



Pink to white flowers spring through summer

Tamarisk, Salt Cedar Tamarix spp.



Habitat:

Riparian and wet areas

Least Toxic Removal:

- · Hand pull plants under 1" diameter
- Large thickets can be bulldozed by root plowing
- Flooding will kill plants if root crowns are submerged for at least three months

Non-Invasive Alternatives:

- Arizona Cypress
- Bald Cypress

DO NOT PLANT

Spread by seeds, vegetative roots

Tree of Heaven *Ailanthus altissima*



Description:

- · Deciduous tree
- Grows up to 80' tall
- Alternate leaves with 10-40 leaflets on a 1-3' stem
- Light gray stems and trunk

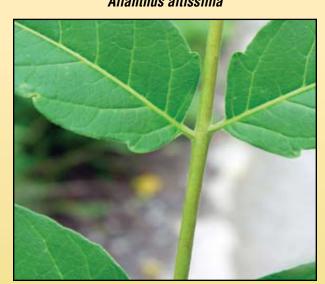


Cluster of wing-shaped samaras (fruit) in late summer to early spring



Flowers in spring

Tree of Heaven Ailanthus altissima



Habitat: Along roads and right of ways; cannot tolerate flooding or extreme shade

Least Toxic Removal:

- · Remove small plants by hand
- Use Weed Wrench™ for 2.5 diameter and smaller
- Must remove root system to prevent regrowth into dense thickets

Non-Invasive Alternatives:

- Chinquapin Oak
- Lacey Oak

DO NOT PLANT

Spread by seeds, root and stump shoots

Vitex Vitex agnus-castus



Description:

- · Deciduous small tree or large shrub
- · Grows to 20'
- Gray-green to dark-green, finger-like, aromatic leaflets in groups of 5-7



Fragrant, purple clusters of flowers in spring through late fall



Black fruit in fall

Vitex

Vitex agnus-castus

Habitat:

Beginning to invade nature preserves, found near water

Least Toxic Removal:

- · Pull plants by hand when young
- Use Weed Wrench™ for 2.5 diameter and smaller
- Cut trees to stumps remove sprouts as they appear

DO NOT PLANT

near creeks and preserves; can be an appropriate plant in a managed yard

Waxleaf Ligustrum

Ligustrum japonicum/Ligustrum lucidum



Description:

- · Shrub to small tree
- Grows to 25'
- Thick, glossy, opposite leaves



Fragrant clusters of small, white flowers in spring through summer



Blue berries in late summer through fall

Waxleaf Ligustrum

Ligustrum japonicum/Ligustrum lucidum

Habitat:

Disturbed areas, lowland areas and floodplains

Least Toxic Removal:

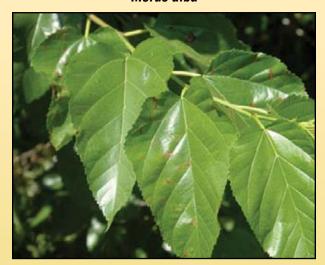
- Pull plants by hand when young
 Use Weed Wrench™ for 2.5 diameter and smaller
- Cut trees to stumps remove sprouts as they appear

Non-Invasive Alternatives:

- Texas Sage
- Barbados Cherry

DO NOT PLANT Spread by seeds

White Mulberry Morus alba



Description:

- · Can grow to 70'
- Named for the color of its buds (fruit can be white, lavender or black)
- · Variable leaf shapes
- · Hybridizes with native red mulberry

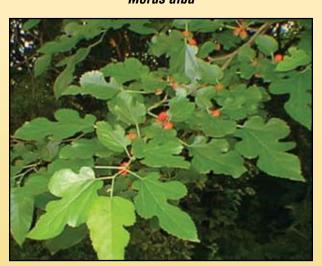


Fruit in late summer through fall



Variable leaf shapes

White Mulberry Morus alba



Habitat:

Disturbed areas, roadsides

Least Toxic Removal:

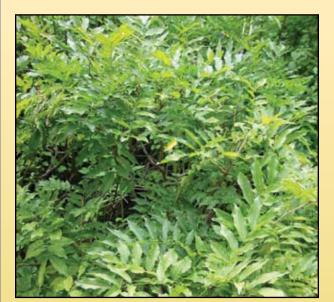
- Seedlings can be pulled
- Use a Weed Wrench[™] to remove 2.5" diameter and smaller
- · Cut tree and grind stump

Non-Invasive Alternatives:

- Cherry Laurel
- Texas Persimmon

DO NOT PLANT Spread by seeds

Wisteria Wisteria sinensis, W. floribunda



Description:

- · Deciduous, woody vine
- Grows up to 70'
- Showy, abundant flowers



Fragrant white, pink, or lavendar clusters of flowers in spring



Vines can strangle other plants

Wisteria

Wisteria sinensis, W. floribunda

Habitat:

Disturbed areas, roadsides, forest edges, ditches; escapes near original plantings; can persist in low light settings

Least Toxic Removal:

- · Sever vine at base
- Remove vines that are coiling around trunks to prevent girdling.

Non-Invasive Alternatives:

Passion Vine

DO NOT PLANT

Spread by vegetative growth of stems and stolons; seeds if conditions are favorable