# **BIRD-FRIENDLY** NATIVE ALTERNATIVES TO INVASIVE PLANTS

A Resource for Nurseries, Landscapers, and Land Managers



# **IMPACTS OF INVASIVE PLANTS<sup>1</sup>**

Annually, invasive species cause over \$100M in economic damages in Pennsylvania (PA).

The global ornamental nursery trade is the primary pathway for introducing invasive plants. Over 140 species of plants are considered invasive in PA. Many of those invasive plants, such as burning bush, barberry, and privet, have been designated as noxious weeds, and are therefore banned from sale.

Impacts of invasive plants include:

- Loss of biodiversity and forest health.
- Agricultural impacts through invaded fields and damaged fruit trees.
- Lost timber product.
- Restricted recreational access to community parks, trails, and lakes.
- Safety concerns on roadways due to proliferation of invasive shrubs.
- Invasion of wetlands, waterways, and stream plantings, which impacts flood control, water filtration, and habitat quality of these areas.

# WHAT IS AN INVASIVE PLANT?

Invasive plants have the following qualities:

Non-native to the region.

Cause environmental or economic harm to the introduced environment.

Rapid growth and reproduction, with the ability to outcompete native plants.

Readily spread from areas where planted to nearby forests, waterways, and other natural areas.

Can grow in a wide range of conditions, especially disturbed areas.

# WHY CHOOSE NATIVE PLANTS?

Gardening with native plants makes environmental and economic sense—plus, they're beautiful! Native plants are those that were here prior to European settlement. They are adapted to local conditions and co-evolved with native birds and pollinators over thousands of years. A majority of popular ornamental plants originated in other continents and therefore provide little habitat value for local wildlife.

Benefits of gardening with native plants include:

- Native plants are low-maintenance. They don't need fertilizer, require less water than ornamental plants once established, and come back year after year.
- They provide food for birds in the form of seeds, berries, nectar, and insects.
- From steep slopes to clay soils to the spot in your yard that never drains, there is a native plant that adapted to those conditions and therefore can flourish.
- Pollinators and other native insects are the foundation of our ecosystem—and they need native plants thrive. Gardening with native plants supports biodiversity.

<sup>1</sup>Adapted from PA Department of Agriculture: prdagriculture.pwpca.pa.gov/Plants\_ Land\_Water/PlantIndustry/GISC/Pages/Invasive-Species-in-Pennsylvania.aspx#



# NATIVE, BIRD-FRIENDLY SPECIES: GROWING IN POPULARITY

Interest and demand for native species has been increasing over the past decade, largely due to growing interest from eco-conscious consumers. In addition to home gardeners, municipalities are increasingly focused on using native plants in order to support habitat, which in turn supports the local economy and recreational opportunities. As the popularity of native plants continues to grow, there is an opportunity for the nursery industry to respond to consumer demand to capitalize on this movement. Native plants are good for business and the environment.

In recent years, sales at Audubon Society of Western Pennsylvania's (ASWP) native plant nursery have grown exponentially. Annually, hundreds of households enroll in ASWP's Certified Backyard Habitat program. As interest grows in native plants and their role in creating a healthy environment, demand for them will continue to increase.

# AUDUBON IS HERE TO HELP

ASWP has over 30 years of experience with native plants. ASWP's expertise in native plant propagation and gardening makes it simple for local nurseries and landscapers to offer and landscape with plants that make a positive impact. ASWP's efforts include supporting local greenhouses and nurseries to fulfill the public's growing demand for native plants.

Examples of how ASWP can assist with native plants include:

- Nurseries and landscapers: wholesale sourcing, plant selection, workshops, custom signage, and promotion of native plant selection and services to ASWP constituency.
- Municipalities, nonprofits, and community groups: native plant selection, sourcing, planning for public spaces, advising on habitat restoration and/or demonstration projects, and environmental education programs.

We can all make a difference for the environment by reducing invasive species and incorporating native species into our gardens, businesses, or public spaces. Contact ASWP at info@aswp.org or (412) 963-6100 for assistance with native plants.



#### **EXOTIC HONEYSUCKLE** *Lonicera japonica*



- Highest invasive threat level in PA
- Will choke out other landscaping without aggressive maintenance

#### **EXOTIC WISTERIAS** *Wisteria sinensis, W. floribunda*



- Can disfigure and kill ornamental trees and shrubs
- Potential to damage buildings and structures

#### ENGLISH IVY

Hedera helix



- Weakens and kills landscape trees, which can be hazardous
- Exacerbates cracks in foundations and hardscaping

BIRD-FRIENDLY NATIVE ALTERNATIVES

#### TRUMPET HONEYSUCKLE Lonicera sempervirens



- Early bloomer
- Fast-growing
- Hummingbird favorite
- Fruit attracts birds; host plant for pollinators

AMERICAN WISTERIA Wisteria frutescens



- Clusters of fragrant, purple flowers
- Attracts butterflies
- Suitable for arbors and fast-growing

CREEPING PHLOX Phlox stolonifera



- Deer-resistant
- Showy flowers in May-June
- Attracts Hummingbirds and butterflies
- Tolerates clay soil

#### VIRGIN'S BOWER Clematis virginiana



- Blooms July-September
- Fast-growing
- Abundant flowers
- Attracts Hummingbirds and butterflies

#### **TRUMPET VINE** *Campsis radicans*



- Blooms July-September
- Fast-growing
- Abundant flowers
- Attracts Hummingbirds and butterflies

#### EASTERN TEABERRY Gaultheria procumbens



- Grows in heavy shade
- Red fruit attracts birds and white flowers in summer
- Evergreen foliage
- Tolerates clay soil



#### **PERIWINKLE** *Vinca minor*



- Smothers other plants, reducing garden interest and biodiversity
- Damages tree bark
- Little to no wildlife value

#### WINTERCREEPER Euonymus fortunei



- Kills other plants, from tree seedlings to flowers, ferns, and grasses
- Climbs trees and fences, causing damage

### MONEYWORT

Lysimachia nummularia



- Forms dense mat, outcompeting other plants
- Aggressively re-sprouts, making removal very difficult



### WILD GINGER

Asarum canadense



- Gorgeous velvety foliage
- Deer- and rabbit-resistant
- Vegetation emerges in early spring and lasts until heavy frost

#### FOAM FLOWER Tiarella cordifolia



- Showy white flowers attract butterflies and other pollinators
- Great for garden borders
- Spring wildflower

#### WOODLAND STONECROP Sedum ternatum



- Low-maintenance
- Deer-resistant
- Showy white flowers attract pollinators
- Drought-tolerant

#### BARREN STRAWBERRY Waldsteinia fragarioides



- Four seasons of garden interest
- Bright yellow flowers
- Tolerates dry-moist soil
- Forms dense groundcover

#### CORALBELLS Heuchera americana



- Great foliage plant
- Does well in containers or in the ground
- Deer- and rabbit-resistant

#### MARSH MARIGOLD Caltha palustris



- Good for moist soil
- Spreads quickly, deer-resistant
- Attracts birds and pollinators



#### **AJUGA** *Ajuga reptans*



- Common garden weed
- Rapid spread displaces native vegetation
- Difficult to control without herbicides

# EXOTIC PACYSANDRA

Pacysandra terminalis



- Forms dense cover and prevents other vegetation from establishing
- Rapid growth

#### **CREEPING CHARLIE**

Glechoma hederacea



- Forms dense mat, outcompeting other plants
- Aggressively re-sprouts, making removal very difficult



#### GROUNDSEL

Packera aurea



- Small yellow blooms in spring on short stems
- Rapid spreader, good fill between larger perennials

#### ALLEGHENY SPURGE Pachysandra procumbens



- Unique foliage plant with green and purple speckled leaves
- Spreading groundcover in shade-part shade

#### PLANTAIN PUSSYTOES Antennaria plantaginifolia



- Misty white stems and soft basal leaves
- Grows best on marginal, rocky and thin soils
- Tolerates some foot traffic

#### MEEHHAN'S MINT Meehania cordata



- Purple-blue flowers in late-spring for pollinators
- Nectar source for Hummingbirds
- Good companion plant from shade-part shade

#### LOWBUSH BLUEBERRY Vaccinium angustifolium



- Great bronze/red fall foliage
- Growth is dense ankle-high thicket
- Edible fruit

#### WINDFLOWER Anemone canadensis



- Delicate green foliage with bright white blooms in spring
- Spreads well in sun-part sun



#### **SILVERGRASS** *Miscanthus sinensis*



- Can escape into natural areas and can quickly form a monoculture
- Fire hazard—increases risk and intensity of fires

#### EXOTIC BAMBOO

Bambusa and Phyllostschys spp.



- People regret planting it because its so aggressive
- Quickly crowds out other species and requires constant effort to control

### COMMON REED

Phragmites australis



- Fire hazard—increases risk and intensity of fires
- Very difficult to remove



#### BIG BLUESTEM Andropogon gerardii



- Tall prairie grass
- Very drought tolerant
- Golden-bronze fall color
- Seeds are important food source for birds

#### LITTLE BLUESTEM Schizachyrium scoparium



- Good to plant in masses for privacy screening
- Seeds attract birds
- Red-bronze fall color
- Unique blue-green blades

#### BOTTLEBRUSH GRASS Elymus hystrix



- Showy native ornamental grass; adds unique texture to garden
- Seeds attract birds
- Thrives in dry-moist soils

#### PURPLETOP TRIDENS Tridens flavus

Grasses



- Oily purple color in fall
- Seeds attract birds in winter
- Salt tolerant
- Deer-resistant

#### INDIANGRASS Sorghastrum nutans



- Orange-purple fall color
- Seeds attract birds
- Deer-resistant
- Establishes quickly
- Tolerates clay soil

#### SWAMP MILKWEED Asclepias incarnata



- Larval host plant for many butterfly species, including Monarch
- Deer- and rabbit-resistant
- Attracts pollinators



#### **COMMON DAYLILY** *Hermerocallis fulva*



- Forms dense patches that outcompete other garden plants
- Re-sprouts from root fragments

#### **PURPLE LOOSESTRIFE** *Lythrum salicaria*



- Aggressive invader of wetlands
- May clog inflows and outflows resulting in increase flooding risk

#### YELLOW FLAG IRIS

Iris pseudacorus



- Readily escapes gardens
- Displaces native wetland plants important for waterfowl and amphibians
- All parts are poisonous



#### BUTTERFLY MILKWEED Asclepsias tuberosa



- Showy orange flowers
- Monarch butterfly larval host plant
- Attracts Hummingbirds and butterflies

#### OBEDIENT PLANT Physostegia virginiana



- Enthusiastic seeder and forms colonies
- Purple flowers are frequented by many pollinators

#### BLAZING STAR Liatris spicata



- Unique purple flowers
- Seeds attract birds in winter
- Pollinator and Hummingbird favorite

#### BLUE VERVAIN Verbena hastata



- Blue-purple small flowers in summer through fall
- Seeds are good food source for birds in fall

#### BLUE FLAG IRIS Iris versicolor



- Prefers wet-moist soils
- Deep blue-purple flowers with arching leaves
- Can be grown in several inches of standing water

#### **ROSE MALLOW** *Hibiscus moscheutos*



- Huge disc flowers, varied bloom colors
- Long bloom time in summer
- Deer- and rabbit- resistant



### EXOTIC BARBERRY

Berberis thunbergii



- Acts as a "nursery" for ticks
- Noxious weed
- Banned for sale in PA as of 10/2023





- Noxious weed
- Banned for sale in PA; grace period through 1/2025
- Spreads rapidly by suckers

# BURNING BUSH

Euonymus alata



- Noxious weed
- Banned for sale in PA; grace period through 1/2025
- Spreads prolifically through seeds



#### INKBERRY HOLLY Ilex glabra



- Compact, upright evergreen shrub with 4-season interest
- Red berries add winter interest and attract birds

#### BAYBERRY Myrica pensylvanica



- Good for natural privacy screening or in garden
- Fruit adds winter interest and attracts birds
- Semi-evergreen

#### RED CHOKEBERRY Aronia arbutifolia



- Brilliant red fall foliage
- Berries attract birds
- White spring flowers attract pollinators
- Unique bark

#### **NEW JERSEY TEA** *Ceanothus americanus*



- Compact native shrub
- Early spring white blooms
- Attracts Hummingbirds and pollinators
- Great for slopes

#### SPICEBUSH Lindera benzoin



- Early spring yellow blooms
- Yellow fall foliage
- Bright red fruit attracts birds

#### NINEBARK Physocarpus opulifolius



- Attracts butterflies and other pollinators
- Long-lasting fruit loved by birds
- Exfoliating bark



### EXOTIC SPIREA

Spiraea japonica



- Highest invasive threat level
- Forms monocultures
- Seeds last in soil for many years

#### **DOUBLEFILE VIBURNUM** *Viburnum plicatum*



- High maintenance needs
- Labor-intensive and costly to remove
- Spreads rapidly by seed and suckers

#### AUTUMN OLIVE

Elaeagnus umbellata



- Allelopathic traits impact other garden plants
- Spreads rapidly via suckers and around 200,000 seeds per plant per year



#### STEEPLEBUSH

Spiraea tomentosa



- Clusters of pink flowers attract butterflies
- Tolerates clay soil
- Exfoliating bark
- Deer-resistant

#### NANNYBERRY Viburnum lentago



- Showy white flowers
- Fruit attracts birds
- Attracts pollinators
- Larval host plant for over 100 butterflies and moths

SWEET PEPPERBUSH Clethra alnifolia



- Fragrant summer blooms
- Blooms in heavy shade
- Flowers attract butterflies and other pollinators
- Fruit attracts birds

#### VIRGINIA SWEETSPIRE Itea virginica



- Long tassels of fragrant, showy white flowers attract pollinators
- Tolerates clay soil
- Low-maintenance

#### BLUE FALSE INDIGO Baptisia australis



- Shrub-like perennial with stunning blue/purple flowers
- Strong specimen plant
- Attracts pollinators

#### BLACKHAW VIBURNUM Viburnum prunifolium



- Blue-black berries follow showy white flowers
- Red-purple fall foliage
- Songbirds love fruit
- Dry-moist soils



# BRADFORD PEAR

Pyrus calleryana 'Bradford'



- Fast-growing with weak trunk creates property damage hazard
- Scent of flowers is unpopular

**NORWAY MAPLE** *Acer platanoides* 



- Dense canopy with shallow roots makes it difficult for anything to grow underneath
- Readily self-sows





- Short-lived (10-20 years)
- Prolifically reproduces
- Seeds are toxic to dogs
- Outcompetes other garden plants



#### FLOWERING DOGWOOD Cornus florida



- Iconic showy white flowers in spring
- Red fruit attracts birds
- Scarlet to purple fall foliage

#### **REDBUD** *Cercis canadensis*



**Trees** 

- Brilliant pink early spring blooms
- Good specimen tree
- Attracts Hummingbirds, songbirds, and pollinators

#### RED MAPLE Acer Rubrum



- Brilliant fall color
- Important food source and nesting habitat for birds
- Fast-growing and hardy

### SWAMP WHITE OAK Quercus bicolor



- Extremely high wildlife value
- Smaller oak, suitable for many spaces
- Interesting bark

#### SHADBLOW SERVICEBERRY Amelanchier canadensis



- Early spring blooms attract pollinators
- Birds and people love the edible berries
- Bronze fall foliage

#### FRINGETREE Chionanthus virginicus



- Ornamental small tree with fragrant, unique flowers
- Berries attract birds
- High pollinator value

# ABOUT AUDUBON SOCIETY OF WESTERN PENNSYLVANIA

Audubon Society of Western Pennsylvania (ASWP) is an environmental education and conservation engagement organization serving Pittsburgh and the surrounding region. Our mission is to connect the people of southwestern Pennsylvania to birds and nature through our programs, projects, and places. Our nature centers and reserves—Beechwood Farms Nature Reserve, Buffalo Creek Nature Park, Succop Nature Park, and Todd Nature Reserve—offer over 12 miles of trails through more than 600 tranquil acres that provide an oasis for individuals, families, and groups to explore and reconnect with nature at their own pace.

ASWP works with individuals, public, nonprofit, and private entities to improve habitats across southwestern Pennsylvania through initiatives such as the Certified Backyard Habitat and Bird-Friendly Community Recognition programs. Please visit aswp.org or call (412) 963-6100 to learn more.

#### NATIVE PLANT NURSERY

Opened in 2000, ASWP's Native Plant Nursery is the region's largest provider of western Pennsylvania native perennials. The nursery is open to the public and staff are onsite to help purchasers choose the right plant for their location—be it sun or shade, dry or wet. The nursery has successfully propagated hundreds of plant species—visit aswp.org for a list of species we expect to have available during the planting season of April-October. Landscapers, nonprofit organizations, and municipalities are eligible for a 20% discount on plants.

Volunteer support helps us to grow and care for thousands of native plants each year, primarily from hand-collected seed. Visit us from May through October to explore our selection of native perennials, shrubs, and trees.

Contact ASWP for assistance with incorporating native plants and eliminating invasive species in your retail nursery operations, landscape designs, neighborhood parks, or habitat management efforts.



#### **HEADQUARTERS**:

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