



Landscaping to Create Backyard Bird Habitat



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The diversity of wildlife in New Jersey is tremendous, including more than 400 species of birds. Landscaping and gardening to attract birds is an increasingly popular activity. In an ever-changing environment, factors such as rapid development, resulting in modified landscapes and suburban sprawl, have contributed to the decline of many species of wildlife, especially birds. As habitats become fragmented and degraded, predation increases and suitable breeding habitat may be lost. By including certain plants in their landscapes, homeowners can offer birds nesting sites, hiding places from predators, shelter from harsh winter weather, and a year-round natural food source. If the proper habitat types are present, backyards can provide an exciting opportunity to view the amazing diversity of bird (and other wildlife) species found in the Garden State. This publication will assist homeowners in attracting New Jersey's birds to their yards by offering suggestions in creating backyard bird habitat.

Basic needs of wildlife:

All wildlife species, (including birds) need food, water, cover, and space. These four components, collectively known as habitat, are essential for survival. Different species have different habitat requirements, but as a general rule of thumb, the greater the habitat diversity, the greater the bird diversity.

Food: Birds receive energy and nutrients from the foods they eat. Every bird species has its own nutritional requirements that often change from season to season and as the bird matures. Plants included in the landscape may supply fruits, berries, grains, seeds, nuts or nectar. Homeowners should learn the food preferences of the birds they wish to attract and plant accordingly.

Water: Water is essential for all forms of life and can be a factor in determining which species of birds are attracted to a backyard. A stream, pond, or birdbath will attract many species, especially if the water is dripping, moving, or splashing. Preserve any naturally occurring wetland habitat on your property. Digging a small hole and installing a preformed plastic pool will easily create an artificial wetland area to attract birds. Heated birdbaths can be inviting during the winter months when other sources of water are frozen.

Cover: Birds need places where they can escape from predators and harsh weather, rest, build nests, and raise their young. Trees, shrubs, tall grasses, flowers, brush and rock piles, and standing dead trees (snags) offer shelter. Snags provide cavities for nesting and roosting, in addition to perches for larger birds, and are excellent components of any backyard habitat where safety and feasibility permit.

Space: All birds need a certain amount of space, both vertical and horizontal. Many species are territorial and defend the spaces in which they find food, water, cover, and mates. Species that are not territorial still rely on a given amount of space to find the necessities for survival. The amount of space a bird requires depends on the species, time of year, and quality of the habitat. Your property may not be sufficient in and of itself to provide all of a bird's needs, but much can be done with landscaping to increase the likelihood that your property will be a regular stop for many species of birds.

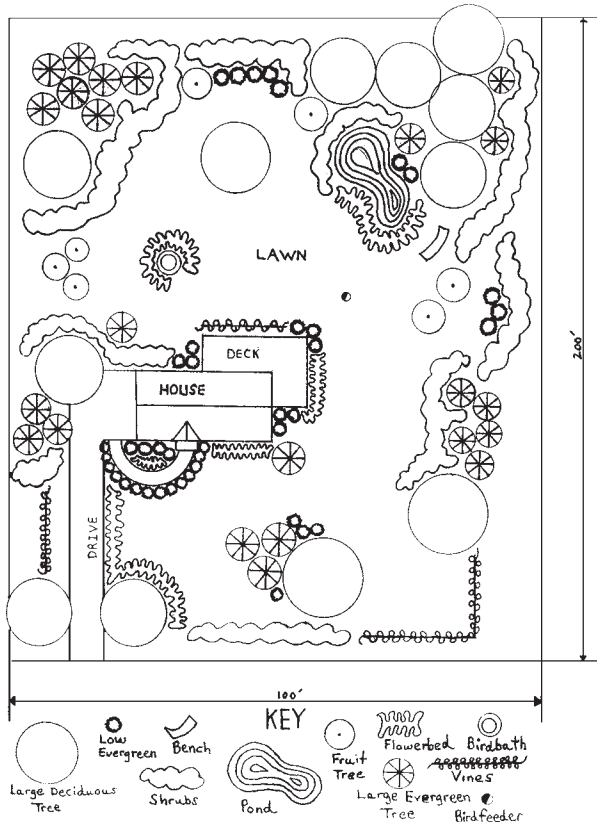
Utilizing native plants to impart the above necessities will ultimately save time and money, and yield the best results. Native plants occur naturally in the landscape, are adapted to survive the conditions of a particular area, and require



little care to thrive. Since native birds and native plants have evolved together, they are a “natural” fit and often depend on each other for survival. Observing what grows in the fields, forests, and wetlands of the areas surrounding your home, as well as consulting with local native plant nurseries and your county Cooperative Extension agent, can supply the information needed for a successful native planting.

Steps to landscaping for backyard bird habitat:

- Decide which birds you would like to attract. A bird identification book will describe which species are common to your area and what type of habitat is needed.
- Inventory the vegetation on your property and in the surrounding areas and begin to design your new landscape.
- Draw a map of your yard to determine available space including buildings, driveways, septic tanks, power lines, and existing trees, shrubs, and plants, noting the components that already exist and those needed (an example drawing is included).
- Determine the food, water, cover, and space requirements for the birds you wish to attract.



- If interested in native plantings, observe the vegetation that naturally grows in your area; consult native plant nurseries and your county Cooperative Extension agent for help with plant selection.
- Develop a landscaping plan, taking care to draw all plants at their mature sizes to account for spacing needs.
- Decide how much money you are willing to spend, keeping in mind that the planting can be installed in stages over several years.
- Buy plants at local plant nurseries and implement your plan.
- Maintain your newly created backyard bird habitat by watering, pruning, mulching, weeding, and mowing as need.

Homeowners can obtain information on creating wildlife habitat and become certified in the National Wildlife Federation’s “Backyard Wildlife Habitat Program,” by accessing www.nwf.org/education/.

Types of plants to consider when creating bird habitat:

Conifers (evergreens): Trees and shrubs such as pines, spruces, firs, junipers, and cedars provide cover from predators, shelter from harsh weather, summer nesting sites, and food (insects, seeds, fruit).

Nut and Acorn Producing Plants: Deciduous trees such as oaks, hickories, butternuts, and walnuts provide cover, summer nesting sites for birds that live in a tree’s canopy, and a supply of nuts, acorns, seeds, and insects for food.

Grasses and Legumes: When left un-mowed, grasses and legumes offer seeds for many birds and shelter for ground nesting birds (and butterflies). They also provide insects, nectar, and fruit.

Nectar-Producing Plants: Nectar-producing plants, especially those that display trumpet shaped red flowers, are effective in attracting hummingbirds. Vines provide winter shelter, summer nesting sites, nectar, and fruit.

Ornamentals: Ornamentals are plants utilized for their particularly beautiful form, color, foliage, bark, or fruit. They provide summer nesting sites, in addition to insects and fruit during the summer, fall, and winter months.

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Large Trees							
Species	Mature Size	Food Quality	Season Food Produced	Cover	Nesting	Growing Conditions	Additional Remarks
black cherry (<i>Prunus serotina</i>)	60-100ft+	Excellent	Fall	Fair	Fair	Average soil conditions, sun	Fast growing, fruit can be used for wine and jelly
red oak (<i>Quercus rubra</i>)	60-100ft+	Good-excellent	Fall and winter	Fair	Fair	Variable soils	One of the fastest growing oak species, good shade tree, birds feed on acorns and insects attracted to oaks
white oak (<i>Quercus alba</i>)	60-100ft+	Good-excellent	Fall and winter	Fair	Fair	Variable soils	Slow-growing, long lived, good shade tree, birds feed on acorns and insects attracted to oaks
white pine (<i>Pinus strobus</i>)	60-100ft+	Fair	Winter	Good	Good	Variable soils	Evergreen, not much food produced
yellow birch (<i>Betula alleghaniensis</i>)	60-100ft+	Good	Late winter	Fair	Fair	Good soils	Good for attracting finches
Low-Medium Size Trees							
Species	Mature Size	Food Quality	Season Food Produced	Cover	Nesting	Growing Conditions	Additional Remarks
chokecherry (<i>Prunus virginiana</i>)	10-30ft+	Excellent	Summer	Fair	Fair	Light, good soils, sun	Easily transplanted and birds are attracted to berries that can also be used for jams, pies, and wine
crab apple (<i>Malus spp.</i>)	10-60ft	Fair	Winter	Good	Good-fair	Average soils, sun	Attractive in winter, prone to disease
Eastern red cedar (<i>Juniperus virginiana</i>)	30-60ft	Excellent	Winter	Excellent	Excellent	Light soils, sun	Tolerant to adverse conditions and poor soils, useful as living fence or windbreak, attracts many birds, especially waxings
pin or fire cherry (<i>Prunus pennsylvanica</i>)	10-30ft	Excellent	Summer	Fair	Fair	Average soils, sun	Ornamental
serviceberry (<i>Amelanchier spp.</i>)	10-30ft	Excellent	Summer	Fair	Fair	Average soils, moisture	One of the first trees to flower in spring, flowers greatest in fall

Tall Shrubs

Species	Mature Size	Food Quality	Season Food Produced	Cover	Nesting	Growing Conditions	Additional Remarks
arrowwood (<i>Viburnum dentatum</i>)	11-20ft+	Good	Late summer, early fall	Good	Good	Moist soils	Fast growing
nannyberry (<i>Viburnum-lentago</i>)	11-20ft+	Good	Late fall, winter	Good	Good	Moist soils	Produces clusters of black fruits
common elder (<i>Sambucus Canadensis</i>)	11-20ft+	Excellent	Late summer, early fall	Good	Good	Moist soils	Produces large quantity of food

Medium Shrubs

Species	Mature Size	Food Quality	Season Food Produced	Cover	Nesting	Growing Conditions	Additional Remarks
Alleghany blackberry (<i>Rubus alleghaniensis</i>)	6-10ft	Excellent	Summer and fall	Fair	Fair	Average soils, sun	Difficult to handle
black chokeberry (<i>Aronia melanocarpa</i>)	6-10ft	Good	Fall	Fair	Fair	Good soils, wet or dry	Ornamental
red chokeberry (<i>Aronia arbutifolia</i>)	6-10ft	Good	Fall	Fair	Fair	Good moist soils	Ornamental
Rugosa rose (<i>Rosa rugosa</i>)	6-10ft	Excellent	Fall and winter	Fair	Fair	Average soils, well drained, sun	Ornamental, salt tolerant
silky dogwood (<i>Cornus amomum</i>)	6-10ft	Good	Fall	Fair	Good	Average moist soils	Many birds are attracted to the fruit

Low Shrubs							
Species	Mature Size	Food Quality	Season Food Produced	Cover	Nesting	Growing Conditions	Additional Remarks
black raspberry (<i>Rubus occidentalis</i>)	1-5ft	Excellent	Summer and fall	Fair-poor	Fair-poor	Indifferent, well drained	Attracts many birds
red raspberry (<i>Rubus idaeus</i>)	1-5ft	Excellent	Summer and fall	Poor	Poor	Indifferent	Attracts many birds
meadow or smooth rose (<i>Rosa blanda</i>)	1-5ft	Good	Winter	Fair-poor	Fair	Average soils	Attractive flowers
Virginia rose (<i>Rosa virginiana</i>)	1-10ft	Good	Winter	Fair	Fair-good	Average moist soils, sun	Fruits maintain color throughout winter
Vines							
Species	Mature Size	Food Quality	Season Food Produced	Cover	Nesting	Growing Conditions	Additional Remarks
grapes (<i>Vitis spp.</i>)	N/A	Excellent	Fall and winter	Good	Fair	Indifferent	Grows on fences
Trumpet creeper (<i>Campsis radicans</i>)	N/A	Excellent	Summer	Fair	Poor	Average soils, sun	Humming-birds feed on nectar produced by flowers
Virginia creeper (<i>Parthenocissus-quinquefolia</i>)	N/A	Excellent	Fall and winter	Fair	Fair	Average soils	Clings to walls

Summer-Fruiting Plants: Plants producing fruits or berries from May through August, such as chokecherry, raspberry, blackberry, and blueberry, can provide soft mast for many birds.

Fall-Fruiting Plants: Shrubs and vines, with fruit that ripens in fall, such as *Viburnum* species, can serve as an important food source for fall migratory birds, as well as residents that need to store fat to make it through the winter months. These plants can also provide cover and nesting sites.

Winter-Fruiting Plants: Plants such as crabapple and Virginia creeper retain their fruit through the winter, pro-

viding a convenient food source to birds that over-winter in New Jersey.

Summary

Creating backyard bird habitat is an effective way to attract many of New Jersey's bird species. By providing nesting sites, shelter, and a year-round supply of food, homeowners may enjoy birding from the comfort of their homes by ensuring regular visits from their favorite birds. For more information contact your local Rutgers Cooperative Extension Agent. Listings can be found in the blue pages of your local phonebook.

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