

Bird-friendly Gardens

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Springdale Estates Garden Club,

Raleigh, NC

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Food



Shelter



Water



What do
birds
need?

Water



GardeningWithAngus.com.au

Natural Pond with Native Plants, note shallow end

Water



Water features can be quite simple.

Empty every 3-5 days to prevent mosquito breeding, and scrub once in a while to prevent algal growth

Water



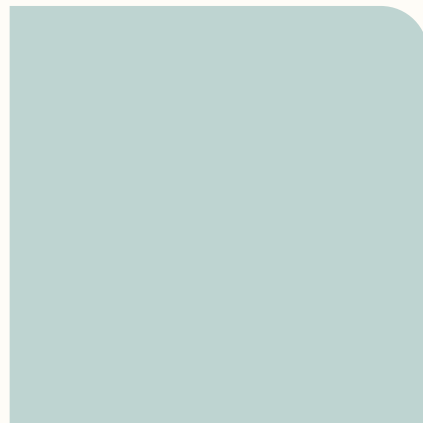
Anne Schauss / Santa Fe New Mexican

Birdbath Heater



HomeSprout

Birdbath Pump, Drips, and "Water-wigglers"



Food &
Shelter



Plant Native!



Advantages of Native Plants

- Less fragmented wildlife habitat
- More food
 - Diverse insect communities, especially caterpillars!
 - Not toxic to native wildlife
- Reduce water usage (especially if you increase planting & reduce lawn)
 - Drought-resistant, adapted to local conditions
- Reduce herbicide & pesticide use
 - Natural predators to control insects, etc. (birds!)
- Reduce maintenance

<https://www.audubon.org/news/why-native-plants-are-better-birds-and-people>



Some Recent Research...

- **“In areas made up of less than 70 percent native plant biomass, Carolina chickadees will not produce enough young to sustain their populations. At 70 percent or higher, the birds can thrive. (Desirée Narango)”**
 - Ecologists Have this Simple Request to Homeowners—Plant Native
Read more: <https://www.smithsonianmag.com/smithsonian-institution/ecologists-have-simple-request-homeownersplant-native-180970655/#pHZVUL7kzmSSIH5x.99>
- Original Paper: Nonnative plants reduce population growth of an insectivorous bird. 2018. Desirée L. Narango, Douglas W. Tallamy, and Peter P. Marra. PNAS November 6, 2018 115 (45) 11549-11554
 - <http://www.pnas.org/content/115/45/11549>

Exotics Can Kill



- *Nandina domestica*
- Nandina, Heavenly Bamboo, Sacred Bamboo
- USDA: noxious, invasive weed
- Berries contain cyanide & other alkaloids that produce hydrogen cyanide

<http://ar.audubon.org/news/nandina-berries-kill-birds>

<https://decaturish.com/2017/03/invasive-bushes-in-decatur-killing-cedar-waxwings/>

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Exotics Can Kill

- *Taxus cuspidata*, *Taxus baccata*, *Taxus x media*
- **Japanese Yew**,
English Yew, hybrids,
(there are some natives)
- Leaves & berries highly
toxic! – esp Japanese
Yew

<https://blog.nature.org/science/2017/03/22/is-your-landscaping-killing-wildlife/>

<https://www.idahostatesman.com/outdoors/article124538034.html>



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- see linked YouTube video for details (has transcript)

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<https://youtu.be/yOOah0wtsT0>

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<https://www.cbsnews.com/news/bears-likely-killed-from-eating-poisonous-plant-in-pennsylvania/>

Plant-based Foods for Birds

Fruit

Nectar

Nuts

Seeds

Caterpillars

Butterflies

Fruit...exotics



Fruit



American Beautyberry
Callicarpa americana



American Pokeweed
Phytolacca americana



Fruit



(Smooth) Highbush Blueberry
Vaccinium corymbosum



Southern Highbush Blueberry
Vaccinium formosum

Who Likes Fruit?



Eastern Bluebird (female)



Gray Catbird

Who Likes Fruit?



Black-throated Blue Warbler



American Robin

Who Likes Fruit?



Red-bellied Woodpecker



Blue Jay



Northern Cardinal

Flowers...exotics



Callery Pear var. 'Bradford'
& other cultivars
Pyrus calleryana

Country Boy 1949, CC-BY-SA-2.0 via
<https://plants.ces.ncsu.edu/plants/all/pyrus-calleryana/>



Multiflora Rose
Rosa multiflora

James H. Miller, USDA Forest Service, Bugwood.org, CCA-3.0
Inset: Rob Routledge, Sault College, Bugwood.org, CCA-3.0

Flowers...



Bradford (Callery) Pear
Pyrus calleryana



Multiflora Rose
Rosa multiflora

Flowers...and Fruit!



Missouri Botanical Garden Plant Finder



Courtesy Robert Smith, Lady Bird Johnson Wildflower Center



Courtesy Robert Smith, Lady Bird Johnson Wildflower Center

American Wild Plum
Prunus americana

Flowers...and Fruit!



Flowering Dogwood
Cornus florida

Flowers...and Fruit!



Black Raspberry
Rubus occidentalis



Sand Blackberry
Rubus cuneifolius



Whiplash (Common)
Dewberry
Rubus flagellaris

Who Likes Fruit?



Gray Catbird
with *Opuntia* (Prickly Pear) fruit



Baltimore Oriole

Who Likes Fruit?



Red-eyed Vireo eating Red
Mulberry (*Morus rubra*)



Summer Tanager eating American Black
Elderberry (*Sambucus canadensis*)

Who Likes Fruit?



Northern Flicker
(this is the western
Red-shafted
subspecies)
eating Toyon berries
(a California native
plant)

Foliage...exotics



Common Boxwood, Japanese Boxwood, etc.

Buxus sempervirens, *B. microphylla*, etc.



Japanese (Box-leaved) Holly
Ilex crenata (crenatum)

Foliage...exotics



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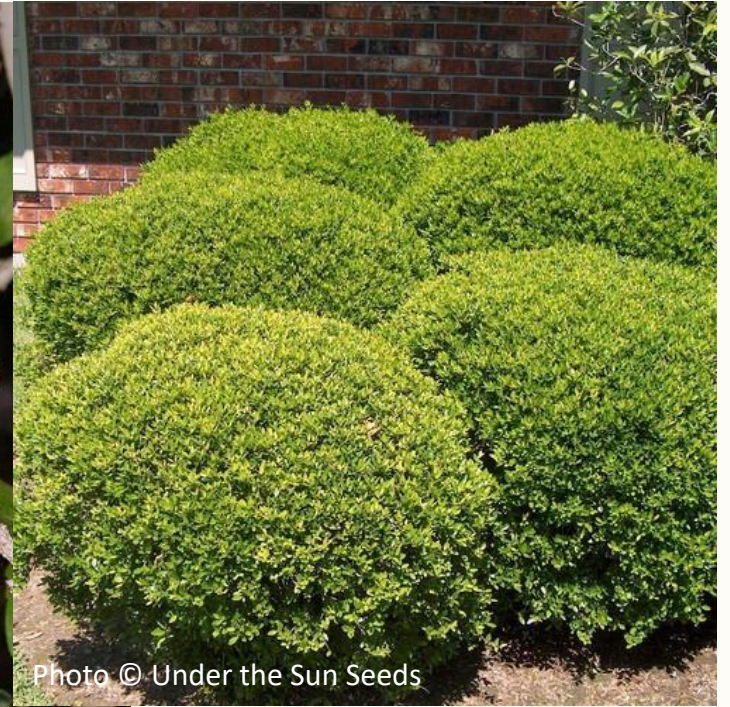


Japanese (Box-leaved) Holly
Ilex crenata (*crenatum*)

Foliage...and Fruit



Yaupon Holly
Ilex vomitoria



Dwarf Yaupon Holly
Ilex vomitoria "Nana"



Northern Mockingbird



Cedar Waxwing

Foliage and flowers...exotic



Photo by Oregon State University, Landscape Plants Guide



Photo by Darrell Barrell via Wikimedia Commons



Photo © Krzysztof Ziarnik - Own work, CC BY-SA 4.0, via Wikimedia Commons

Chinese Fringe Flower

Loropetalum chinense “Rubrum”, “Plum Delight,” “Ruby Snow” etc.

Foliage and flowers...exotic



Photo by Oregon State University, Landscape Plants Guide



Photo © Krzysztof Ziarnek - Own work, CC BY-SA 4.0, via Wikimedia Commons

Chinese Fringe Flower
Loropetalum chinensis, "Plum Den", "Ruby Snow" etc.

Foliage...and flowers



Sweetshrub (Carolina Allspice)

Calycanthus floridus (var. *purpureus* “Burgundy Spice”)

Left & Center: Typical “wild” form. Far right: a brand new, all-burgundy cultivar!
Both wild and cultivated forms have yellow-amber Fall color

Foliage...and Flowers



Virginia Sweetspire

Itea virginica “Henry’s Garnet” (and other cultivars)

Primarily Fall color, but there may be other cultivated varieties

Nectar...and other benefits



Cardinal Flower
Lobelia cardinalis



Butterfly Milkweed
Asclepias tuberosa



Pink Azalea
*Rhododendron
periclymenoides*

Such a small sampling of the many possibilities!

Nectar...and other benefits



Dense Blazing Star
(Prairie Gayfeather)
Liatris spicata



Trumpet (Coral) Honeysuckle
Lonicera sempervirens

Many cultivars of this vine, but this is the natural color!

Nuts, Seeds, etc.



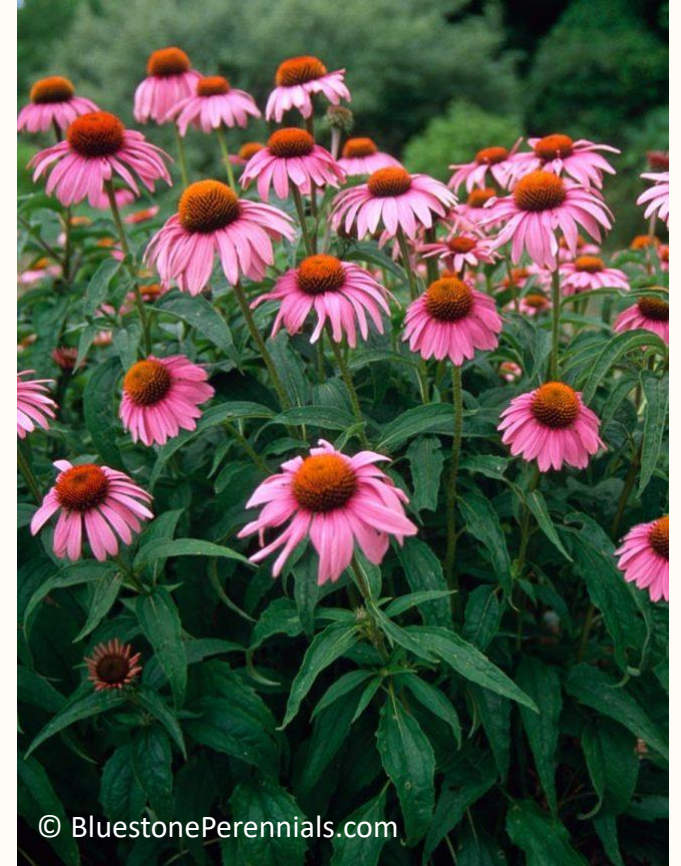
© Jen Borcic, via AnniesAnnuals.com

Hairawn Muhly
(Pink Muhlygrass)
Muhlenbergia capillaris



© Qwertzy2, CC BY-SA - 3.0 via Wikipedia

Lance-leaf Tickseed
Coreopsis lanceolata



© BluestonePerennials.com

Purple Coneflower
Echinacea purpurea

Many cultivars of muhly (white, yellow, etc), and many species & cultivars of the flowers

Who Eats Nuts & Seeds?



American Goldfinch



House Finch

*Finches tend to prefer small to medium seeds
(especially Asteraceae – daisies, thistles, tickseed, sunflowers, etc.)*

Foliage, Nuts, Seeds, etc....exotics



Arborvitae, *Thuja* species

Some native to N. Amer, but not to central NC

Autumn (Russian) Olive, Silverthorn
Elaeagnus species

Nuts, Seeds, etc.



Eastern Red Cedar
Juniperus virginiana

*Birds & mammals peel shreds of bark to
build nests!*

Nuts, Seeds, etc.



Wax Myrtle
(Southern Bayberry)
Myrica cerifera



Scented leaves! Trimmable into hedges (above), and many cultivars, including dwarf (left).

Who Eats Nuts & Seeds?



Yellow-rumped (Myrtle) Warbler
(winter plumage)

MYWA among few birds that can digest the thick waxy coating on wax-myrtle berries



Cedar Waxwing

Nuts, Seeds, etc.



American Beech
Fagus grandifolia

Birds and squirrels like to use the previous year's papery dried leaves for nesting material

Nuts, Seeds...and Caterpillars!



Hickories
Carya spp.



Oaks
Quercus spp.



Red Maple, Silver Maple
Acer rubrum, *A. saccharinum*



Too many to list here; be cautious — not all species in these genera are native to central NC

Who Eats Nuts & Seeds & Caterpillars?



Blue Jay



Tufted Titmouse



Brown-headed Nuthatch

A tiny sampling of species!

Caterpillars!



© Jenkins Arboretum

Musclewood
American Hornbeam
Carpinus caroliniana



© Hobby Seeds.com



Butterfly Gardens to Go.com



Bransford, W.D. and Dolphia via
wildflower.org

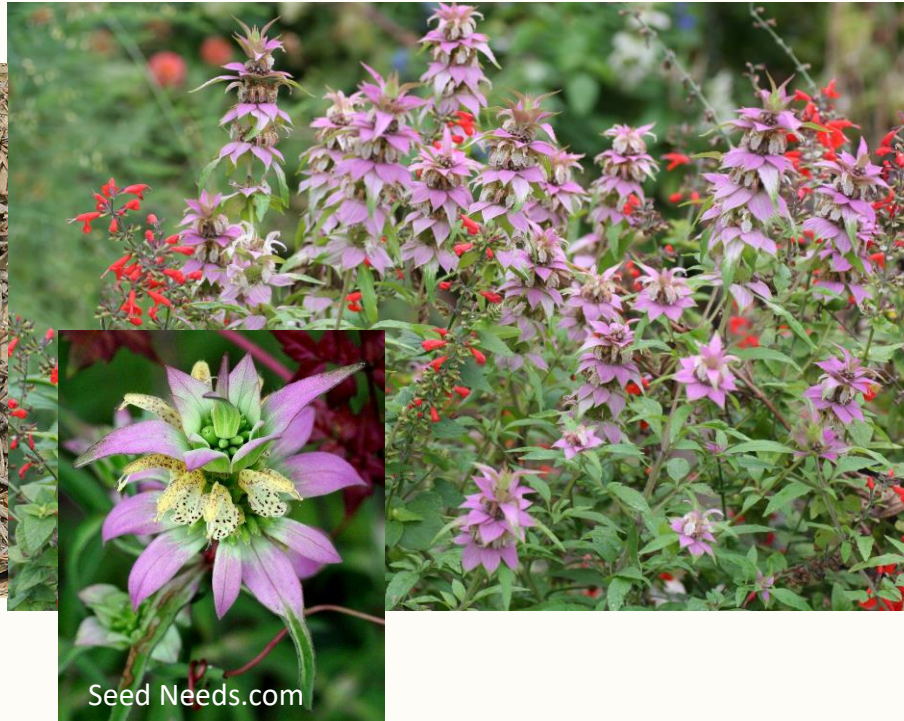
Anise-scented (Sweet) Goldenrod
Solidago odora

Caterpillars!



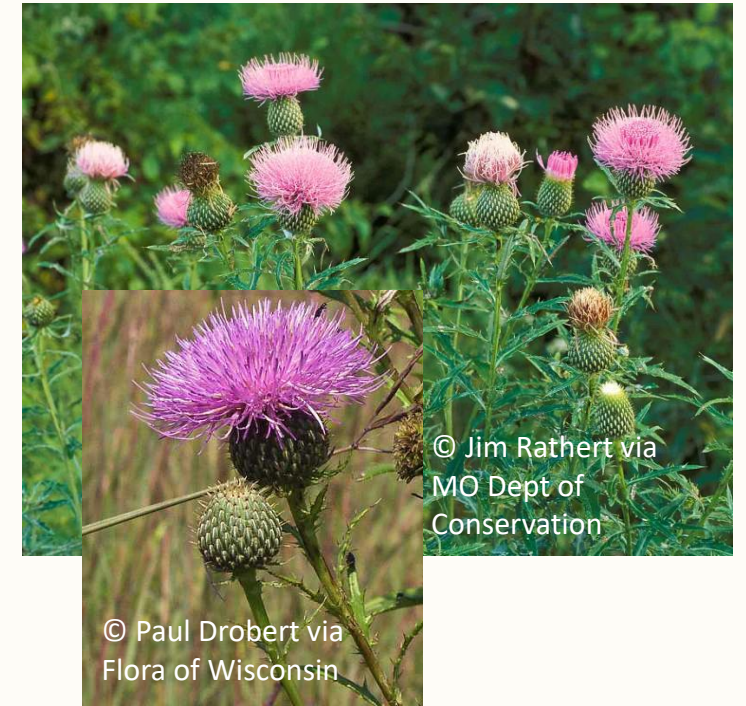
© Jim Stasz via MarylandBiodiversity.com

Bird's-foot Violet
Viola pedata



Seed Needs.com

Spotted Beebalm
Monarda punctata



© Jim Rathert via
MO Dept of
Conservation

© Paul Drobert via
Flora of Wisconsin

Tall Thistle
Cirsium altissimum

Seeds sold as "thistle" (aka Nyjer or Niger) are not from thistles, but an African daisy (seeds are similar)

Who Eats Caterpillars?



Carolina Wren

Nearly all songbirds switch to eating -- and feeding nestlings -- insects in summer, and caterpillars are a favorite of most!



Yellow-billed Cuckoo

This bird is a caterpillar specialist!

Bird-friendly Gardens Don't have to be big!

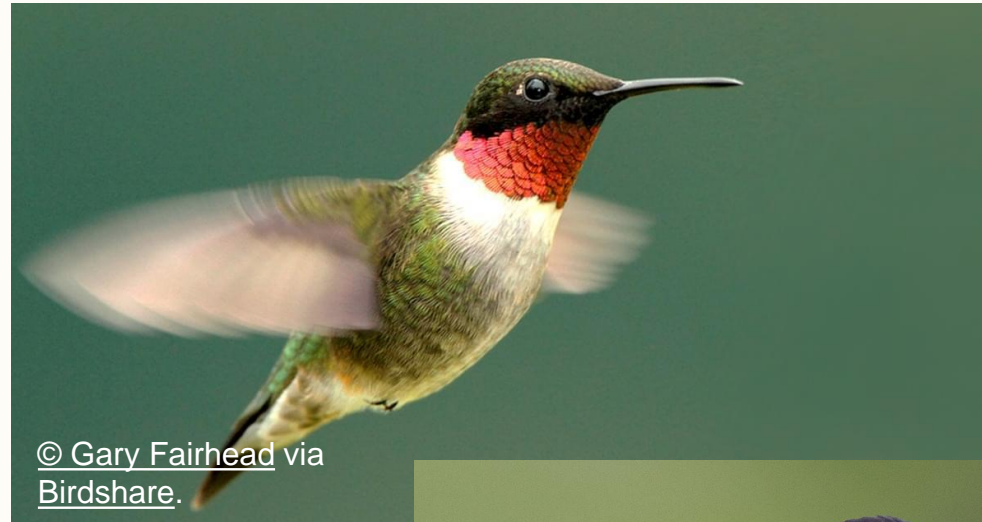


Photo by Elizabeth A. Farley-Dawson



Resources: Plants

- Audubon Article: Why Native Plants are Better for Birds & People
<https://www.audubon.org/news/why-native-plants-are-better-birds-and-people>
- Native Plants Database by Zip Code (National Audubon Society)
<https://www.audubon.org/native-plants>
- Vascular Plants of North Carolina
<https://auth1.dpr.ncparks.gov/flora/index.php>
- NC List of Bird-friendly Native Plants Retailers (Audubon North Carolina)
<http://nc.audubon.org/birdfriendlynativeplantsretailers>
- North Carolina Native Plant Society
<https://www.ncwildflower.org/>



Resources: Birds

All About Birds (Cornell Lab of Ornithology)

allaboutbirds.org

allaboutbirds.org/guide

Merlin Smartphone App
("easy" bird ID)

<http://merlin.allaboutbirds.org/>

Audubon Bird Guide

www.audubon.org/bird-guide

Audubon Birds Pro Smartphone App

<https://www.audubon.org/app>

Note: I used this for songs on the bird walk. Apparently it was updated (my phone is too old for the update) & recent reviews suggest it's not as good anymore. However, it's totally free!

Recommended Field Guides:

- National Geographic Field Guide to the Birds of North America, 7th ed (or newer)
- Sibley Field Guide to Birds of Eastern North America, 2nd ed