Creating Wildlife Gardens in Child Care

Benefits of Wildlife Gardens
- Creates dynamic outdoor classroom.
- Expands educational opportunities for teachers and children.
- Creates positive change in local environment.
- Supports children’s natural curiosity.
- Promotes children’s sense of stewardship and a sense of place.

Children and Wildlife
- Stimulate caring and responsible attitude toward other living things.
- Children will interact with, talk to, invest in emotionally.
- Requires supervision, management, policies.

Wildlife in Childcare Centers
In and around the outdoor space
- Birds
- Butterflies
- Small animals, amphibians, reptiles
- Fish, frogs, pond life
Creatures and Bugs

Row 1: Garden snail, Black White Orange Caterpillar, Worms, Grasshopper,
Row 2: Red-eared Turtle, Dragonfly, Orb Spider, Lady Bug

Ecosystem

- A whole community of living things, non-living elements, and their interrelationships.
- A complex, shared habitat.

What is Habitat?

- A place where species get what they need to survive.
- A plant or animal’s home.

Wildlife Habitat Basic Requirements

- Food
- Water
- Shelter
- Places to Raise Young

**Food**

- Use Native Plants for local and migrating wildlife.
- Natural Sources of Food
  - Foliage
  - Nuts, seeds
  - Fruit
  - Sap
  - Nectar, pollen
  - Roots
- Feeders are OK as supplemental sources of food.

**Water**

- For drinking, bathing, breeding.
- Sources
  - Bird baths
  - Streams, creeks, ponds
  - Lakes, rivers, coast
  - Wetlands
- Combination of sources.
- Change water frequently.

**Cover**

- Feeding, hiding, courting, nesting.
- Protective from the heat, cold, wind, rain and predators.
- Sources
  - Living and dead trees
  - Dense shrubs
  - Grasses
  - Rocks and brush piles
  - Constructed nesting boxes

**Places to Raise Young**

- Examples
  - Areas for nesting
  - Plants for butterfly larvae
  - Pond water for tadpoles
- Sources
  - Trees and bushes
  - Holes in the ground
  - Water and rain gardens
  - Host plants for caterpillars
Native Plants

All about the plants
- Promote diversity of plant species in our communities.
- Provide the best overall support for local wildlife species.
- Produce more pollen (bees), nectar (butterflies), seeds (birds).
- Require less water and overall maintenance.

Plant Selection
- Choose native plants.
- Choose plants to fit your site.
- Plan for summer.
- Interest in every season.
- Variety of textures and foliage.

NCSU Cooperative Extension
http://www.ncsu.edu/goingnative/index.html

Sustainable Gardening Practices
- Work in harmony with nature – environmentally friendly.
- Improve the health of the garden.
- Minimize negative impact on environment.
- Practices
  - Mulching to conserve moisture
  - Use native, drought-tolerant plants
  - Reduce/eliminate use of chemicals
  - Composting
  - Water conservation

Maintain Your Schoolyard Habitat

Regular and Ongoing Maintenance
- Watering
- Cleaning and Refilling
- Weeding
- Cleaning Feeders
- Maintaining compost pile

Involve students, parents, teachers and community
Let's Visit Some Wildlife Habitats

Simple Ways to Create Habitats
- Planter with native plants
- Bird baths
- Logs and rocks
- Dead Trees
- Fruit bearing shrubs
- Compost pile

Attracting Birds

Attracting Birds
- Flowers
- Trees
- Shrubs
- Grasses
- Feeders
BIRD BATHS

• Sloped sides, rough surface.
• Locate near bird cover.
• Change the water every few days.
• Keep the bath scrubbed clean.
• Running water and a drip or misting feature will increase the number of visitors.
• Water heaters will keep the water free of ice during winter months in colder climates.

Birds Nests

• Birds nest to raise their young.
• Natural sources
  – Ledges, trees, shrubs, ground,
• Supplemental sources — Nest Box, Gourds
  – 5 feet above ground
  – Ventilation and drainage holes

Butterfly Garden

• Choose a sunny location.
• Scented, colorful plants.
• Plant two types of plants
  – Host plants provide nutrition for hatched caterpillars
  – Nectar flowers for adult butterflies
• Flat rocks for resting places.
• Water for “puddling”.
• Avoid pesticides.

Plants to Attract Butterflies in NC

<table>
<thead>
<tr>
<th>Annuals</th>
<th>Perennials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alyssum</td>
<td>Asters</td>
</tr>
<tr>
<td>Marigold</td>
<td>Butterfly Bush</td>
</tr>
<tr>
<td>Salsia</td>
<td>Purple Coneflower</td>
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<tr>
<td>Sunflower</td>
<td>Black-eyed Susan</td>
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<tr>
<td>Zinnia</td>
<td>Phlox</td>
</tr>
<tr>
<td>Verbena</td>
<td>Milkweed</td>
</tr>
<tr>
<td>Snapdragon</td>
<td>Joe Pye Weed</td>
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</tbody>
</table>

Milkweed is attractive to all butterflies as a nectar food source, but only Monarch caterpillars can eat the plant.
**Top Ten Easy-to-Grow Perennials and Shrubs for Attracting Butterflies and Hummingbirds**

1. Butterfly bush Buddleja davidii  
2. Anise hyssop Agastache spp.  
3. Beebalm Monarda didyma  
4. Black-eyed Susan Rudbeckia hirta  
5. Cardinal flower Lobelia cardinalis  
6. Salvia Salvia greggi  
7. Liatris Liatris spicata  
8. Aster Aster spp.  
9. Yarrow Achillea millefolium  
10. Goldenrod Solidago spp.

Natural Learning Initiative, Green Desk Post on

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**Top Ten Easy-to-Grow Perennials, Shrubs and Trees for Attracting Birds to Children’s Gardens**

1. American beautyberry Callicarpa dichotoma  
2. Blueberry Vaccinium spp.  
3. Purple coneflower Echinacea purpurea  
4. Dogwood Cornus florida  
5. Cornelian Cherry Cornus mas  
6. Miscanthus Miscanthus sinensis  
7. Sunflower Helianthus annuus  
8. Sweetbay magnolia Magnolia virginiana  
10. Purple top verbena Verbena bonariensis

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**Sample Plans**

![Sample Plans](image)

**Butterfly Container Garden Ideas**

![Butterfly Container Garden Ideas](image)

PLANT LIST

- A. Pentas ‘Butterfly Red’
- B. 2 Penstemon ‘Prairie Dust’
- C. 2 Bee balm (Monarda ‘Peppermint’)
- D. 1 Butterfly bush (Buddleja davidii ‘Nectarine Blush’)
- E. 3 Coreopsis verticillata ‘Tera’
- F. 1 Salvia ‘Bollicio’
- G. 1 Daylily (Hemerocallis ‘Daydream’)

![Butterfly Container Garden Ideas](image)

Better Homes and Gardens (www.bhg.com)

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The Natural Learning Initiative  
College of Design | NC State University
Butterfly and Hummingbird Garden

Learning Activities in the Garden

Whole child development –
Literacy, math, science, language, social studies, geography, arts, dramatic play

- Bird watching
- Life cycles of butterflies
- Relationship between animals and plants
- Plant pollinators
- Wildlife safari
- Nature journals

Nature Detectives

- Jounaling.
- Scavenger hunt.
- Observation skills.
- Simple tools (magnifiers, binoculars, containers).
- Make predictions, record data, draw conclusions.
- Create schoolyard field guide.
- Teacher take photos.
- Create project approach to learning.

Place-Based Education: Connecting Classroom and Communities, David Sorbel

Children’s Books
Resources

- Project Wild (www.projectwild.org/GrowingUpWILD/htm)
- Nest boxes: http://migratorybirds.fws.gov/pamphlet/pamphlets.html;
- North American Bluebird Society (www nbrbluebirdsociety.org)
- http://www.audubonathome.org/schoolyard/
- http://www.ncsu.edu/gongnative/index.html
- North Carolina Botanical Garden
  http://ncbg.unc.edu/plants-and-gardening/

Children and Nature

“As a child, one has that magical capacity to move among the many eras of the earth; to see the land as an animal does; to experience the sky from the perspective of a flower or a bee; to feel the earth quiver and breathe beneath us.”

Valerie Andrews, A Passion for this Earth

Questions?

Check out the Green Desk
www.naturalearning.org