Gardening with Kids Basics

A Seasonal Gardening Toolkit for ECE Educators
The Scotts Miracle-Gro Foundation, National Head Start Association, and KidsGardening have joined together for the GroMoreGood National Head Start Garden Program Initiative to inspire and support the growth of garden programs in early childhood education settings, especially for the one million at-risk Head Start children and families across the country. Our mission is to bring the powerful, life-enhancing benefits of gardens to ECE centers to help combat some of the most pressing challenges facing today’s youngest generation by improving access to healthy food and increasing time spent outdoors connected to nature.

**National Head Start Association**
The National Head Start Association's mission is to coalesce, inspire, and support the Head Start field as a leader in early childhood development and education. We hold the belief that every child, regardless of circumstances at birth, has the ability to succeed in life. We are the voice for more than 1 million children, 275,000 staff, and 1,600 grant recipients in the U.S.

**Scotts Miracle Gro Foundation**
The mission of The Scotts Miracle-Gro Foundation is to inspire, connect, and cultivate a community of purpose. The Foundation is deeply rooted in helping create healthier communities, empower the next generation, and preserve our planet. The Foundation is a 501(c)(3) organization that funds non-profit entities that support its core initiatives in the form of grants, endowments, and multi-year capital gifts.

**KidsGardening**
KidsGardening has been helping youth garden programs across the country thrive since 1982. We offer inspiration and support to educators and families by way of grants, original educational resources, and by cultivating a community of practice. Our mission is to create opportunities for kids to play, learn, and grow through gardening, engaging their natural curiosity and wonder.
TABLE OF CONTENTS

This toolkit contains resources to help educators and caregivers develop a thriving ECE garden program. It includes the following chapters:

4 Gardening with Young Children
6 Starting an Early Childhood Education Garden Program
8 Plants for the ECE Garden
10 In the Spring Garden
14 In the Summer Garden
18 In the Fall Garden
22 In the Winter Garden
26 Additional Lesson and Activity Resources
Gardening engages kids by providing a dynamic environment to observe, discover, experiment, nurture and learn. An adventure for all ages, the garden provides opportunities for young children to build strong connections with caring adults and their communities and can be found in many settings including child care centers, early childhood classrooms and at home.

Benefits of Gardening with Young Children

**Mental** – Garden activities offer practical, hands-on learning experiences that entice kids’ natural curiosity and wonder. Gardens are versatile teaching tools that can be used across all subject matters including with early literacy development, science exploration and math practice. Garden experiences also help build language and communication skills.

**Physical** - Gardening provides opportunities to hone gross and fine motor skills. The garden engages the senses allowing kids to gather perceptual information to understand the world around them. Fresh fruits and vegetables along with exercise tasks help young children establish positive health behaviors.

**Social and Emotional** - In the garden, young children can connect with nature and build relationships with their peers and caring adults. They can also learn techniques for self-regulation, express creativity, practice patience, and develop problem-solving skills. Taking on garden responsibilities can help grow self-confidence and pride. Garden activities have also been shown to reduce stress and bring joy to both kids (and adults too!).
Starting an Early Childhood Education Garden Program

Lay the foundation for a successful and sustainable youth garden program by following these steps:

1. **Gather Support**: Involve a wide variety of people in your garden program, including educators, administrators and staff, caregivers and family members, neighbors, and community volunteers, and don’t forget to include the kids, too! Establish a Garden Team with members from all interest groups and find ways to brainstorm and communicate efficiently and effectively.

2. **Identify Needs**: A successful and sustainable garden helps meet educational and organizational needs. Ask your team: Why do we want to plant a garden? Where do we want to plant the garden? How will we use the garden? What benefits do we want to achieve?

3. **Establish Goals**: Create clear goals for your garden and garden program. Your garden’s mission should complement existing organizational objectives. Make sure your goals are realistic and achievable. Consider implementing the garden in stages if needed.

4. **Design and Plan the Garden**: Gardens for young children must be safe and accessible... and also engaging and FUN! Design your garden spaces so everyone can enjoy them. Select hardscapes and plants that are hardy and easy to grow. Design around a theme can help inspire and guide your creativity.

5. **Obtain Supplies and Recruit Volunteers**: Choose tools and supplies that are developmentally appropriate, safe, and long-lasting. You can search for donations, apply for grants, attract sponsors, and hold fundraisers to gather necessary funds. Volunteers help support the garden through their time and energy and can be recruited from family members, older students, and community volunteer groups.

6. **Install the Garden**: Planting day is a time to work hard and celebrate. Spread the word and gather help when needed. Make sure to invest in preparing your soil before planting. Don’t forget to take lots of pictures to share with supporters!

7. **Maintain and Sustain Your Garden Program**: Using your garden regularly is key to sustaining it over the long run! Continue to highlight your work to keep existing and recruit new volunteers and support. Don’t forget to show appreciation for everyone who helps make your garden bloom!
Garden Spaces for Young Children

Gardens come in all shapes and sizes. A youth garden is a fun space created by kids and adults to engage in plant-focused exploration, educational activities and to have FUN! Here are a few different ways to grow a garden:

**Container Gardens:** Anything that will hold soil and has good drainage can be used to host a garden — cups, pots, buckets, wheelbarrows, baskets, even an old bathtub! Container gardens offer ample flexibility and mobility and can be scaled for any budget. Learn More: Consider Container Gardening.

**Raised Beds:** No soil? No problem! Raised beds can be used to hold soil for planting even over concrete and asphalt. Made from materials like rot-resistant wood, concrete blocks, or recycled plastic, beds are often 12-24 inches deep but can be adapted to best serve young gardeners. Learn more: Raised Beds 101

**In Ground Gardens:** Grass and existing landscaping can be cleared to create a space for seasonal gardens. Before planting in ground, it’s important to conduct a soil test to determine if you need to adjust the soil pH for optimal plant growth or correct any nutrient deficiencies. Learn More: How to Prepare your Soil for Planting.

**Indoor Gardens:** For schools with limited outdoor space or challenging weather conditions during the majority of the school year, windowsills and grow lights provide opportunity for year round garden activities. Hydroponics units can also provide an engaging indoor growing experience. Learn more: Indoor Gardening Basics.

If your center or school does not an optimal space for garden, consider partnering with:
- Other schools
- Community gardens
- Nonprofit organizations (i.e., YMCA, Boys and Girls Clubs)
- Government properties (libraries, parks, community centers, Extension offices)
- Botanical gardens or nature centers
- Neighbors/homeowners or local farms
Five Tips for a Successful ECE Garden Program

- Start small and dream big! Experience builds confidence and skill.
- Garden programs come in many different sizes and shapes - design your garden to fit to meet your needs and resources.
- Plan, plan and plan some more.
- Connect your garden with organizational goals and objectives.
- Involve the whole community in the garden (teachers, staff, families, neighbors and community members). The more the merrier!

Additional Resources

Growing Head Start Success with Farm to Early Care and Education
The National Farm to School Network has created this resource specifically for Head Start programs to show how farm to ECE can support performance standards and framework benchmarks.

Seeds of Success Toolkit
This KidsGardening resource provides in-depth planning support for your youth garden program.

Getting Started
The Center for Ecoliteracy and Life Lab offers this helpful publication with an overview of how to establish a school garden and outdoor classroom.

Growing Minds Farm to Preschool
Growing Minds Farm to Preschool Program shares an extensive collection of lesson plans, a farm to school preschool kit, and weekly resources designed for parents and families.

Rooted's Farm to Early Care and Education Resources
A collection of resources from Rooted in Wisconsin to help implement Farm to Early Care Education and garden programs.

NC State Natural Learning Initiative’s Green Desk
The Natural Learning Initiative provides extensive resources to help educators and families plan natural outdoor play spaces.
Plants for the ECE Garden

Plants in a garden for young children must be:

- **Safe.** Especially for young ones who like to explore with their hands and mouths.
- **Hardy.** To stand up to curious hands and running feet.
- **Easy to grow.** Time should be spent on adventures with kids, not on fussy plants. Choose plants well suited for your environment.
- **Fun!** Plants should engage the senses, offer seasonal interest, and attract fun garden critters like butterflies and ladybugs.

**Annuals**

Annuals are plants that complete their life cycle during one growing season; that is, they sprout from seed, blossom, set seed, and die within a short time. They are further divided into cool-season and warm-season annuals. Cool-season types, grow best when daytime temperatures are 60° to 70° F. Warm-season annuals grow best when daytime temperatures in the mid-70's through the 90's.

**Cool Season Annuals:**
- Calendulas
- Dill
- Lettuce
- Radishes
- Pansies
- Peas
- Snapdragons
- Spinach
- Swiss Chard

**Warm-Season Annuals:**
- Basil
- Bean
- Cosmos
- Cucumbers
- Nasturtiums
- Pumpkins
- Sunflowers
- Zinnias

**Perennials**

Perennials live for three or more years. Lifespans vary, with some lasting just a few years and others living for decades.

**Cool Season Perennials:**
- Coneflower
- Coreopsis
- Lamb’s Ear
- Lemon Balm
- Mints

**Warm-Season Perennials:**
- Monarda
- Salvia
- Strawberries
- Verbena

*For detailed plant descriptions check out: Plants for Prek Gardens

**Plants to Avoid**

Although every child needs to learn that some plants are not good to eat or touch, it is best to avoid poisonous plants or those with irritating characteristics like thorns in an ECE garden. An online database of poisonous plants is available in the North Carolina Extension Gardener Plant Toolbox.
Theme Gardens

Designing gardens around themes can help with plant selection and inspire creativity. Here are some theme garden ideas that are engaging for young children:

- **Alphabet Garden** - Incorporate plants whose names start with the different letters of the alphabet.

- **Butterfly Garden** - Include plants that will attract butterflies and other pollinators.

- **Book Garden** - Use a favorite children’s book to inspire your garden, like Peter Rabbit or Tops and Bottoms.

- **Dinosaur Garden** - Grow plants that were around when the dinosaurs were alive, like ferns and horsetail.

- **Giant’s Garden** - Plant varieties that will grow super big, like giant sunflowers that reach 15 feet in height and pumpkins that grow to 150 pounds.

- **Pizza Garden** - Grow all the ingredients to make a pizza, including tomatoes, wheat, basil, oregano, peppers, and onions.

- **Rainbow Garden** - Use plants whose flowers or leaves show off the different colors of the rainbow, including red, orange, yellow, green, blue, and purple.

- **Salad Garden** - Grow all the ingredients to make a tasty salad, like lettuce, carrots, radishes, and cucumbers.

- **Salsa Garden** - Grow all the ingredients to make your own salsa, including tomatoes, garlic, cilantro, and peppers.

- **Sensory Garden** – Select plants that engage your senses, such as plants with soft leaves or herbs with scented leaves.
In the Spring Garden

Where better to welcome and enjoy the season of spring than in the garden? Here are some ideas to help you dig into a new year of growing!

Plants for Spring Gardens:

Here are some great kid-friendly plant ideas for spring gardens:

- **Greens**: (lettuce, kale, spinach, and swiss chard)
- **Cole Crops**: (broccoli and cabbage)
- **Root Crops**: (beets, carrots, radishes, and turnips)
- **Beans and Peas**
- **Cucumbers**
- **Herbs**: (dill, mint, parsley, and chives)
- **Spring-blooming Annuals**: (pansies, calendulas, snapdragons, and petunias)

Spring Garden Chores:

Try these simple but fun spring garden chores with young children. Each can be adapted to meet your youth gardeners’ skill and developmental levels.

- **Plant seeds**: Whether inside or outside, spring is the perfect time to start many types of plants from seed. Kids will marvel as they watch the small rock-like packages change and grow.

- **Explore soil**: Before the plants take over, spring can be a good time to explore soil with kids and observe what life is like under our feet. You may even want to leave a bit of space in your garden to serve as a permanent digging bed.

- **Enjoy spring-blooming trees and shrubs**: Many trees and shrubs bloom in spring months, providing a spectacular, colorful show. If spring comes later in your area, you can also force blooms to open early by bringing them indoors and giving them a little warmth.

- **Build a pea or bean-covered fort**: Vining peas or bean plants and a few pole supports can be used to create a whimsical garden fort for kids to explore, play, read, or just hang out in. Peas, like **sugar snap peas**, are more cold-tolerant than many veggies and are great for lingering winter weather in the early spring. Beans do well in climates where warm weather arrives early in the season.

- **Catch the rain**: April showers bring May flowers. Spring rains help your garden grow. Make your own **rain gauge** and track the results. Talk with kids about the importance of water to all the living things in the ecosystem.
Spring Garden Activities:

- **Seed Viewers**: Use clear plastic cups to plant bean seeds so kids can closely observe each step of the germination process.

- **Plant People**: Make ‘hair’ using grass seed for a plant pal using pantyhose or funny face pots to bring some fun to the spring season.

- **Fun with Mud**: Have some squishy, squashy fun while you explore soil with all of your senses by making a mud pie, mud art, or a mud shake.

- **Make Seed Paper**: Recycle old paper to make wildflower seed paper to give to special friends on spring holidays like Valentine’s Day or Earth Day.

- **Paint Rocks**: Decorate your new garden with brightly colored rocks so kids can put a personal touch on your special space. Letter or word rocks can be created to encourage some pre-literacy activities.

Children’s Garden Book Recommendations

The garden is a great place to bring your favorite garden stories to life. Here are a few to complement your spring garden activities:

- **Flower Garden** by Eve Bunting

- **Little Seeds (My Little Planet)** by Charles Ghigna

- **Plant the Tiny Seed** by Christie Matheson

- **Lola Plants A Garden** by Anna McQuinn

- **Bloom Boom!** by April Pulley Sayre
# Spring Garden Scavenger Hunt

Mark the box of each springtime item that you find! Turn your hunt into springtime bingo by seeing who can find every item in a column, row, or diagonal first.

<table>
<thead>
<tr>
<th>Butterfly</th>
<th>Seeds</th>
<th>Leaf</th>
<th>Blossoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worm</td>
<td>Grass</td>
<td>Ladybug</td>
<td>Puddle</td>
</tr>
<tr>
<td>Caterpillar</td>
<td>Bunny</td>
<td>Sun</td>
<td>Bee</td>
</tr>
<tr>
<td>Bird/ Nest</td>
<td>Snail</td>
<td>Flowers</td>
<td>Clouds/ Rain</td>
</tr>
</tbody>
</table>
Spring Garden Journal

Draw your Spring Garden!
In the Summer Garden

Have some fun in the sun with a summertime garden! The summer season is for adventures, games, and learning through play.

Plants for Summer Gardens:

Here are some great kid-friendly plant ideas for summer gardens:

- **Beans**
- **Cherry tomatoes***
- **Peppers** (mild)
- **Squash and Zucchini**
- **Herbs** (mint, basil, dill, cilantro)
- **Radishes**
- **Spring-blooming Annuals** (zinnias, cosmos, sunflowers, salvia)

*Tomato leaves are poisonous if consumed in large quantities. Cherry tomatoes are a garden favorite, but best for young gardeners who will not consume the leaves of all plants.

Summer Garden Chores:

Try these simple but fun summer garden chores with young children. Each can be adapted to meet your youth gardeners’ skill and developmental levels.

- **Water the garden**: Young children **love to water**! To make sure plants do not get too much water love, ask your gardeners to water in areas where you have well-draining soil and use small watering cans.

- **Plant a container garden**: You can plant a **container garden** in anything that can hold soil and allows for water to drain – buckets, old shoes, toys – let your young gardener’s imagination soar. A container garden can provide kids with a little space to design and care for all on their own.

- **Observe pollinators**: **Pollinators** are a special group of animals that help plants make their fruits and seeds as they travel from flower to flower in search of nectar and pollen. Take time to look for pollinators busy in your garden like bees, butterflies, and birds. Add a few blooming plants to garden beds and your landscape to create a pollinator-attracting buffet.

- **Plant a sunflower house**: Create a **living play house using sunflowers** as the walls. It is the perfect space for quiet reading or an afternoon tea party.

- **Build a compost bin**: Whether you build a **traditional compost bin outdoors** or a **worm bin indoors** (in some areas of the country, you can also set up a worm bin outside, too), teaching young children how to compost food scraps and garden waste is an important and fun environmental lesson.
Summer Garden Activities

- **Make a Plant Parts Salad**: Harvest fruits and vegetables from the garden or visit a local Farmer’s Market or grocery store to make a Plant Parts Salad that includes edibles representing all the parts of a plant (roots, stems, leaves, flowers, fruit, and seeds). If you want to get a little more creative, let them use their fruits and veggies to make edible art.

- **Design Garden Suncatchers**: Here comes the sun! Press some summer flowers or harvest fresh petals and leaves and use them to make garden suncatchers using jar lids and clear contact paper.

- **Build a Garden Art Box**: Use an old shoe box, clipped pictures from magazines or seed catalogs, and some clear contact paper to make your own garden art box. Fill it with craft materials like a garden journal, crayons, pencils, paint, and chalk that you can take out to create masterpieces in the garden.

- **Engage in Small World Play**: Gather a collection of figurines, natural materials (i.e., stones, pinecones, leaves, flowers, seed pods), and craft supplies (i.e., yarn, raffia) and encourage kids to act out stories and engage in imaginative play.

- **Craft a Pollinator Water Station**: Just like people, pollinators need water, too. Help keep your pollinator friends hydrated in the hot summer sun by building a pollinator water station.

**Children’s Garden Book Recommendations**

The garden is a great place to bring your favorite garden stories to life. Here are a few to complement your summer garden activities:

- **The Thing About Bees** by Shabazz Larkin
- **Errol’s Garden** by Gillian Hibbs
- **Bea’s Bees** by Katherine Pryor
- **Rainbow Stew** by Cathryn Falwell
- **Sunflower House** by Eve Bunting
- **Green Green: A Community Gardening Story** by Marie Lamba
Summer Garden Scavenger Hunt

Mark the box of each summertime item that you find! Turn your hunt into bingo by seeing who can find every item in a column, row, or diagonal first.

<table>
<thead>
<tr>
<th>Butterfly</th>
<th>Hummingbird</th>
<th>Dragonfly</th>
<th>Worm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rocks</td>
<td>Grass</td>
<td>Ladybug</td>
<td>Water</td>
</tr>
<tr>
<td>Inch Worm</td>
<td>Dandelion</td>
<td>Sun</td>
<td>Bee</td>
</tr>
<tr>
<td>Grasshopper</td>
<td>Ant</td>
<td>Flowers</td>
<td>Watering Can</td>
</tr>
</tbody>
</table>
Summer Garden Journal

Draw your Summer Garden!
In the Fall Garden

Cool nights, but warm days keep many gardens growing into the fall. A time of harvest celebrations and dazzling autumn color, fall is a great time to garden with young children.

Plants for Fall Gardens:

Here are some great kid-friendly plant ideas for fall gardens:

- **Greens** (lettuce, spinach, kale, and Swiss chard)
- **Cole Crops** (broccoli and cabbage)
- **Root Crops** (beets, carrots, radishes, and turnips)
- **Sugar Snap Peas**
- **Herbs** (dill, cilantro)
- **Onions**
- **Fall-blooming annuals** (pansies, marigolds, calendulas, verbena, petunia, sweet alyssum, and snapdragons)

Fall Garden Chores:

Try these simple but fun fall garden chores with young children. Each can be adapted to meet your youth gardeners' skill and developmental levels.

- **Harvest fruits and vegetables:** Fall is time to *harvest* many fruits and vegetables. There are some crops that even grow best in the cool fall months. Let kids help gather the bounty of your garden before the frost hits.

- **Save seeds:** Don’t forget to *save seeds* from your favorite garden plants to use for your spring garden.

- **Press flowers and leaves:** Not all harvest is edible. Take time to *press some flowers and leaves* to use for winter crafts and gifts.

- **Rake leaves:** Leaf raking is big fun for young children (make sure to use child-sized rakes). Leaves can be added to compost bins or gathered through a municipal leaf collection. Remember you can leave some to use as mulch in beds to cover bare soil and to provide a winter nesting spot for beneficial insects. This can be a great opportunity to teach kids about *why leaves change colors* in the fall.

- **Engineer season extenders:** You can use *plant cover ups* to keep plants growing in the garden just a little bit longer in the fall. Common tools include sheets/blankets, cold frames, hoop houses and row covers. Instead of buying prefabricated covers ups, let kids brainstorm some ideas for creating their own plant protecting ‘forts.’
Fall Garden Activities:

- **Cook and Preserve Harvest**: Use your harvested fruits and vegetables to make a few easy recipes with your kids. Easy Refrigerator Pickles can be fun to make and eat using veggies like carrots, cauliflower, green beans, radishes, cucumbers, onions, and peppers.

- **Pressed Flower and Leaf Crafts**: Make cards, placemats, ornaments, and more with pressed flowers and leaves. Autumn leaf lanterns can be very useful as the nights start getting longer.

- **Acorn Sink or Float Experiments**: Not all acorns have what it takes to sprout. Conduct sink or float activities to determine which acorns are likely to germinate and grow into the next generation of oak trees (hint: if they sink, they will most likely sprout and grow, but if they float, they will likely not germinate).

- **Pumpkin Play**: Pumpkins are the royalty of fall plants. Paint them, carve them, roll them, float them, measure them, plant their seeds, use them to make potions – there are so many different ways to engage young children in pumpkin play.

- **Make Seed Balls**: Seed balls are small bundles of seeds, clay and soil/compost that can be used to sow seeds in nature. Fun to make and give, this can be a great way to pass along some of the seeds you saved from your garden.

Children’s Garden Book Recommendations

The garden is a great place to bring your favorite garden stories to life. Here are a few to complement your fall garden activities:

- **Pumpkin Circle** by George Levenson
- **The Pie That Molly Grew**, by Sue Heavenrich
- **What’s in the Garden?** By Marianne Berkes
- **Leaf Man** by Lois Ehlert
- **Because of an Acorn** by Lola Schaefer
## Fall Garden Scavenger Hunt

Mark the box of each fall-season item that you find! Turn your hunt into autumn bingo by seeing who can find every item in a column, row, or diagonal first.

<table>
<thead>
<tr>
<th>Rake</th>
<th>Tree</th>
<th>Squirrel</th>
<th>Red Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spider Web</td>
<td>Acorn</td>
<td>Ducks</td>
<td>Cloud</td>
</tr>
<tr>
<td>Brown Leaf</td>
<td>Pumpkin</td>
<td>Moon</td>
<td>Soil</td>
</tr>
<tr>
<td>Yellow Leaf</td>
<td>Mushroom</td>
<td>Grass</td>
<td>Orange Leaf</td>
</tr>
</tbody>
</table>
Draw your Fall Garden!
In the Winter Garden Garden

You can keep kids growing in the garden through the frosty winter weather with special activities outdoors and by adding indoor gardening opportunities too.

Plants for Winter Gardens:

Here are some great kid-friendly plant ideas for winter gardens:

- **Outdoor in colder climates:** Woody shrubs and trees offer winter fun
- **Outdoor in mild climates:**
  - **Greens** (lettuce, spinach, kale, and Swiss chard)
  - **Cole Crops** (broccoli and cabbage)
  - **Root Crops** (beets, carrots, radishes, and turnips)
  - **Pansies**
- **Indoor Gardens:**
  - **Greens** (lettuce, spinach, kale, and Swiss chard)
  - **Microgreens** (quick harvest - 14 to 28 days)
  - **Beans**
  - **Herbs** (mint, dill, oregano, and basil)
  - **Radishes**
  - **Non-toxic house plants**

Winter Garden Chores:

Try these simple but fun winter garden chores with young children. Each can be adapted to meet your youth gardeners’ skill and developmental levels.

- **Feed the birds:** Although some birds relocate to warmer climates in the winter, those that do not migrate can often use a little extra food during the colder months. Kids can help make and fill bird feeders for the garden during the winter.

- **Art in the garden:** Liven up the outdoor garden space with art crafted from natural found objects like rocks, sticks, leaves, acorns, pinecones, berries and seed pods. When kids are finished, hold a quick art show and take a picture, so they can start all over again.

- **Grow a salad indoors:** Many salad crops like lettuce and microgreens can be grown in pretty low levels of light on a windowsill or under grow lights.

- **Start a hydroponic garden:** Plants grown through hydroponic methods grow really quickly and can be great fun for young children to observe. Prefabricated hydroponic systems and DIY models are available to fit all different budgets and spaces.

- **Design your next garden:** Use seed catalogs to inspire kids to begin dreaming about their next garden. They can use drawing or graph paper to share out their ideas.
Winter Garden Activities:

- **Kitchen Scrap Gardening**: Save seeds and veggie scraps from the kitchen, such as carrot tops, sweet potatoes, avocado and citrus seeds, and more, then plant and watch as they start growing (regrowing).

- **Create Seed Art**: Dried bean seeds from the grocery can be a great source of fun in winter months for young children who have outgrown the stage of putting everything in their mouth. Use them to create fun mosaics. Start a few of your beans in seed viewers and talk about the life cycle of a plant and what seeds need to grow. Because of the diversity of shapes and sizes, bean seeds can also be fun to sort, compare, and contrast.

- **Make a Terrarium**: Create a little world that simulates the water cycle by planting house plants in a clear, repurposed container, like a large pretzel or animal cracker jar. Add in a few fun figurines for an imaginative touch. Terrariums need little care but help liven up any windowsill.

- **Treasure Hunt in the Garden**: Freeze food dye-colored ice cubes and hide them in your garden. Kids can explore the winter garden as they go on a treasure hunt for ‘jewels’ and ‘gems.’

- **Tree Observation**: Looking at trees without leaves provides a different perspective of their shape, size, and structure. Take young gardeners on a nature hike to observe and/or sketch tree trunks and branches. Ask them to look for similarities and differences. Make bark rubbings to compare different bark textures.

**Children’s Garden Book Recommendations**

The garden is a great place to bring your favorite garden stories to life. Here are a few to complement your winter garden activities:

- **Logan’s Greenhouse** by JaNay Brown-Wood
- **When Winter Comes** by Nancy Van Laan
- **One Bean** by Anne Rockwell
- **The Snowy Day** by Ezra Jack Keats
- **Planting a Rainbow** by Lois Ehlert
Winter Habitat Scavenger Hunt

Mark the box of each wintertime item that you find! Turn your hunt into winter bingo by seeing who can find every item in a column, row, or diagonal first.

<table>
<thead>
<tr>
<th>Evergreens</th>
<th>Snow</th>
<th>Squirrels</th>
<th>Tracks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Songbirds</td>
<td>Icicles</td>
<td>Pinecones</td>
<td>Mud/Puddles</td>
</tr>
<tr>
<td>Houseplant</td>
<td>Chimpmunks</td>
<td>Fallen Leaves</td>
<td>Deer</td>
</tr>
<tr>
<td>Bare Trees</td>
<td>Winter Berries</td>
<td>Bench</td>
<td>Clouds/ Rain</td>
</tr>
</tbody>
</table>
Name

Winter Garden Journal

Draw your Winter Garden!

Winter
Additional Resources for ECE Gardens

The following resources offer activity ideas and lessons plans to help you effectively incorporate the garden into your ECE curriculum.

Digital Resources

- **Gro More Good Learning Activities**: A joint project of The Scotts Miracle-Gro Foundation and the Smithsonian Early Enrichment Center, this curriculum provides a wide variety of lesson ideas for each season, targeting Tiny Gardeners (infants and toddlers) through Garden Guides (grades 1 to 3).

- **KidsGardening Garden Activities**: An extensive collection of garden activities for home or school youth gardens.

- **KidsGardening ECE Lesson Plans**: Five lesson plans for home or school that cover gardening basics, including plant life cycles, plant needs, plant parts, pollinators, and soil.

- **Growing Minds Farm to Preschool**: Growing Minds Farm to Preschool Program shares an extensive collection of lesson plans, a farm-to-school preschool kit and weekly resources designed for parents and families.

- **Got Veggies? ECE Edition**: Lesson and tips from Rooted to help implement vegetable garden.

- **Grow It, Try It, Like It! Nutrition Education Kit from the USDA**: A garden-based nutrition education kit for early childhood educators.

- **Edible Schoolyard Project Resource Library**: Edible Schoolyard Project has created a searchable database of lesson plans for preK-12th grade.

- **Junior Master Gardener/American Horticultural Society “Growing Good Kids: Excellence in Children’s Literature Book Award”**: An annual award for the best garden-themed children’s literature books. Includes a list of the best classics from the last 100 years.

- **Farm to ECE Book List**: A list of recommended children’s books from NAPSACC and adapted from: “Multicultural Collection of Farm to ECE Books” by PA Ready, Set, Grow. The list also includes titles available in Spanish.
Printed Resources

- **Life Lab: Sowing the Seeds of Wonder (Book):** An extensive collection of tried and true ECE lesson plans.

- **Junior Master Gardener’s Early Childhood Learn, Grow, Eat & Go (Manual):** The National JMG Program is currently working on an ECE version of their popular Learn, Grow, Eat & Go Curriculum focused on nutrition education and edible gardening activities.

- **Garden Adventures (Book):** A guide designed to help early childhood educators teach kids plant basics through garden activities.

Online Courses

- **GroMoreGood Gardening with Kids Basics Course:** An in-depth, 4-module introductory course to starting a Head Start garden program incorporating videos, suggested readings, and interactive activities.

- **Teaching in Nature’s Classroom Online ECE Course:** This course is offered twice a year and was developed as a companion to Teaching in Nature’s Classroom: Principles of Garden-Based Education. It provides an opportunity for Early Care and Education (ECE) providers to consider best practices and reflect on their own teaching practices in outdoor learning environments, with a focus on ECE gardens.

- **Natural Learning Initiative’s Certificate Programs:** NLI offers two certificate programs, including Early Childhood Outdoor Learning Environments and the more advanced course for designers, Designing Early Childhood Outdoor Environments.