



## Lesson: Wild About Wildflowers

(To follow Amplify CKLA K, Knowledge 4: Plants, Lesson 2: Plant Parts)

### At a Glance

In this lesson, students reinforce their knowledge of plant parts by investigating New Hampshire's state wildflower: the pink lady's slipper.

### Primary Focus Objectives

- Students will closely observe and sketch wildflowers.
- Students will listen to, and discuss, different types of non-fiction text about wildflowers.
- Students will identify different parts of New Hampshire's state wildflower and the function of each.

### Formative Assessment

- Vocabulary card and label making
- Photograph labeling

### Standards

CCSS.ELA-LITERACY.SL.K.2

Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.

CCSS.ELA-LITERACY.L.K.4a

Identify new meanings for familiar words and apply them accurately (e.g., knowing a duck is a bird and learning the verb to duck).

CCSS.ELA-LITERACY.RI.K.2

With prompting and support, identify the main topic and retell key details of a text.

### Materials

- Wildflower samples
- Focus Text: *Have You Ever Seen a Flower?* By Shawn Harris
- Label template
- Vocabulary Card template
- Focus Text Facts: Pink Lady's Slipper
- Image set: Pink Lady's Slipper

### Time Needed

Three 30-40 minute class sessions

### Learning Activity

1. **Read Focus Text.** Read or listen to a recording of *Have You Ever Seen a Flower?* to encourage children to look closer at flowers and consider what their parts do to help them live. (10 minutes)
2. **Observe wildflowers.** Display wildflower cuttings on trays or in small jars of water. Support students as they draw, write, and observe, paying close attention to shape, color, and patterns. (20 minutes)
3. **Create vocabulary cards and labels.** Make a brainstorm list of the things the children know and wonder about flowers, including a list of flower parts. Create your own set of vocabulary cards and set of labels using what they know. (30 minutes)



4. **Learn about Pink Lady's Slipper.** Project or display Focus Text Facts: "Pink Lady's Slipper." Read aloud the facts and Mason's Challenge. (15 *minutes*)
5. **Label the photographs.** Support students as they add labels to the pink lady's slipper photographs. (15 *minutes*)



## Educator Rationale and Answer Guide

<b>Connection to Amplify</b>	In this lesson, students will extend their knowledge of plant parts developed in Amplify CKLA K, Knowledge 4: Plants, Lesson 2: Plant Parts through a study of New Hampshire's state wildflower, the pink lady's slipper. Examining other wildflowers, analyzing photographs of a pink lady's slipper, and listening to different styles of text about flowers reinforce student vocabulary and encourage synthesis of new information.
<b>Read Focus Text</b>	<i>Have You Seen a Flower?</i> is a poetic piece of non-fiction widely available in bookstores, libraries, or through free online recordings. Beginning with this book will inspire to students to look even closer at flowers, using their imagination to make sense of their shapes, patterns, and colors. This book also helps students connect to the idea that a flower is a living thing, just as they are living things.
<b>Observation</b>	<p>In this step, students will observe a wildflower and draw and write about it. Students should be encouraged to pay attention to details and should be encouraged to add labels to their illustration. See the end of this document for a list of flowers native to New Hampshire, provided by the UNH Cooperative Extension.</p> <p>This is a good place to pause if dividing the lesson across multiple sessions.</p>
<b>Create vocabulary cards and labels</b>	<p>This is an opportunity to review what was learned in the Amplify lesson. Prompt with "what are the parts of a plant?" if students don't independently mention them. From their brainstorm, have students make their own vocabulary cards and labels on sticky notes, index cards, or the provided templates for: stem, leaf, petal, root.</p> <p>This is a good place to pause if dividing the lesson across multiple sessions.</p>
<b>Learn about Pink Lady's Slipper</b>	Begin with a whole group discussion about the types and locations of wildflowers students have seen in New Hampshire. During this conversation it will be important to distinguish what is a wildflower and what is something that is found in a garden. Wildflowers grow wherever their seeds land; they are left to grow independently without human help. Garden flowers are specifically placed and tended to by people. Project or display pictures of the pink lady's slipper and ask students what they notice about this flower. Do they think it's a wildflower or a garden flower? Why? Display and read aloud Focus Text Facts: "Pink Lady's Slipper."
<b>Label photographs</b>	Provide students with a copy of one of the pink lady's slipper photographs included in this lesson and their set of labels. Give them time to stick or glue the labels to the correct spot on the flower in the image. Make a state wildflower display with their finished work.
<b>Optional: More to read</b>	<p>In <i>Wake, Sleepy One</i>, students learn about the super bloom phenomenon in California. <i>Alfred Blooms</i> and <i>Miss Rumphius</i> are both fictional tales about how flowers can help strengthen community and how people can use flowers to connect.</p> <ul style="list-style-type: none"><li>• <i>Wake, Sleepy One: California Poppies and the Superbloom</i>, by Lisa Kerr, illustrated by Lisa Powell Braun</li><li>• <i>Alfred Blooms</i>, by Carrie Kruck, illustrated by Carmen Mok</li><li>• <i>Miss Rumphius</i>, written and illustrated by Barbara Cooney</li></ul>



**Definition:**

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## Pink Lady's Slipper

### New Hampshire's State Wildflower

It can take 10 years for a plant to have its first flower.

The pink lady's slipper is a type of orchid.

The pink lady's slipper grows in wet, wooded areas.

Pink lady's slippers have a special relationship with a type of fungus.



Source: UNH Extension

Pink lady's slippers bloom between May and July.

The fungus helps the plant get food from the soil. Its seeds do not store food.

The pink lady's slipper was named the state wildflower in 1991.

Pink lady's slippers grow slowly. Some can live for 50 years!



### Mason's Challenge

The next time you go for walk in the woods in the spring, look for a pink lady's slipper but don't pick it! It's a myth that it is illegal to pick the flowers, but they grow so slowly that it is best to leave them alone. Why do you think people gave it that name?



Pink lady's slipper in Sanbornton, New Hampshire. Source: Kari Allen





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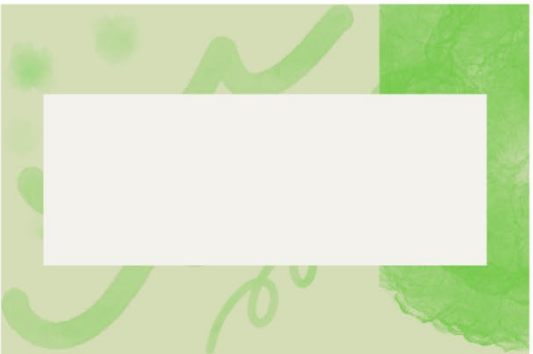
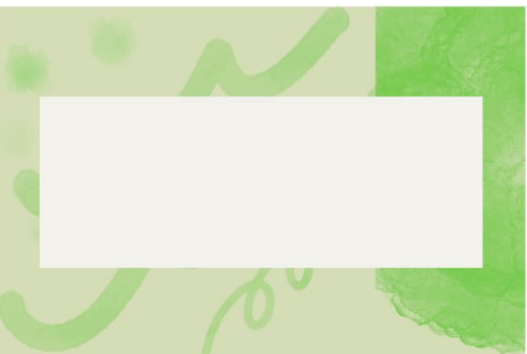
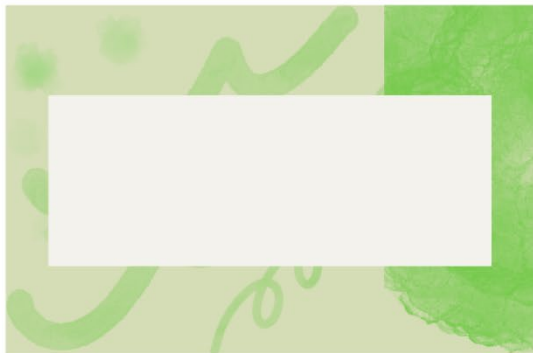
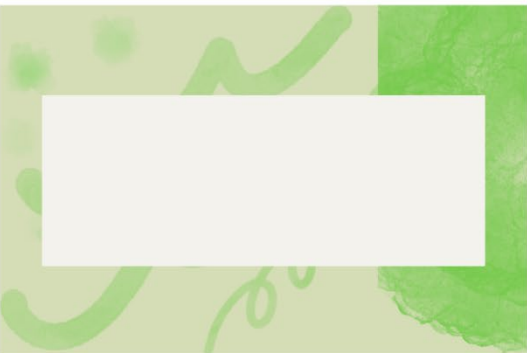
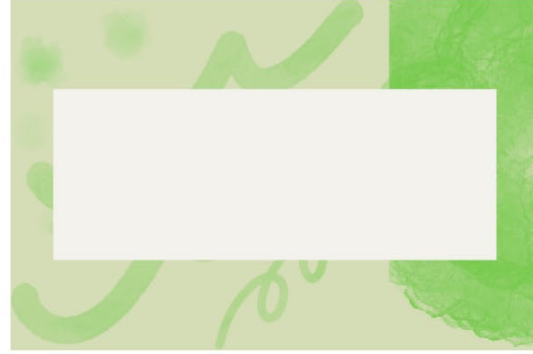
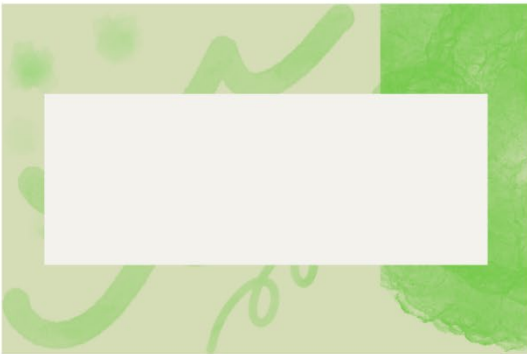
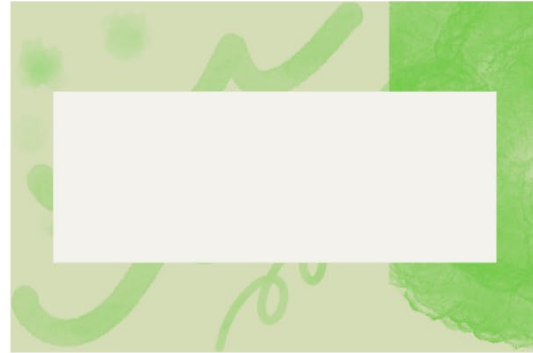
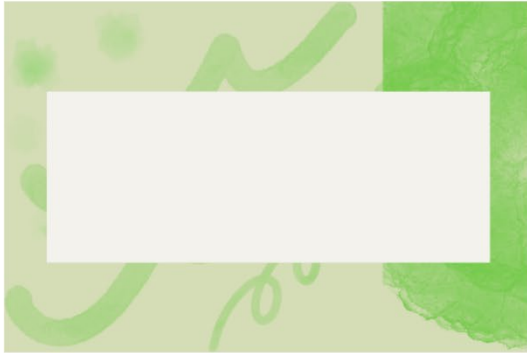
Pink lady's slipper in Sanbornton, New Hampshire. Source: Kari Allen.





Pink lady's slipper in Sanbornton, New Hampshire. Source: Kari Allen







# Native Wildflowers for New England Meadows

compiled by Cathy Neal and Amy Papineau



Perennial Wildflowers <sup>a</sup>	Common Name	Bloom Period						Flower Color	Height	Photo key	Best Use			Native to NE States <sup>b</sup>					
		May	June	July	August	Sept.	October				Garden Use	Meadow from Seed	Meadow from Plugs	CT	MA	ME	NH	RI	VT
<i>Agastache foeniculum</i>	Lavender Hyssop			X	X	X		purple	3'	1	x	x		x			x		
<i>Aquilegia canadensis</i>	Red Columbine	X	X					red	3'	2	x		x	x	x	x	x	x	x
<i>Asclepias syriaca</i>	Common Milkweed		X	X	X			purple	5'		x	x	x	x	x	x	x	x	x
<i>Asclepias tuberosa</i>	Butterfly milkweed		X	X	X			orange	2'	3	x		x	x	x	x	x	x	x
<i>Baptisia australis</i>	Blue Wild Indigo		X	X				blue	3'		x			x	x		x		x
<i>Baptisia tinctoria</i>	Yellow Wild Indigo			X	X			yellow	3'		x			x	x	x	x	x	x
<i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis		X	X				yellow	3'	6	x	x	x	x	x	x	x	x	x
<i>Echinacea pallida</i>	Pale Purple Coneflower		X	X				pink	4'		x	x	x	x	x	x			
<i>Echinacea purpurea</i>	Purple Coneflower			X	X			purple	4'	7	x	x	x	x	x	x			
<i>Eutrochium purpureum</i>	Sweet Joe Pye Weed			X	X	X		pink	6'	8	x		x	x	x	x	x	x	x
<i>Gentiana andrewsii</i>	Bottle Gentian				X	X		blue	2'		x		x	x	x		x	x	x
<i>Heliopsis helianthoides</i>	Oxeye Sunflower		X	X	X	X		yellow	5'	9	x	x	x	x	x	x	x	x	x
<i>Liatris spicata</i>	Dense Blazing Star			X	X	X		purple	3'	10	x			x	x				
<i>Lobelia cardinalis</i>	Cardinal Flower			X	X	X		red	4'		x		x	x	x	x	x	x	x
<i>Lupinus perennis</i>	Wild Lupine	X	X	X				blue	2'	11	x			x	x	x	x	x	x
<i>Monarda fistulosa</i>	Wild Bergamot			X	X	X		purple	4'		x	x	x	x	x	x	x	x	x
<i>Oligoneuron rigidum</i> var. <i>rigidum</i>	Stiff Goldenrod				X	X		yellow	4'	14	x	x	x	x	x			x	
<i>Penstemon digitalis</i>	Foxglove Beardtongue		X	X				white	4'	12	x	x	x	x	x	x	x	x	x
<i>Pycnanthemum virginianum</i>	Virginia Mountain Mint			X	X	X		white	3'		x			x	x	x	x	x	x
<i>Ratibida columnifera</i>	Upright Prairie Coneflower		X	X	X			yellow	2'		x			x	x				
<i>Ratibida pinnata</i>	Yellow Coneflower			X	X	X		yellow	5'		x	x	x	x	x				x
<i>Rudbeckia hirta</i>	Black Eyed Susan		X	X	X	X		yellow	2'	13	x	x	x	x	x	x	x	x	x
<i>Rudbeckia triloba</i>	Brown Eyed Susan				X	X		yellow	5'		x			x	x				x
<i>Senna hebecarpa</i>	American Senna			X	X			yellow	5'	5	x		x	x	x	x	x	x	x
<i>Solidago juncea</i>	Early Goldenrod				X	X		yellow	4'		x	x	x	x	x	x	x	x	x
<i>Symphyotrichum laeve</i>	Smooth Aster				X	X	X	blue	4'		x	x	x	x	x	x	x	x	x
<i>Symphyotrichum novae angliae</i>	New England Aster				X	X	X	purple	5'	4	x	x	x	x	x	x	x	x	x
<i>Verbena hastata</i>	Blue Vervain			X	X	X		blue	5'	15	x	x		x	x	x	x	x	x



Perennial Wildflowers <sup>a</sup>	Common Name	Bloom Period						Flower Color	Height	Photo key	Best Use			Native to NE States <sup>b</sup>					
		May	June	July	August	Sept.	October				Garden Use	Meadow from Seed	Meadow from Plugs	CT	MA	ME	NH	RI	VT
<i>Vernonia altissima</i>	Ironweed				X	X		purple	5'		x			x	x		x	x	
<i>Zizia aurea</i>	Golden Alexanders	X	X					yellow	3'		x	x		x	x	x	x	x	x

Grasses																			
<i>Bouteloua curtipendula</i>	Sideoats Grama			x	x	x			2'		x		x	x			x		
<i>Elymus canadensis</i>	Canada Wildrye			x	x	x			4'	16		x	x	x	x	x	x	x	x
<i>Festuca rubra</i>	Red Fescue		x	x	x	x			2-3'			x	x	x	x	x	x	x	x
<i>Schizachyrium scoparium</i>	Little Bluestem			x	x	x			3'		x	x	x	x	x	x	x	x	x
<i>Sorghastrum nutans</i>	Indian Grass				x	x			6'		x	x	x	x	x	x	x	x	x
<i>Sporobolus heterolepis</i>	Prarie Dropseed			x	x	x			2'		x		x	x	x				

<sup>a</sup>This list includes species that have performed well in our pollinator habitat and meadow trials at UNH. Flowering times and heights will vary by location and density of planting. For more information, visit our website and online wildflower guide at

<http://extension.unh.edu/Wildflower-Meadows>

<sup>b</sup> Source of native plant information: USDA, NRCS. 2014. The PLANTS Database (<http://plants.usda.gov>, 7 August 2014).

