

Lise Schioler

Master Gardener Emerita

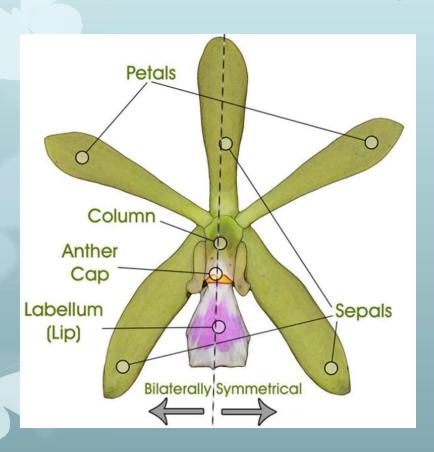
#### General Info

- The Orchid family of plants (*Orchidaceae*) is the largest family of plants in the world
  - About 763 genera and about 28,000 species known (that's twice the number of bird species and 4 times the number of mammal species!)
  - New species discovered every year
  - About 210 species are found in USA
  - About 32 species are found in Hampton Roads
  - Over 100,000 hybrids, including intergenerics

#### General Info, II

- Orchids grow on every continent, except Antarctica; and in every habitat except glaciers and deserts
- Orchids can be saprophytic, terrestrial, or epiphytic
  - Saprophytic gets energy from dead or decaying organic matter
  - Terrestrial grows in the ground
  - Epiphytic grows anchored to trees and shrubs
    - Most orchids grown in the home are epiphytes
- All orchids need a symbiotic relationship with fungi during germination and seedling growth

### General Info, III



- All orchid flowers have the same parts
  - May be different shapes and sizes
  - 2 petals, 3 sepals, a lip, a column, and a cap

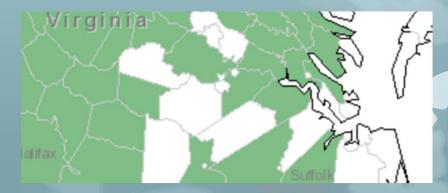
#### Orchids Native to HR

## Aplectrum hyemale putty root



Photo by Seig Kopinitz

- Native eastern US from Mississippi north to Canada
- Found in deciduous forests
- Single leaf appears in winter and dies in the spring
- Flowers Apr-May



## Calopogon tuberosus tuberous grasspink



Photo by Helen Hamilton

- Native to US & Canada east of Texas to Manitoba
- Found in acidic/sandy moist areas
- Flowers Apr-May



### Cleistes divaricata rosebud orchid



Photo by Meegan Wallace

- Native to coastal eastern US
  NJ to Florida
- Found in costal plains, bogs, marshes, and pine barrens
- Likes very acidic soil
- Flowers Apr-July



## Cypripedium acaule pink lady's slipper



Photo by Seig Kopinitz

- Native to US east of the Mississippi to central Canada
- Found in dry, sandy woodlands
- Likes acidic soil
- Flowers Apr-Jul

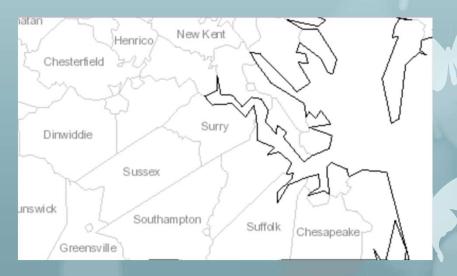


## Cypripedium parviflorum var. pubescens yellow lady's slipper



Photo by Phillip Merritt

- Native to most of the US
- Deciduous and coniferous forest, openings, thickets, prairies, meadows, fens
- Flowers in Apr-Jun



## Galearis spectabilis showy orchis



Photo by Lise Schioler

- Native to eastern US up into Canada, west to Nebraska
- Found in moist woods and swamp edges
- Flowers in Apr-May



## Goodyera pubescens downy rattlesnake plantain



Photo by Meegan Wallace

- Native to US east of the Mississippi into Canada
- Found in dry or moist, deciduous or coniferous woods and welldrained wooded slopes
- Flowers in mid-Jul-Aug



## Isotria medeoloides small whorled pogonia



Photo by Phillip Merritt

- Native to NE US
- Threatened
- Found in acidic deciduous or deciduous-coniferous forests
- Flowers in May-Jun



### Liparis liliifolia lily-leaved twayblade



Photo by Philip Merritt

- Native to eastern US west to Minnesota and north of Florida to eastern Canada
- Found in rich/sandy woods and clearings
- Flowers Jun-Jul

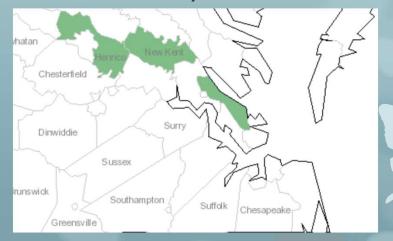


#### Liparis loeselii yellow wide-lip orchid



Photo by Helen Hamilton

- Native to NE and mid-western US west to Montana & Wash state
- Found in cool, moist ravines, bogs, or fens, wet peaty or sandy meadows
- Flowers in May

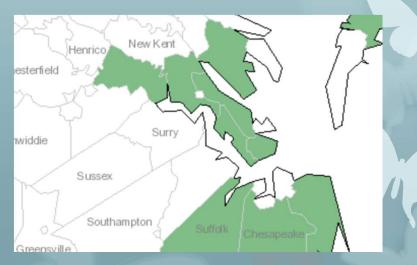


## Listera australis southern twayblade



Photo by Lise Schioler

- Native to southern US and up east coast
- Found in low moist woods, marshes
- Flowers Feb-Mar



### Malaxis unifolia green adder's mouth



Photo by Helen Hamilton

- Native eastern half of the US
- Found in swamp, bogs, dry woods
- Flowers in Mar-Apr



## Platanthera ciliaris yellow fringed orchid



- Native from Texas northeast to Michigan and to the east coast
- Found in moist sandy and peaty meadows, marshes, prairies, pine savannas, open woods
- Flowers Jul-Sep

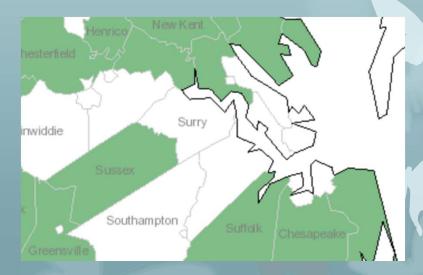


## Platanthera lacera green fringed orchid



Photo by Seig Kopinitz

- Native to eastern half of the US
- Found in bogs, wet woods, dry to wet meadows and fields.
- Flowers in Jun-Sep



### Pogonia ophioglossoides snakemouth orchid



Photo by Meegan Wallace

- Native to eastern half of US
- Found in wet open woods, meadows, swamps, sphagnum bogs.
- Flowers May-Aug



## Ponthieva racemosa hairy shadow witch



Photo by Seig Kopinitz

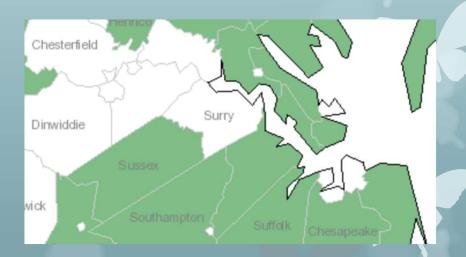
- Native from Virginia south and west to Texas
- Found in swamps and moist woodlands
- Flowers Sep-Feb



# Spiranthes vernalis spring lady's tresses



- Native to TX to FL and north to SD and VT
- Found dry to moist meadows, prairies, roadsides
- Flowers in mid-summer



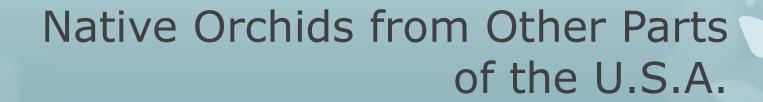
# Tipularia discolor cranefly orchid

- Native Texas to Michigan and east
- Found in humus-rich mixed woodlands, often near sweet gum
- Leaves appear in October and disappear in early May; flowers appear in Aug

Dinwiddie



Photos by Lise Schioler



### Campylocentrum pachyrrhizum ribbon orchid



Photo by Alan Cressler, Wildflower Center Digital Library

- Native to S. Florida, West Indies, Mexico, into N. South America
- Epiphytic leafless orchid
- Brownish pink and white flowers in Sep-Nov



## Cypripedium reginae showy lady's slipper



By Orchi - Self-photographed, CC BY-SA 3.0, <a href="https://commons.wikimedia.org/w/index.php?curid=10569244">https://commons.wikimedia.org/w/index.php?curid=10569244</a>

- Native to NE USA
- Minnesota State Flower
- Terrestrial; prefers alkaline soil in fens, meadows, swamps
- Blooms Jun-Jul
- Pollinated by medium sized bees



## Dendrophylax lindenii ghost orchid



By Jeffalanhale - Own work, CC BY-SA 3.0, <a href="https://commons.wikimedia.org/w/index.php?curid=19029986">https://commons.wikimedia.org/w/index.php?curid=19029986</a>

- Native to S. Florida, Cuba, and the West Indies
- Epiphyte
- Blooms May-Aug
- Pollinated by Giant Sphinx Moth
- Endangered by illegal collection and habitat disruption



### Epipactis gigantean stream orchid



Photo by Ed Nazzal

- Native to western USA into Canada and Mexico
- California State Orchid
- Terrestrial; pollinated by flies; up to 50" tall
- Blooms Jun-Aug
- Rare

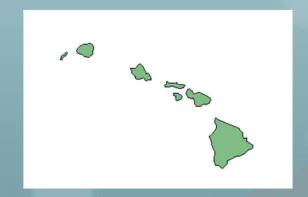


#### Liparis hawaiensis Hawai'i widelip orchid



By Forest & Kim Starr, CC BY 3.0, https://commons.wikimedia.org/w/index.php?curid=6150896

- Endemic to Hawaii, but rare
- Blooms May-Nov
- Pale green inconspicuous flowers on a 12" spike
- Found in moist forests
- Also grows as an epiphyte



#### Sources

- More info
  - https://plants.usda.gov
  - Ohttp://www.wildflower.org/plants/
  - http://www.efloras.org
  - Ohttp://northamericanorchidcenter.org
  - http://www.vaplantatlas.org

### Galearis rotundifolia roundleaf orchid



- Canada, Greenland, Alaska, and northernmost lower 48
- Blooms June July
- Up to 18 flowers at a time in white and magenta
- Needs a cold substrate
- Calcareous soils with a neutral pH

