



**Area Designation**      **Area 2**

Project:                      Emerson Resort  
 Date of Installation:    TBD - Fall 2019  
 Planting Area Size:     6,085 sq. ft.

**Total Trees:                50**  
**Total Shrubs:              167**

| Common Name               | Latin Name                | Total Request. | Materials Requested by Size |       |      | Total Installed |
|---------------------------|---------------------------|----------------|-----------------------------|-------|------|-----------------|
|                           |                           |                | Stakes                      | Tubes | Pots |                 |
| <b>Black Chokeberry</b>   | photinia melanocarpa      | <b>20</b>      |                             |       |      |                 |
| <b>Red Chokeberry</b>     | Photinia melanocarpa      | <b>8</b>       |                             |       |      |                 |
| <b>Winterberry</b>        | Ilex verticullata         | <b>18</b>      |                             |       |      |                 |
| <b>Silky Dogwood</b>      | Cornus amomum             | <b>15</b>      |                             |       |      |                 |
| <b>Gray Dogwood</b>       | Cornus racemosa           | <b>12</b>      |                             |       |      |                 |
| <b>Red osier Dogwood</b>  | Cornus sericea            | <b>7</b>       |                             |       |      |                 |
| <b>Staghorn Sumac</b>     | Rhus typhina              | <b>10</b>      |                             |       |      |                 |
| <b>Elderberry</b>         | sambucus canadensis       | <b>10</b>      |                             |       |      |                 |
| <b>American Cranberry</b> | Viburnum trilobum         |                |                             |       |      |                 |
| <b>Nannyberry</b>         | viburnum lentago          | <b>8</b>       |                             |       |      |                 |
| <b>Ninebark Common</b>    | physocarpus opulifolius   | <b>12</b>      |                             |       |      |                 |
| <b>Arrowwood</b>          | Viburnum dentatum         | <b>15</b>      |                             |       |      |                 |
| <b>Spicebush</b>          | lindera benzoin           | <b>14</b>      |                             |       |      |                 |
| <b>Button Bush</b>        | cephalanthus occidentalis | <b>8</b>       |                             |       |      |                 |
| <b>Smooth Alder</b>       | alnus serrulata           |                |                             |       |      |                 |
| <b>Meadowsweet</b>        | Spirea latifolia          | <b>10</b>      | Clumps of 3 so 30 total     |       |      |                 |
|                           |                           | <b>167</b>     |                             |       |      |                 |
| <b>Serviceberry</b>       | Amelanchier laevis        | <b>4</b>       |                             |       |      |                 |
| <b>Red Maple</b>          | Acer Rubrum               | <b>8</b>       |                             |       |      |                 |
| <b>Silver Maple</b>       | Acer saccharinum          | <b>7</b>       |                             |       |      |                 |
| <b>Red Oak</b>            | Quercus rubra             | <b>4</b>       |                             |       |      |                 |
| <b>White Oak</b>          | quercus alba              | <b>2</b>       |                             |       |      |                 |
| <b>Sweet Birch</b>        | Betula lenta              |                |                             |       |      |                 |
| <b>Gray Birch</b>         | Betula populifolia        | <b>6</b>       |                             |       |      |                 |
| <b>River Birch</b>        | Betula nigra              | <b>6</b>       |                             |       |      |                 |
| <b>ironwood</b>           | Carpinus Carolina         | <b>2</b>       |                             |       |      |                 |
| <b>Tulip Poplar</b>       | liriodendron tulipifera   | <b>5</b>       |                             |       |      |                 |
| <b>Sycamore</b>           | platanus occidentalis     | <b>4</b>       |                             |       |      |                 |
| <b>Red Bud</b>            | Cercis canadensis         | <b>2</b>       |                             |       |      |                 |
|                           |                           | <b>50</b>      |                             |       |      |                 |
|                           |                           |                |                             |       |      |                 |
|                           |                           |                |                             |       |      |                 |
|                           |                           |                |                             |       |      |                 |

**A Area 3**

Project: Emerson Resort  
 Date of Installation: TBD - Fall 2019  
 Planting Area Size: 5,916 sq. ft.

Total Trees: 41  
 Total Shrubs: 163

| Common Name               | Latin Name                | Total Request. | Materials Requested by Size |       |      | Total Installed |
|---------------------------|---------------------------|----------------|-----------------------------|-------|------|-----------------|
|                           |                           |                | Stakes                      | Tubes | Pots |                 |
| <b>Black Chokeberry</b>   | photinia melanocarpa      | 20             |                             |       |      |                 |
| <b>Red Chokeberry</b>     | Photinia melanocarpa      | 8              |                             |       |      |                 |
| <b>Winterberry</b>        | Ilex verticullata         | 18             |                             |       |      |                 |
| <b>Silky Dogwood</b>      | Cornus amomum             | 11             |                             |       |      |                 |
| <b>Gray Dogwood</b>       | Cornus racemosa           | 12             |                             |       |      |                 |
| <b>Red osier Dogwood</b>  | Cornus sericea            | 7              |                             |       |      |                 |
| <b>Staghorn Sumac</b>     | Rhus typhina              | 10             |                             |       |      |                 |
| <b>Elderberry</b>         | sambucus canadensis       | 10             |                             |       |      |                 |
| <b>American Cranberry</b> | Viburnum trilobum         |                |                             |       |      |                 |
| <b>Nannyberry</b>         | viburnum lentago          | 8              |                             |       |      |                 |
| <b>Ninebark Common</b>    | physocarpus opulifolius   | 12             |                             |       |      |                 |
| <b>Arrowwood</b>          | Viburnum dentatum         | 15             |                             |       |      |                 |
| <b>Spicebush</b>          | lindera benzoin           | 14             |                             |       |      |                 |
| <b>Button Bush</b>        | cephalanthus occidentalis | 8              |                             |       |      |                 |
| <b>Smooth Alder</b>       | alnus serrulata           |                |                             |       |      |                 |
| <b>Meadowsweet</b>        | Spirea latifolia          | 10             |                             |       |      |                 |
|                           |                           | 163            |                             |       |      |                 |
|                           |                           |                |                             |       |      |                 |
| Serviceberry              | Amelanchier laevis        | 4              |                             |       |      |                 |
| Red Maple                 | Acer Rubrum               | 5              |                             |       |      |                 |
| Silver Maple              | Acer saccharinum          | 3              |                             |       |      |                 |
| Red Oak                   | Quercus rubra             |                |                             |       |      |                 |
| White Oak                 | quercus alba              | 6              |                             |       |      |                 |
| Sweet Birch               | Betula lenta              |                |                             |       |      |                 |
| Gray Birch                | Betula populifolia        | 5              |                             |       |      |                 |
| River Birch               | Betula nigra              | 6              |                             |       |      |                 |
| ironwood                  | Carpinus Carolina         | 4              |                             |       |      |                 |
| Tulip Poplar              | liriodendron tulipifera   | 5              |                             |       |      |                 |
| Sycamore                  | platanus occidentalis     | 3              |                             |       |      |                 |
| Red Bud                   | Cercis canadensis         |                |                             |       |      |                 |
|                           |                           | 41             |                             |       |      |                 |
|                           |                           |                |                             |       |      |                 |
|                           |                           |                |                             |       |      |                 |
|                           |                           |                |                             |       |      |                 |

Area Designation Area 4

Project: Emerson Resort

Date of Installation: TBD - Fall 2019

Planting Area Size: 2,806 sq. ft.

Total Trees: 23

Total Shrubs: 77

| Common Name        | Latin Name                | Total Request. | Materials Requested by Size |       |      | Total Installed |
|--------------------|---------------------------|----------------|-----------------------------|-------|------|-----------------|
|                    |                           |                | Stakes                      | Tubes | Pots |                 |
| Witch hazel        | Hamamelis virginiana      | 3              |                             |       |      |                 |
| Black Chokeberry   | photinia melanocarpa      | 5              |                             |       |      |                 |
| Red Chokeberry     | Photinia melanocarpa      | 12             |                             |       |      |                 |
| Winterberry        | Ilex verticullata         | 10             |                             |       |      |                 |
| Silky Dogwood      | Cornus amomum             | 10             |                             |       |      |                 |
| Red osier Dogwood  | Cornus sericea            | 3              |                             |       |      |                 |
| Staghorn Sumac     | Rhus typhina              | 3              |                             |       |      |                 |
| Elderberry         | sambucus canadensis       | 4              |                             |       |      |                 |
| American Cranberry | Viburnum trilobum         |                |                             |       |      |                 |
| Nannyberry         | viburnum lentago          | 3              |                             |       |      |                 |
| Ninebark Common    | physocarpus opulifolius   | 3              |                             |       |      |                 |
| Arrowwood          | Viburnum dentatum         | 6              |                             |       |      |                 |
| Spicebush          | lindera benzoin           | 5              |                             |       |      |                 |
| Button Bush        | cephalanthus occidentalis | 5              |                             |       |      |                 |
| Smooth Alder       | alnus serrulata           |                |                             |       |      |                 |
| Meadowsweet        | Spirea latifolia          | 5              | Clumps of 3 so 15 total     |       |      |                 |
|                    |                           |                |                             |       |      |                 |
|                    |                           | 77             |                             |       |      |                 |
|                    |                           |                |                             |       |      |                 |
| Serviceberry       | Amelanchier laevis        | 1              |                             |       |      |                 |
| Red Maple          | Acer Rubrum               | 5              |                             |       |      |                 |
| Silver Maple       | Acer saccharinum          | 3              |                             |       |      |                 |
| Red Oak            | Quercus rubra             |                |                             |       |      |                 |
| White Oak          | quercus alba              | 4              |                             |       |      |                 |
| Sweet Birch        | Betula lenta              |                |                             |       |      |                 |
| Gray Birch         | Betula populifolia        | 3              |                             |       |      |                 |
| River Birch        | Betula nigra              | 2              |                             |       |      |                 |
| ironwood           | Carpinus Carolina         |                |                             |       |      |                 |
| Tulip Poplar       | liriodendron tulipifera   | 2              |                             |       |      |                 |
| Sycamore           | platanus occidentalis     | 3              |                             |       |      |                 |
| Red Bud            | Cercis canadensis         |                |                             |       |      |                 |
|                    |                           | 23             |                             |       |      |                 |
|                    |                           |                |                             |       |      |                 |
|                    |                           |                |                             |       |      |                 |
|                    |                           |                |                             |       |      |                 |
|                    |                           |                |                             |       |      |                 |

|                            | Right Bank | Left Bank |   | # pots |
|----------------------------|------------|-----------|---|--------|
| Potted Silky Willow        | 14         | 8         | Single potted planted every 8' along bank, sedges fill in l |        |
| Potted Pussy Willow        | 12         | 6         | Rbnk = 425'   | 53     |
| Potted Silky Dogwood       | 15         | 10        | Lbnk = 275'   | 34     |
| Potted Smooth Alder        | 12         | 10        |   |        |
|                            | 53         | 34        |   |        |
| Sedges Tussock/Fox/Fringed | 100        | 54        |   |        |

Here are seed mixes that Bobby Taylor of Catskill Streams Buffer Initiative used at the Emerson Project. To note that he added a pound of bigleaf lupine to the mix since the others didn't come with it. Also a cover crop of Annual Rye 15lbs to the site to help with the first year becoming established.

<https://www.ernstseed.com/product/mesic-to-dry-native-pollinator-mix-w-o-grasses/>

Mesic to Dry Native Pollinator Mix w/o Grasses

Item Number: **ERNMX-125**

Contains native forbs common in the Northeast. Excellent for wildlife food and shelter, including pollinators. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

### **MIX COMPOSITION**

- 25.3% *Echinacea purpurea*  
([Purple Coneflower](#))
- 10.8% *Penstemon digitalis*  
([Tall White Beardtongue](#))
- 9.9% *Verbena hastata*, PA Ecotype  
([Blue Vervain, PA Ecotype](#))
- 8.1% *Coreopsis lanceolata*  
([Lanceleaf Coreopsis](#))
- 8.1% *Rudbeckia hirta*  
([Blackeyed Susan](#))
- 5.3% *Heliopsis helianthoides*, PA Ecotype  
([Oxeye Sunflower, PA Ecotype](#))
- 5.3% *Lespedeza capitata*, RI Ecotype  
([Roundhead Lespedeza, RI Ecotype](#))
- 3.5% *Zizia aurea*, PA Ecotype  
([Golden Alexanders, PA Ecotype](#))
- 2.7% *Chamaecrista fasciculata*, PA Ecotype  
([Partridge Pea, PA Ecotype](#))
- 2.7% *Senna hebecarpa*, VA & WV Ecotype  
([Wild Senna, VA & WV Ecotype](#))
- 2.4% *Asclepias incarnata*, PA Ecotype  
([Swamp Milkweed, PA Ecotype](#))
- 2.4% *Asclepias tuberosa*, PA Ecotype  
([Butterfly Milkweed, PA Ecotype](#))
- 1.9% *Aster pilosus*, PA Ecotype  
([Heath Aster, PA Ecotype](#))
- 1.9% *Baptisia australis*, Southern WV Ecotype  
([Blue False Indigo, Southern WV Ecotype](#))

- 1.6% *Aster lateriflorus*  
([Calico Aster](#))
- 1.6% *Rudbeckia triloba*, WV Ecotype  
([Browneyed Susan, WV Ecotype](#))
- 1.3% *Eupatorium perfoliatum*, PA Ecotype  
([Boneset, PA Ecotype](#))
- 1.1% *Monarda fistulosa*, Fort Indiantown Gap-PA Ecotype  
([Wild Bergamot, Fort Indiantown Gap-PA Ecotype](#))
- 1.1% *Pycnanthemum incanum*, MD Ecotype  
([Hoary Mountainmint, MD Ecotype](#))
- 0.8% *Asclepias syriaca*, PA Ecotype  
([Common Milkweed, PA Ecotype](#))
- 0.8% *Solidago bicolor*, PA Ecotype  
([White Goldenrod, PA Ecotype](#))
- 0.8% *Solidago nemoralis*, PA Ecotype  
([Gray Goldenrod, PA Ecotype](#))
- 0.3% *Solidago juncea*, PA Ecotype  
([Early Goldenrod, PA Ecotype](#))
- 0.3% *Solidago rugosa*, PA Ecotype  
([Wrinkleleaf Goldenrod, PA Ecotype](#))

<https://www.ernstseed.com/product/mesic-to-dry-native-pollinator-mix/>

Mesic to Dry Native Pollinator Mix

Item Number: **ERNMX-105**

The native wildflowers and grasses in this mix provide an attractive display of color from spring to fall. Designed for mesic to upland sites and full sun to lightly shaded areas. This mix will attract a variety of pollinators and songbirds. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

## **MIX COMPOSITION**

- 30.0% *Schizachyrium scoparium*, Fort Indiantown Gap-PA Ecotype  
([Little Bluestem, Fort Indiantown Gap-PA Ecotype](#))
- 19.0% *Elymus virginicus*, Madison-NY Ecotype  
([Virginia Wildrye, Madison-NY Ecotype](#))
- 12.3% *Sorghastrum nutans*, NY4 Ecotype  
([Indiangrass, NY4 Ecotype](#))
- 8.5% *Echinacea purpurea*  
([Purple Coneflower](#))
- 5.0% *Panicum clandestinum*, Tioga  
([Deertongue, Tioga](#))
- 3.5% *Verbena hastata*, PA Ecotype  
([Blue Vervain, PA Ecotype](#))

- 3.2% *Penstemon digitalis*, PA Ecotype  
([Tall White Beardtongue, PA Ecotype](#))
- 3.0% *Coreopsis lanceolata*  
([Lanceleaf Coreopsis](#))
- 3.0% *Rudbeckia hirta*  
([Blackeyed Susan](#))
- 2.0% *Heliopsis helianthoides*, PA Ecotype  
([Oxeye Sunflower, PA Ecotype](#))
- 1.5% *Lespedeza capitata*, RI Ecotype  
([Roundhead Lespedeza, RI Ecotype](#))
- 1.3% *Zizia aurea*, PA Ecotype  
([Golden Alexanders, PA Ecotype](#))
- 1.0% *Asclepias tuberosa*, PA Ecotype  
([Butterfly Milkweed, PA Ecotype](#))
- 1.0% *Aster pilosus*, PA Ecotype  
([Heath Aster, PA Ecotype](#))
- 1.0% *Chamaecrista fasciculata*, PA Ecotype  
([Partridge Pea, PA Ecotype](#))
- 1.0% *Senna hebecarpa*, VA & WV Ecotype  
([Wild Senna, VA & WV Ecotype](#))
- 0.7% *Asclepias incarnata*, PA Ecotype  
([Swamp Milkweed, PA Ecotype](#))
- 0.6% *Rudbeckia triloba*, WV Ecotype  
([Browneyed Susan, WV Ecotype](#))
- 0.5% *Baptisia australis*, Southern WV Ecotype  
([Blue False Indigo, Southern WV Ecotype](#))
- 0.5% *Eupatorium perfoliatum*, PA Ecotype  
([Boneset, PA Ecotype](#))
- 0.4% *Monarda fistulosa*, Fort Indiantown Gap-PA Ecotype  
([Wild Bergamot, Fort Indiantown Gap-PA Ecotype](#))
- 0.3% *Asclepias syriaca*, PA Ecotype  
([Common Milkweed, PA Ecotype](#))
- 0.2% *Solidago bicolor*, PA Ecotype  
([White Goldenrod, PA Ecotype](#))
- 0.2% *Solidago nemoralis*, PA Ecotype  
([Gray Goldenrod, PA Ecotype](#))
- 0.1% *Pycnanthemum incanum*, MD Ecotype  
([Hoary Mountainmint, MD Ecotype](#))
- 0.1% *Solidago juncea*, PA Ecotype  
([Early Goldenrod, PA Ecotype](#))
- 0.1% *Solidago rugosa*, PA Ecotype  
([Wrinkleleaf Goldenrod, PA Ecotype](#))



<https://www.ernstseed.com/product/specialized-wetland-mix-for-shaded-obl-facw-areas/>

## Specialized Wetland Mix for Shaded OBL-FACW Areas

Item Number: **ERNMX-137**

The shade-tolerant native species provide wildlife habitat near wetland borders that are surrounded by trees. Excellent for grass and herbaceous cover on bioengineering sites. Mix formulations are subject to change without notice depending on the availability of existing and new dproducts. While the formula may change, the guiding philosophy and function of the mix will not.

### **MIX COMPOSITION**

- 26.8% *Carex vulpinoidea*, PA Ecotype  
([Fox Sedge, PA Ecotype](#))
- 20.0% *Elymus virginicus*, Madison-NY Ecotype  
([Virginia Wildrye, Madison-NY Ecotype](#))
- 17.5% *Carex lurida*, PA Ecotype  
([Lurid Sedge, PA Ecotype](#))
- 17.4% *Carex scoparia*, PA Ecotype  
([Blunt Broom Sedge, PA Ecotype](#))
- 10.0% *Panicum clandestinum*, Tioga  
([Deertongue, Tioga](#))
- 2.0% *Heliopsis helianthoides*, PA Ecotype  
([Oxeye Sunflower, PA Ecotype](#))
- 1.5% *Sparganium americanum*  
([Eastern Bur Reed](#))
- 1.0% *Juncus effusus*  
([Soft Rush](#))
- 1.0% *Juncus tenuis*, PA Ecotype  
([Path Rush, PA Ecotype](#))
- 0.7% *Solidago rugosa*, PA Ecotype  
([Wrinkleleaf Goldenrod, PA Ecotype](#))
- 0.5% *Glyceria striata*, PA Ecotype  
([Fowl Mannagrass, PA Ecotype](#))
- 0.5% *Scirpus cyperinus*, PA Ecotype  
([Woolgrass, PA Ecotype](#))
- 0.5% *Verbena urticifolia*, PA Ecotype  
([White Vervain, PA Ecotype](#))
- 0.3% *Lycopus americanus*, PA Ecotype  
([American Water Horehound, PA Ecotype](#))
- 0.3% *Scirpus atrovirens*  
([Green Bulrush](#))