Additional information as well as responses to questions in the chat during the Zoom Presentation from Elaine Mills

In speaking of bees, I referred to the pollen baskets on the legs of bumblebees as pollinia. **Pollinia** is the term for a mass of pollen grains. **Corbicula** (plural corbiculae) is the correct term for the structure on the tibia of the hind legs of certain bees. So, bees collect pollinia in their corbiculae.

The slide on **Downy Serviceberry** (*Amelanchier arborea*) mentions that this small tree is prone to rust disease. That is a fungal disease that requires alternating hosts between junipers and members of the rose family. If affected, the serviceberry will develop brownish-orange spots on its leaves and a fuzzy orange coating on the fruit. To avoid the problem, don't plant this tree near Eastern Red Cedar (*Juniperus virginiana*) or prostrate junipers.

One of the participants, volunteered the information that the native **American Wisteria** vine (*Wisteria frutescens*) is also the larval host for the Long-tailed skipper.

On the slide for purple-flowered perennials, I described **Anise Hyssop** (*Agastache foeniculum*) as locally native. It is actually native to parts of the upper Midwest and Great Plains, although, like *Echinacea purpurea*, it grows very well in Northern Virginia and provides great support to pollinators.

I apologize for the slide on "butterfly" **plants to avoid** being out of order. Those two plants are Tropical Milkweed (*Asclepias curassavica*) and Butterfly Bush (*Buddleia davidii*). See this newly revised fact sheet for some suggestions of native shrubs and mostly shrub-sized perennials to plant as substitutes for the latter. https://mgnv.org/wp-content/uploads/2020/05/Butterfly-Bush-10.0.pdf Links from that fact sheet will take you directly to our Tried & True fact sheets which describe the native plants.

With regard to **controlling aphids** on milkweed without affecting Monarch eggs, Monarch females often lay their eggs, one at a time, on the undersides of leaves. It should be possible to remove the aphids, either by hand (knocking them into a bucket of soapy water to kill them) or with a stream of water without disturbing the eggs underneath.

Our Extension Agent comments that aphids can be hard to control and suggests growing small flowering plants, such as herbs and alyssum nearby to encourage the presence of natural predators, such as lacewings, ladybugs, and wasps.

Regarding the question on **stratification of seeds** for Butterfly Weed (*Asclepias tuberosa*), I referred to the website of the Lady Bird Johnson Wildflower Center. See a detailed description of the process at
https://www.wildflower.org/expert/show.php?id=10705&frontpage=true
See also this reference on winter sowing recommended by our Extension Agent
https://extension.psu.edu/successful-winter-seed-sowing

The book on **managing perennials**, including techniques for controlling height, is *The Well-Tended Perennial Garden: Essential Guide to Planting & Pruning Techniques* by Tracy DiSabato-Aust.

In responding to the question on appropriate **native vines for growing on deck railings**, I should have mentioned that vines attach in various ways: by twining, by clinging with aerial roots, or by adhering with suction cups. Although this article by the Wild Seed Project is intended for gardeners in Maine, it gives excellent descriptions of some native vines and their landscaping uses. All of them are also native to Virginia, although Allegheny-Vine grows in the mountains and Wild Cucumber has a limited range in our state. Two species I didn't mention are Virginia Creeper (*Parthenocissus quinquefolia*), the host plant for a sphinx moth, and Dutchman's Pipe (*Isotrema macrophyllum*), which is the sole food for the Pipe-Vine Swallowtail.
https://wildseedproject.net/2016/12/growing-vertical-native-vines-climbing-plants-fences-trellis-walls/
This resource also describes **growing conditions** (sun or shade) for these **vines**.

In reference to the question on using **"in-ground" bagged soil**, this product will not be appropriate for use in containers. Like soil taken directly from your garden, it consists of a mix of sand, silt, and clay, which, because of its denseness, can become compacted in containers, causing root damage and inhibiting growth. Potting "soils" are lighter soilless mixtures formulated specifically for use in containers and containing natural rocks, moss, composite, and plant matter.

If possible, try to find a **potting mix** with a sustainable substitute for peat moss, such as coconut coir, a byproduct of the coconut industry. Peat moss is a non-renewable resource, and harvesting results in destruction of bog ecosystems and the release of carbon dioxide into the atmosphere where it acts as a potent greenhouse gas.

There were several questions in the chat box on **Golden Alexanders** (*Zizia aurea*) which were not discussed during the presentation. The root of this plant is generally considered toxic as eating its root can cause vomiting. There should be no problem handling the plant. Although the compound flower umbels somewhat resemble the flowers of rue, the two plants aren't related. Golden Alexanders is a member of the carrot/parsley family, while rue (*Ruta graveolens*), native to Southern Europe, is a member of the citrus family.

Another question was posed about planting **sunflowers**. The large-flowered Common Sunflower (*Helianthus annuus*) that most people are familiar with is an annual native to the western United States. Sunflowers grown for commercial crops are generally pollinated by honeybees, but native bees, including bumblebees, carpenter bees, and smaller bees, are also attracted to these plants for nectar and pollen.

Refer to the Digital Atlas of Virginia Flora for a list of the sunflower species native to Virginia.
http://vaplantatlas.org/index.php?s=Helianthus&c=&do=search%3Aadvanced&search=Search
I mentioned Woodland Sunflower (*Helianthus divaricatus*), but there are many other species.

Participants also inquired about several **woody plant cultivars**. I didn't mention Buttonbush (*Cephalanthus occidentalis*) because the straight species grows from 6 to 12 feet high. The 'Sugar Shack' cultivar is a somewhat smaller shrub at 4x4', growing in sun to part-sun and wet conditions. The fragrant flowers appear to retain the shape of the straight species, so they should support the same visitors: bees, butterflies, hummingbirds. I'm not familiar with the 'Red Pygmy' cultivar of Flowering Dogwood (*Cornus florida*). This patented plant, developed by Rutgers is described on their website as ideal for use in small garden spaces. Missouri Botanical Garden describes it as a slow-growing dwarf cultivar, reaching maturing at 7 feet in height after 10 years. (Other sites describe it as growing up to 15 feet tall.) It has rosy flowers and appears to retain the green foliage color of the straight species.

Another participant asked for advice on **canvas grow bags**. An Extension Master Gardener colleague, who is a coordinator of our organic vegetable demonstration garden, shared this information. She uses high quality bags to grow potatoes every year in her personal vegetable garden, but she empties them at the end of the season after harvesting and puts them away for the winter. She feels that their use for perennials would take a toll on the soil and bag itself as it went through freezes, heat, and periods of dry and wet.

Another colleague points out the advantages of better drainage and healthy root growth compared with other containers. In her experience, however, the bags are very porous, making watering a challenge. Hers have not lasted beyond several seasons, and the fabric handles tend to tear. In addition, most bags are not biodegradable, posing environmental concerns when they need to be replaced.

Happy gardening!
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