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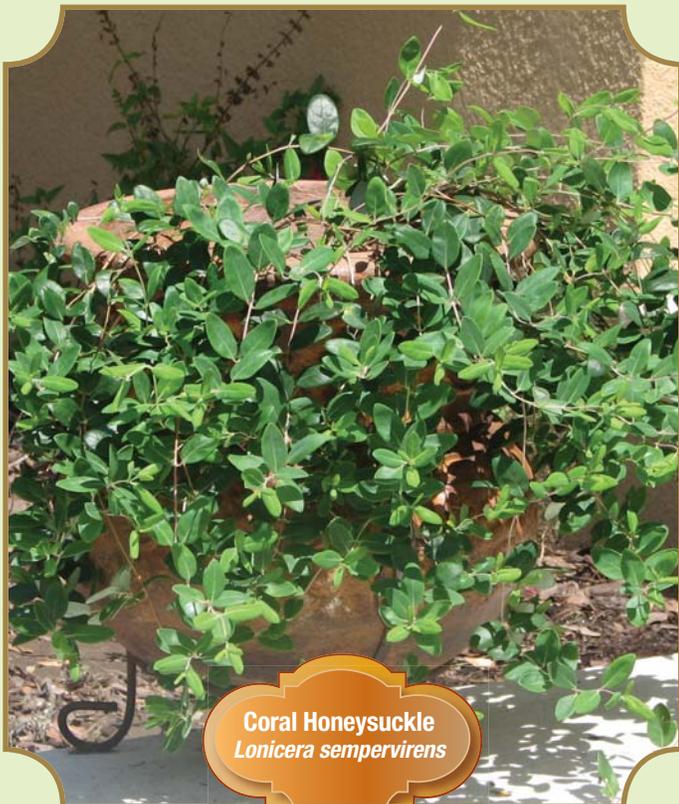
Palmetto



Notes on *Harrisia fragrans* • Native Container Gardening • *Helenium amarum*



Blue-eyed grass
Sisyrinchium angustifolium



Coral Honeysuckle
Lonicera sempervirens



Horsemint
Monarda punctata



Native Container Gardens

Ginny Stibolt

Photos by Kari Ruder

If your gardening is limited to a small space or if you'd like to invite more butterflies to your deck or patio, add a few container gardens planted with Florida natives to your landscape. While some natives work well in containers, others do not. Choose tough, drought tolerant plants that can take the strain of container living.

When combining different types of plants in a container, do your homework to make sure they are compatible. Plants that you grow in one container should require the same soil type and irrigation level. If possible, choose plants so that their roots occupy different levels within the pot. For instance you could plant bulbs and a shallow-rooted plant such as blue-eyed grass (*Sisyrinchium angustifolium*) along with rain lilies (*Zephyranthes* species). If a plant is an aggressive spreader, it won't be easy to include other species in the same pot – they'll be crowded out in no time. Multiple pots, each with a monoculture, can be arranged in a pleasing manner and might be easier to maintain.

Your pot choices and soil mix will depend upon the plants you've chosen and the exposure of the container to sun and wind. Whether it is a long-term container garden or a one-season pot, you need to plan for watering and care. Develop a realistic strategy to fit in with the resources available and proceed accordingly.

Here in Florida, it gets hot, especially on our front door steps where many potted plants live. There's heat retention in the sidewalk, concrete steps, and even in the pot if you use clay or cement planters. It's a wonder that any plant, unless it's a prickly pear cactus or yucca, can

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Native Container Gardens

survive this environment. To help reduce the heat problem and the resultant need for more water, insulate the plant and its soil by planting it in a liner pot. A liner pot allows a layer of air between the outside and inside pots to separate the soil from the heat – you could even stuff some Spanish moss or packing peanuts in the space between the pots to increase the insulation.

This interior pot doesn't have to be pretty, but it should be lightweight, so you can remove it with its plants and soil without too much trouble. Fabric pots make the best liners, because plants will be less stressed growing in a confined space if the soil is aerated all around and their roots have the benefit of air-pruning.

If the exterior pot has drainage holes, and if it's the right height, just set the liner pot on the bottom. If your exterior pot does not have drainage or if you need to raise the height of the liner pot for the best presentation of the plants, then place enough gravel, packing peanuts, a couple of bricks, or other inert material in the bottom to raise the liner pot to the desired level.

Whether you are using a new pot or reusing an old one, it's a good practice to rinse or scrub out the pot to remove salts, disease-carrying organisms, or chemicals used in manufacturing. When cleaning a porous pot such as clay, cement, or wood, thoroughly wet down the interior of the container. Fabric pots can be soaked in a bucket of water.

No Gravel!

Despite what we've been told all these years, covering the bottom of the container with a few inches of gravel (or pot shards) does not enhance drainage. University studies have shown that this layer of gravel or pot shards actually impedes drainage, because water tends to hang together and does not travel well from the fine substrate of the potting mix to the coarse gravel mixture. Plus, plants are under enough stress in containers; so don't reduce the depth of the soil in the pot with a layer of gravel. Prevent soil from washing out of the drainage holes by placing a piece of screen or non-woven weed barrier cloth, or even a few dried leaves over the holes before adding the soil. Using a large piece of non-woven weed barrier cloth so it extends up the sides of the pot sometimes discourages ants from using outdoor pots as nests.

The soil mix for containers will vary depending upon whether you're planting a one-season pot or a long-term container garden. The standard advice for container gardens is to use a soil-less potting mix for its lightness and because it contains no weeds or other organisms. This sets up a situation where the plants are totally dependent on you to

provide fertilizer, because this potting medium serves only to hold the plants upright. This light mix also dries out quickly. Some potting mixes that have chemical fertilizers and water retention granules built-in attempt address these shortcomings, but studies have been unable to verify that water retention granules make any difference at all.

A better environment, especially for native plants, is to use your own compost made from many types of plant materials. It's full of beneficial microbes that promote good root health and complete nutrients. You could mix it with vermiculite and/or coconut coir to add absorbency. Vermiculite lightens the soil. Coconut coir adds more organic material or humus; use it instead of peat moss.

The ratio of these three items will depend upon the container and what you'll be planting in it. For a permanent container, create a heavier mix with more compost, so plants can thrive for a few years before they need to be repotted. For hanging baskets or temporary containers, keep it light with more vermiculite in the mix.

On planting day, it's a good idea to pre-water the plants in their nursery pots so they'll be easier to remove and so more soil will remain clumped around the roots. Water them first and let them drain while you work on the rest of the preparations.

Once it's planted, water the whole container to rinse the soil from the leaves, to settle the soil in between the plants, and to eliminate any big air spaces. Press down the wet soil gently, add more as needed to smooth out the surface – don't pack it tightly, because the roots need small spaces in the soil. Depending upon the type of planter or container, you may wish to add a fine-textured mulch, such as coconut coir, or coarser mulch, such as pine needles, on top of the soil.

To create a hanging or mounted pot in a wire basket with a coconut fiber mat or sphagnum moss liner, proceed as above in handling your plants and create a fairly heavy soil mixture – the aeration is so extreme that your plants will appreciate the extra moisture retention. You can plant several plants on top in the soil and wait for them to grow into a graceful, trailing arrangement, but for quicker results, you could add plants to the sides as well. Place just a little soil in the bottom of the pot, split the coconut mat or sphagnum liner in three or five places. Slip the plants, roots-first, into those side-splits. Fill in the rest of the soil up to the bottom of your top plants' root balls and proceed as described above. This will not be a long-term planter, but will provide quite a show for a season.

No matter what type of container you've planted, you may wish to set it in an out-of-the-way spot for a day or two while the plants adjust to their new orientation, and where you can keep an eye on it. Some of the stems or branches may have been broken during planting and will need to be

trimmed. If one of the plants wilts while the others remain perky, it needs to be replaced. Plants will arrange themselves so that as many leaves as possible can absorb light for photosynthesis – when they do this, your planter is ready to set or hang in its permanent position.

Container Garden Care

Coming up with a watering routine is the largest challenge in container care, even for native plants. Watch for wilting and check the soil before and after you water to make sure that the water is soaking into the soil and not running straight through a gap somewhere – this may happen if the soil dries out and it requires a deep soaking to fix it. The faster a plant grows, the more water it needs. You may need to water most plants daily on hot or windy days, but during the cooler months or rainy season, the need will be much less. Hand watering is the most frequently used method, but it can become a chore if you have a lot of pots. An automatic drip system will remove some of the time required for maintenance, but you'll still need to keep an eye on how your container plants are doing.

While the soil mix includes compost with its microbes and nutrients, your plants will deplete the soil in this enclosed environment, so add some compost to the soil's surface, or if you think it's needed, fertilize occasionally with organic fertilizer such as a fish emulsion or compost extract. Don't stimulate new growth with fertilizer if the plants are entering a dormant period or a period with limited watering.

Trimming and pruning plants can increase the blooming, keep the arrangement well balanced, and reduce the amount of water and nutrient uptake. For a one-season pot, the trimming will mostly be deadheading and trimming back stragglers – this will cause new growth and will lengthen its season. For a permanent container, prune woody plants, being careful of the overall shape, because these plants are prominently displayed. Herbaceous plants such as spotted horsemint may need to be trimmed back the same as a one-season pot to stimulate new growth and to keep them from getting too leggy.

During the dry season flush your permanent pots with an extra deep watering every six weeks or so. This rinses out the salts that build up from fertilizers (organic or not), soil residue, and maybe salt spray. It's good if you can coordinate this with Mother Nature; so do it just before or just after a hard rain. Set up your plants without their saucers, water them thoroughly with rain barrel water, and then check the soil for depth of moisture. Sometimes even what seems to be a thorough watering doesn't wet all the soil. Water again after a few minutes and then let the rain soak the soil again.

After two or three years growing in a container, most plants will appreciate new soil, and maybe a larger pot. The day before repotting, water deeply. If you used a cloth liner pot, the plants won't be root bound, but they're likely to fill the whole space, so it might be easiest to cut the pot away. If you used a hard pot, the roots will probably be growing against the inner wall of the container. Carefully knock the plants from the pot. Don't manhandle the plants by the stems or trunks; support them by their root balls.

Judge your container's ecosystem as if you were purchasing new plants. If the roots are white and turgid, your plants are still in good health. If your container soil is healthy, it should smell sweet or earthy, not sour. If the soil is sour, you've probably been over watering which creates an anaerobic condition. If the roots are circling in the pot or if they are tan or mushy, then you've waited too long to repot or maybe there is a soil-borne disease in your container. It's not a good idea to repot mushy-rooted plants; they are not likely to survive. To attempt to save the plant, cut away all the mushy roots, rinse the remaining healthy roots, and use all new soil in the new or well-scrubbed pot.

Before you replant, knock away some of the loose soil, and spread out the roots. If you plan to reuse the same pot, scrub it inside and out. Also because you are not going to a larger pot, take a clue from the bonsai gardeners and trim back the roots (maybe one fifth of the volume) before replanting. If you trim the roots, don't prune the top for two or three months – the plant will need all the leaves it has to recover from the shock of transplant. Record the dates of planting and repotting in your garden log, so the next time you'll have a better idea of when to repot.

Container Gardens Add Flexibility to Native Landscapes

Container gardens can set the tone for your landscape – they can be formal or informal. Container gardens can define outdoor areas, absorb rainfall on otherwise impervious surfaces, allow gardening in small areas, and provide changeable accents each season. Use your imagination and you may find that containers can solve some of your biggest gardening challenges. You may never go back to 100 percent in-the-ground gardens again.

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Editorial Content

We welcome articles on native plant species and related conservation topics, as well as high-quality botanical illustrations and photographs. Contact the editor for guidelines, deadlines and other information.

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The purpose of the Florida Native Plant Society is to conserve, preserve, and restore the native plants and native plant communities of Florida.

Official definition of native plant:

For most purposes, the phrase Florida native plant refers to those species occurring within the state boundaries prior to European contact, according to the best available scientific and historical documentation. More specifically, it includes those species understood as indigenous, occurring in natural associations in habitats that existed prior to significant human impacts and alterations of the landscape.

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