

MAKING A CLOSED TERRARIUM

1. Pick a glass container that will accommodate you plants
2. Have a vision
3. Have a few accessories / stone, shells, figures...people, animals that won't rust

ASSEMBLING

1. DRAINAGE – ½ TO 1" PROPORTIONAL TO CONTAINER
2. Landscape fabric – small square to cover stone
3. Activated Charcoal – sprinkle on fabric if used
4. Soil – dampened just enough to hold it together – height of container plans purchased – adjust soil to make hills or valleys if you like.

PLANTS

Use plants specially propagated for terrariums (slow growing & they like moisture ie: high humidity)

Ferns
Mosses
Begonias
Mini impatiens
Hawaiian heather
Terrarium green

Terrarium Location

- Indirect Sun light - Never put your terrarium in direct sun - it will cook
- East or west facing window in the winter
- Some moisture drops ok – too much condensation wipe off and leave top off slightly for a bit
- Make take a week or two to find the correct location
- Once you find the spot – rotate every once in a while
- **HAVE FUN**

Good Sources

The New Terrarium by Tovah Martin

East Coast Garden Center /Willeys/Jeff Green House

Mary Noel 302-337-1054

TERRARIUMS

RAINFOREST	ARID CLIMATE / DRY (DESERT)
CLOSED - LID	OPEN – NO LID
LOW MAINTENANCE	REQUIRE WATER – EVERY 2 TO 3 WEEKS
ARCHIVEA	ELANDIA
MAIDENHAIR FERN	SUCCULENTS
BABY TEARS	CACTI PLANTS
MOSS	CACTI SOIL
SOIL	SANDY SOIL
CHARCOAL	CHARCOAL
ROCKS	ROCKS
PLACE IN WELL LIT AREA	BRIGHT LITE / SOME SUN
NO DIRECT SUN EAST OR WEST WINDOW IN WINTER	GLASS CONTAINER MAGNIFIES THE SUN
IF DRY LIGHTLY MIST WITH FILTERED WATER	FILL STRAW WITH WATER TO WATER AT THE BASE OF PLANTS
A GOOD TERRARIUM SHOULD CREATE IT OWN ECOSYSTEM	WATER EVERY 2 TO 3 WEEKS
OVER WATERING	UNDER WATERING
YOUNG & OLD LEAVES DROP AT SAME TIME	LEAF TOPS BECOME BROWN - DRY
ROOT ROT (BROWN, MUSHY)	CURL & YELLOW

INSTRUCTIONS FOR SUCCULENT TERRARIUM

Terrariums are great for plants that require moist, humid environments. Succulents don't usually prefer these types of conditions. Because succulents use their thick, fleshy leaves and stems to hold water, they don't need moist, humid conditions. Traditional closed terrariums hold in moisture and humidity. These wet environments will rot and kill succulents in very little time. Just a few easy tweaks to a traditional terrarium will make for a successful succulent terrarium.

1. Choose a wide glass or plastic container with an open top or a removable lid. Wash the container with warm water and mild soap and allow it to dry completely.
2. Fill the bottom 1/8 of the terrarium with gravel to provide adequate drainage of excess water. Use pebbles, bits of broken pottery or similar materials in place of gravel if you prefer.
3. Add a 1/2 to 1-inch layer of activated charcoal on top of the gravel to absorb toxins from the water and soil and to help eliminate stale or musty odors.
4. Sprinkle about an inch of sphagnum moss on top of the charcoal or use moss sheets cut to size. Moss helps keep the soil from falling into the gravel.
5. Add several inches of fast-draining potting mix made for cacti and succulents or mix sand or pumice with houseplant soil to increase drainage.
6. Add water to the soil so that it's just moistened throughout but not wet or muddy.
7. Plant succulents in the soil mix, spacing them several inches apart to allow for airflow and growth.
8. Add a thin layer of gravel on top of the soil and around your succulents to help reduce humidity in the terrarium.
9. Leave the lid off the container and place it in a location that gets plenty of airflow and indirect sunlight. Water only when the soil becomes almost dry but not bone-dry.

SMALL SUCCULENTS – miniature pots and landscapes – windowsill plants

Aloe breifolia

Aloe juvenna

Aloe "Lizard Lips and similar hybrids

Cotyledon tomentosa

Crassulas

Echeverias

Euphorbia obesa

Euphorbia suzannae

Faicaroas

Haworthias

Ice plants

Living stones

Mammillarias

Parodias

Rebitoas

Sedeveroas

Sedums

Sempervivums

stapeliias

Flower Show Terms: Terrarium. A miniature landscape in a closed (covered) transparent container. Such as small conservatories or greenhouses, bottle gardens, fish bowls, tanks or other types of covered glass cases. May include one or more accessories to complete the landscape. Accessories permitted, but not cut plant material.

Combination plantings – must have been in exhibitor's possession and growing together at least 6 weeks prior to exhibiting.

Judging Considerations:

- A. Plant Identification** – each plant clearly and completely identified with scientific name.
- B. Overall Effect.**
 - 1. Conformance – fulfills all schedule requirements for type & size limitations
 - 2. Placement. Well spaced, not crowded, nor with too much space. Terrariums must be landscapes.
 - 3. Appropriate selections with respect to compatibility of color combinations, forms sizes, textures, accessories
 - 4. Unity. Overall cohesiveness of harmonious colors, forms sizes & textures.
- C. Environmental Suitability.** Culturally compatible specimens.
- D. Cultural Perfection**
 - 1. Healthy. Unaffected by insects or disease; vigorous
 - 2. Size/maturity. Plants of adequate size & well established.
 - 3. Color. Bright, fresh, harmonious
 - 4. Substance. Fresh, crisp, turgid
 - 5. Foliage – not deformed, dull etc.
- E. Condition and Grooming**
 - 1. Free of blemishes
 - 2. Groomed to remove spent blooms, damaged foliage, debris
 - 3. Soil unobtrusive and not distracting
- F. Container**
 - 1. Suitability in terms of size,
 - 2. Condition, cleanliness
- G. Distinction.** Significant faults above adversely affect distinction

4. COMBINATION PLANTINGS. May be flowering or foliage.	
Plant Identification	5
Legible. <u>Each plant</u> completely identified with genus, species, cultivar, as appropriate.	
Overall Effect	25
Conformance. 4	
Fulfills all schedule requirements for type and size limitations.	
Placement of plant and accessories. 5	
According to Design Principles. Well spaced. Dish gardens and terrariums must be landscapes.	
Appropriate selection. Compatibility 12	
Color combinations. 3	
Forms and sizes. 3	
Textures. 3	
Accessories, if applicable. 3	
Unity. Overall cohesiveness. 4	
Environmental Suitability	5
Specimens compatible with similar cultural requirements.	
Cultural Perfection	35
Healthy. 10	
Substance. Fresh, crisp, turgid. 5	
Foliage/stems/flowers. 10	
Unaffected by insects or disease. Vigorous.	
Size/Maturity. 5	
Adequate size and well established.	
Color. Bright, fresh, harmonious. Foliage ample, 5	
luxuriant, not deformed, dull, etc. Stems straight, proportionate, sturdy, graceful, etc.	
Flowers well formed, characteristic, abundant, etc.	
Condition & Grooming	10
Free of blemishes. Caused by insects, disease, 4	
lack of grooming, mechanical damage.	
Groomed for best appearance. To remove spent 3	
blooms, damaged foliage, debris, etc.	
Soil unobtrusive and not distracting. 3	
Container	10
Suitability. 5	
In size, color, texture, form, style.	
Condition. 5	
Cleanliness and unbroken.	
Distinction	10
Originality, superiority in all respects. Significant faults above adversely affect Distinction.	
Total score	100

WEBSITE AWARD CRITERIA

#63-1 and #63-2, Website - A Certificate of Merit and a \$100 donation (divided) by The Garden Club of Georgia may be awarded for the most outstanding website promoting the sponsoring organization and NGC objectives. Provide on the NGC Awards Application Form your website address, who maintains site, how often updated, and cost. Ease of navigation will be considered while judging from the current site.

#63-1, Designed and managed by club member/members

#63-2, Professionally designed

- A. Single member garden club - i small club, ii medium club, **iii large club**, iv ex-large club
- B. Group of member clubs (councils or districts, etc.)
- C. ???
- D. State Garden Club - i small state, ii medium state, iii large state, iv ex-large state
- E. National Affiliate (dues paid directly to NGC) G. International Affiliate

SCALE OF POINTS FOR WEBSITE JUDGING #63

25 points - Presentation: Design/Appearance: attractive, engaging, easy to view; layout

35 points - Navigation: Ease of navigation, navigation system (bar, map, etc.), logical flow of pages, clear page headers, links active

20 points - Achievement: Club/group information present/ease to find, educational

10 points- Promotion: Promotes NGC objectives

10 points - Maintenance: Does it appear to be updated?

Some of the Kind of Moss
we might find around here

Hypnum – sheet moss – very common, growing in lots of different conditions, mostly what I have in my yard.

Leucobryum glaucum– Cushion moss – looks like a cushion, forms small clumps

Polytrichum – Hairy Cap moss – looks like miniature pine trees

Mnium cuspidatum – Woodsy moss – Mt. Cuba staff nicknamed it “waterfall moss” because it resembles a waterfall

Thuidium delicatulum – fern moss

Sphagnum palustre – peat moss- forms the foundation of acid peat bogs, harvested as soil amendments to potting mixes, which could be detrimental to the bog. Coconut fiber and pine trees are more eco-friendly alternative soil amendments

Atrichum undulatum – spine leaf moss

Transplanting Moss

You can use transplanted moss to increase moss in your garden, using small pieces, putting them together like patchwork, even using different kinds.

Prepare the area- remove any grass or other plants. Dig or scrape a shallow trench. Moisten the moss you're transplanting and the soil you're putting it on. Press in the moss, water well, pound with your fists or step on to remove air pockets. Water until well established, at least 2-3 months.

Moss Care

Besides watering to establish, the most important (and biggest task) is keeping your moss free of debris and fallen, which will keep it from getting the light and air it needs.

You can use a whisk broom, a rake if you're very careful, or a leaf blower as long as the moss is moist. If it hasn't rained for a while and it's dry, you're more likely to blow away moss, too.

You'll also want to keep out weeds so they don't take over the moss. It's easiest to remove weeds right after a rain, using one hand to hold down the moss while using the other to pull up the weed. The staff recommended tweezers with a bent tip for removing small weeds from moss. They also say it is a zen-like experience weeding moss.

Helpful Tools for Moss

Hori Hori knife and tray for transplanting

Whisk broom or leaf blower

Kneeling pad and tweezers for weeding

Netting or plastic plant trays to keep critter out of moss, especially newly planted moss

Native Plant Companions
to grow with moss

- Bluets - *Houstonia caerulea*
- Partridgeberry - *Mitchella reptans*
- Golden Ragwort - *Packera aurea*
- Blood root - *Sanguinaria canadensis*
- Solomon's Seal - *Polygonatum biflorum*
- Jack in the Pulpit - *Arisaema triphyllum*
- Wild Columbine - *Aquilegia canadensis*
- Native Ferns - Lady fern, Christmas fern
- Shooting Star - *Dodecatheon meadia*
- Stonecrop - *Sedum ternatum*
- Foamflower - *Tiarella cordifolia*
- Native Sedges - *Carex pennsylvanica*, *C. appalachica*
- Virginia Spring Beauty - *Claytonia virginica*
- Crested Iris - *Iris cristata*

Non-native ornamentals such as Hostas, Japanese Painted Fern, Hellebores, Epimediums

Some Gardens to See Moss

Mt. Cuba Center

Hockessin, DE

www.mtcubacenter.org

New England Wild Flower Society's Garden in the Woods

Framingham, MA

www.newfs.org

Fern Valley at the U.S. National Arboretum

Washington, D.C.

www.usna.usda.gov

David Benner's Garden – gives tours late April or Early May

New Hope, PA

www.mossacres.com

Bowman's Hill Wildflower Preserve

New Hope, PA

www.bhwp.org

Some Sources for Native Plants

Adkins Arboretum Annual Plant Sale – April

Ridgely, MD

www.adkinsarboretum.org

Delaware Native Plant Society's Annual Plant Sale – first Saturday in November

St. Jones Reserve, just south of Dover

www.delawarenativeplants.org

Delaware Nature Society's Annual Plant Sale – End of April

Greenville, DE

www.delawarenaturesociety.org

U.S. National Arboretum's Annual Native Plant Sale – end of March

Washington, D.C.

www.usna.usda.gov

Resources

Books:

Native Ferns, Moss and Grasses, William Cullina, New England Wildflower Society, 2008

Moss Gardening: Including Lichens, Liverworts and Other Miniatures, George Schenk, Timber Press, 1997

Outstanding Mosses and Liverworts of Pennsylvania and Nearby States, S. Munch, Sunbury Press, New Kingston PA 2006

Gathering Moss: A Natural and Cultural History of Mosses, Robin Wall Kimmerer, Oregon State University Press, 2003

Websites:

mossacres.com

mossandstonegardens.com

mountainmoss.com