Designing and Growing Terrariums

Terrariums have been a part of our green growing environment for several centuries. Invented in 1836 by N.B. Ward, terrariums were originally called "Wardian Cases." Initially used for transporting growing plants on long sea voyages, they provided the best and safest method for bringing potted and living plants across the ocean.

A true terrarium is, by definition, an enclosed growing environment. Typically, they are made of glass or Plexiglas. For the true recycler, large soda bottles and mayonnaise jars can be used. A few points for success: make sure the chosen container is see-through and clean.

A terrarium can be a work of art when the proper materials are cleverly combined in an attractive container. It can also provide the opportunity to grow some of the delicate plants that would ordinarily not do well when exposed to the dry air in our homes. Because terrariums are closed environments, cacti and other succulents are better suited to dish gardens.

Design Tips

1. Natural settings are often the theme of terrariums--try to replicate this feel.

2. Select plants that will be in scale with the size of the terrarium. Know the plant's growth habits before you buy and plant.

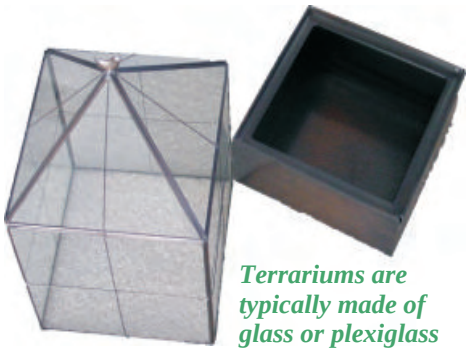
3. Choose species that have similar culture requirements and are aesthetically compatible.

4. Terrariums can have a focal point: a stone, a striking plant or perhaps a ceramic figure.

5. A path into the vegetation can add interest and a bit of intrigue.

6. Consider covering the soil with low-spreading plants or mosses for a more natural look.

7. Do not crowd your plants; allow them some growing room.



Terrariums are typically made of glass or plexiglass

Soil

A good soil mix should be composed of 1/3 soil, 1/3 sand and 1/3 peat moss. Avoid using soil from the garden for terrariums. A visit to the local garden center should provide you with ready-made soil mixes to use. Some mixes may have fertilizer already added (check the label). If not, one tablespoon of water-soluble houseplant food in dry form may be added to 2 pounds or 1 quart of soil mix.

A word of caution, exercise care when opening a bag of dry soil mix--the dust that escapes can be overwhelming should you breathe it in. A helpful hint: carefully open the top of the bag and add some water to it. This will greatly cut down on the dust particles, making it easier to use.

Drainage is critical when designing a terrarium; some provision must be made for this. A one to two-inch layer of sand, small gravel or crock should be placed on the bottom of the container for drainage. (Be certain to use clean gravel or pebbles.)

Care of Terrariums

❖ Closed terrariums can heat up rapidly. Give it good light, but not direct sun.

❖ Avoid overwatering! This is the number one problem encountered in terrarium maintenance.

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Water only when fogging stops or the plants become slightly wilted. When you water, add in small amounts by letting it trickle down the sides of the container. Splashes or steams of water can dislodge soil and/or plants. Mist the foliage to remove any soil.

❖If the terrarium is properly watered when it is constructed, it may not require watering for a long period of time. If overwatering occurs, leave the top off for a period of time, allowing the excess moisture to evaporate. Avoid flooding--even a small sponge may not be enough to soak up excess water! Replace the top when excess moisture is gone.

❖Fertilize infrequently. Excessive fertilizing can stimulate lush growth requiring pruning or possible removal of overgrown plants.

❖Some pruning or thinning of plants is necessary. If overgrown, consider replacing the plant with a new one.

❖Try breathing into the container occasionally to stimulate the plants with extra carbon dioxide.

❖Remove faded flowers and dead leaves. A little grooming goes a long way.

❖Redesign occasionally; don't be afraid to change the plants that aren't doing well.

Plants for terrariums

A visit to your local garden center should provide you with a palette of plants from which to choose. Seek out a knowledgeable staff person to assist you with selection. When selecting plants, arrange them at the garden center as you would when you get them home. Remember, these plants will not stay small forever. Depending on what you select, some plants will need pruning or perhaps relocating to a separate pot.

Woodland terrariums will require cooler temperatures. Keep in mind, many of these plants are the same as those that grow outdoors year-round in colder climes. Do a little homework before you buy and remember, always select those plants that enjoy the same growing conditions.

A word of caution: do not dig any plants out of the wild- these plants could be on protected or endangered lists. Check with your state Department of Environmental Conservation **before** removing any plants from the wild.

Woodland Plant List

❖**Maidenhair Fern** *Adiantum pedatum*
❖**Mother Spleenwort** *Asplenium bulbiferumv*
Boxwood Buxus species
❖**Dwarf Hinoki Cypress** *Chamaecyparis obtusa 'nana'*
❖**Wintergreen** *Gaultheria procumbens*
❖**English Ivy** (dwarf forms) *Hedera helix*
❖**Juniper** *Juniperus sp.*
❖**Ground Pine** *Lycopodium complanatum*
❖**Partridgeberry** *Mitchella repens*
❖**Plectranthus** *Plectranthus oertendahli*
❖**Shield Spike** *Polystichum 'Braunii'*
❖**Club Moss** *Selaginella sp.*
❖**Dwarf Yew** *Taxus media var.*
❖**Foam Flower** *Tiarella cordifolia*
❖**Piggyback Plant** *Tolmiea menziesii*
❖**Canadian Hemlock**, dwarf varieties *Tsuga canadensis*
❖**Ilex** *sp. Ilex* (also Holly)

Tropical Plant List

❖**Friendship plant** *Pilea involucrata*
❖**Nephthytis** (Arrow Leaf Plant) *Syngonium popdophyllum*
❖**Maidenhair Fern** *Adiantum pedatum*
❖**Norfolk Island Pine** *Araucaria heterophylla*

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- **Asparagus Fern** *Asparagus setaceus*
- **Parlor Palm** *Chamaedorea elegans*
- **Kangaroo Vine** *Cissus antarctica*
- **Earth Star** *Cryptanthus*
- **False Aralia** *Dizygotheca elegantissima*
- **Dracaena** *Dracaena surculosa* and *Dracaena sanderiana*
- **Creeping Fig** *Ficus pumila*
- **Nerve Plant** *Fittonia sp.*
- **English Ivy** (dwarf forms) *Hedera helix var.*
- **Prayer Plant** *Maranta sp.*
- **Miniature Peperomia** *Peperomia var.*
- **Philodendron** var.
- **Creeping Jenny** *Pilea depressa*
- **Yew Podocarpus** *Podcarpus macrophyllus*
- **Table or Brake Ferns** *Pteris sp.*
- **African Violet** *Saintpaulia*
- **Bird nest Sansevieria** *Sanservieria trifasciata cv. 'Hahnii'*
- **Strawberry Geranium** *Saxifraga stolonifera*
- **Pothos** *Epipremnum aureum*
- **Spike Moss** *Selaginella sp.*
- **Swedish Ivy** *Plectranthus australis*
- **Creeping Charlie** *Pilae nummulariifolia*
- **Wandering Jew** *Zebrina pendula*
- **Grape ivy** *Cissus rhombifolia*
- **Trailing Watermelon Begonia** *Pellionia sp.*
- **Aluminum plant** *Pilea cadierei*
- **Baby Tears** *Soleirolia soleirolii (Helxine soleirolii)*
- **Dwarf Myrtle** *Myrtus cummunis microphylla*
- **Artillery fern** *Pilea microphyllavCroton Codiaeum variegatum*
- **Moon Valley Pilea** *Pilea 'Moon Valley'*
- **Neanthe Bella Palm** *Chamaedorea elegans "Neanthe Bella'*

About Your Expert
Donna Moramarco,
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PlantAmerica Horticulturist Donna Moramarco (a.k.a. "Donna in the Garden") has been helping gardeners solve problems and achieve their dreams for over two decades. Donna has degrees in horticulture and education plus over 20 years as a Cornell University extension horticulturist.

How to Plant a Bottle Garden

This is great home project for all ages. The larger the container, the more plants you can use. Remember not to overcrowd the container, allow plants some growing room.

1. Clean bottle with moist paper towel held in wooden tongs. Let dry before planting.

2. Add 1-2" layer of sand or pebbles/gravel and a few charcoal chips. Then add a few inches of potting soil using a funnel and paper tube extension to help keep dust down and off sides of the clean bottle.

3. Roll larger, leafy plants in paper cylinders so they can slip through the neck without damage.

4. Use wooden tongs or chop sticks to lower small plants through the neck and to position all plants.

5. A spoon taped to a stick is great for digging planting holes, positioning plants, covering roots and shaping the terrain.

6. Shaping and pruning can be done with a razor blade taped to a stick. Pick up pruning with tongs or chopsticks.

7. Use a bulb syringe to wash sides of glass, water roots into place and settle soil. Use it dry to blow dust and soil particles off glass or leaves.

Did you know...

- The "Wardian Case" was used for transporting plants on long sea voyages during the 1800's.
- Fish tanks make great terrariums cover tops with glass panes or plastic wrap to keep in humidity. Helpful hint: tape the sides of glass panes to avoid injury.