

FIGHTING FLORIDA'S FICKLE FROST

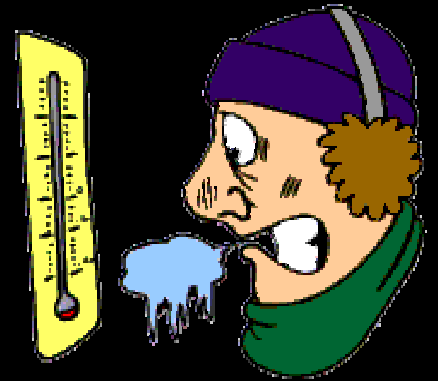
Cold Protection Strategies for Landscape Plants

UNIVERSITY OF
FLORIDA
IFAS EXTENSION



Winterizing the Florida Landscape

- When the thermometer hovers near 34 degrees, plants can be damaged by frost formation or freezing.
- Cold injury can occur to the entire plant or to parts of the plant. Roots and fruits are most vulnerable.



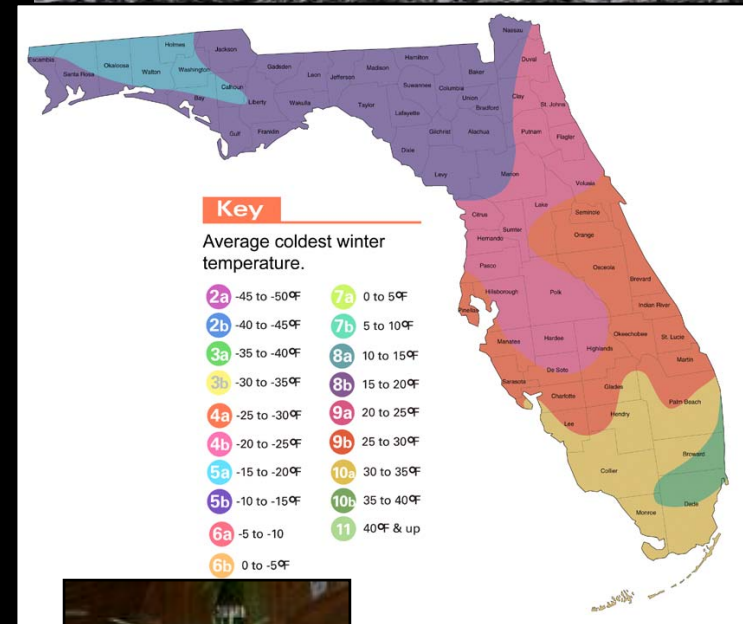
Winterizing the Florida Landscape

- Cold injury to the roots of plants in exposed containers is common.
- Roots of plants in the ground have more protection from cold.
- If the soil freezes, roots may be damaged.



Winterizing the Florida Landscape

- Consider the hardiness zone for the plants you buy. Pinellas County is in Zone 9b.
- Plants listed with hardiness zones of 10 or 11 will probably be damaged by frost or temperatures below freezing.



Winterizing the Florida Landscape

- **Tender plants should be planted in protected areas near fences or hedges or under trees, if shade tolerant, to protect them from cold winds.**
- **Well-drained soil also helps reduce cold damage.**
- **You may still need to cover them, if frost or freeze is predicted.**



Winterizing the Florida Landscape

- Fertilize properly for nutritional needs.
- Heavy applications of fertilizer in late fall can cause a flush of new growth that is more susceptible to cold injury.



Winterizing the Florida Landscape

- **Do not prune in late summer or early fall.**
- **Pruning may cause a flush of new growth that is more susceptible to cold injury.**



Winterizing the Florida Landscape

- **Routinely inspect plants for pests and disease.**
- **Healthy plants are more resistant to cold than plants weakened by disease or pests.**



When Frost or Freeze is Forcast - Methods of Protection

- **Bring tender plants in containers, such as orchids, into an enclosed area like a sunroom or even the garage.**



When Frost or Freeze is Forcast - Methods of Protection

Sheets and Bricks –

- For most home gardeners, the simplest and best protection is to cover plants with sheets or blankets, weighing down the edges with bricks, rocks or soil.



When Frost or Freeze is Forcast - Methods of Protection

No Plastic Bags –

- Do not use plastic bags to cover plants! Plastic in direct contact with leaves will conduct heat away and allow cold injury to the plant.



When Frost or Freeze is Forcast - Methods of Protection

- **Even plants that are normally cold-tolerant, such as these young Saguaro Cactus, (under the sheets) will need to be covered if they are recent transplants, not well established, or if an unusually severe cold snap is predicted.**



When Frost or Freeze is Forcast - Methods of Protection

- Valuable single specimen plants, like this Staghorn Fern, can be protected with a temporary greenhouse, constructed of wood framing and plastic sheets.
- Wood frames can also be covered with cloth with similar results.



When Frost or Freeze is Forcast - Methods of Protection

- **Wrapping the trunk of this Pygmy Date Palm didn't help! Sensitive plants must be completely covered.**



When Frost or Freeze is Forcast - Methods of Protection

Coverings protect more from frost than extreme cold.

- Covers that extend to the ground and are not in contact with plant foliage can lessen cold injury by reducing radiant heat loss from the plant and the ground.
- A ladder makes a convenient frame for covering a group of small potted plants.
- Placing a lamp under coverings can produce enough heat to protect sensitive tropical plants. Light must not touch leaves or covering.



When Frost or Freeze is Forcast - Methods of Protection

- **Tiny greenhouses, made from water or milk jugs, may temporarily protect seedlings and annuals. Remember to remove the covers when the garden warms up again!**



When Frost or Freeze is Forcast - Methods of Protection

Nurseries and strawberry farms may protect their stock by irrigation. This method does not work well for home owners, as the water must be turned on before the temperature falls below freezing, and must be allowed to run until the ice melts the following day!

Water restrictions would not allow for this type of protection.



After the Thaw



Frost on plants



Even native plants, like this Sea Grape, may be damaged by severe cold.

After the Thaw



Crotons are cold sensitive, and may be damaged by a freeze. Do not prune them yet!

Frost or freezing temperatures can damage the Blossoms of cold hardy plants like this camellia.



After the Thaw

Water Needs –

- Be sure plants receive sufficient water after a freeze, especially if plants are in containers.
- Foliage could be losing water on a sunny day after a freeze while the water in the container is frozen.
- Apply water to thaw the soil.



After the Thaw

It is often difficult to determine how far freeze damage extends.

If the cambium layer, just under the bark, is still green then the plant is not dead



After the Thaw

It is best not to prune after a frost or freeze.

Dead, unsightly leaves may be removed when they turn brown if desired, but complete damage may not be known until spring.

New growth will begin below the damaged area.

Prune off the brown stems above the new, green buds.



After the Thaw

- Florida homeowners enjoy a vast array of plant materials and often desire a tropical or semitropical appearance to their landscapes.
- Cold sensitive plants are often planted past their northern limit in Florida.
- Tropical and subtropical plants can be used effectively in the landscape, but they must be protected or replaced when necessary.
- A combination of tender and hardy plants should be planted in order to prevent total devastation of the landscape by extremely cold weather

