It is hard to imagine frost in the desert, especially when we experience average summer temperatures above 100 degrees Fahrenheit. However, on occasion, the desert experiences temperatures below 32 degrees Fahrenheit.

In the Coachella Valley, the period for frost potential is usually mid-November to mid-March.

Plant choice is the first step to protecting plants from frost. Choose hardy plants, especially if your landscape is in a frost prone area. Consider deciduous plants such as low chill fruits and vines.

What does hardy mean? Hardiness is a measure of a plant’s ability to withstand exposure to freezing temperatures. There are a number of factors that can alter a plant’s degree of tolerance or hardiness such as days or hours of exposure, cool temperature preconditioning, age and health.

Some ornamental plants are highly sensitive to freezing temperatures such as Bougainvillea, Hibiscus and Madagascar Palms. Arrange frost sensitive plants near structures that retain heat such as your house, rocks and concrete.

As for fruit trees, lemons, limes and grapefruit are hardy to frost above 26 degrees Fahrenheit. Orange trees can withstand temperatures above 24 degrees Fahrenheit. These temperature thresholds are for mature trees. Young and potted trees are more sensitive to frost damage than mature trees planted in the ground.

Below are some frost protection tips to consider.

- Pre-irrigate soil before a frost occurs. Wet soil gathers and holds more sun-source heat than dry soil. The temperature above wet soil can be up to 5 degrees warmer than dry soil.
- Cover your tree. Capture the earth’s radiant heat and keep it around your plant. Use cloth or fabric, not plastic. Drape the material loosely over the tree, careful not to bundle. Remove the cover daily after the temperature rises to expose the earth to the sun’s rays. Re-cover before the sun goes down.
- Provide external heat sources under the drape. Some examples include black water jugs, coils of black poly pipe and outdoor Christmas lights (not LED). Wrap the poly pipe and lights around the trunk, then drape the canopy. An outdoor incandescent light can also be used under the draped material.
- Utilize dark mulches under plants and trees. These mulches gather more heat around plants than exposed soil.

If your plants suffer as a result of freezing temperatures, follow these simple tips on caring for frost damaged plants.

- Do not prune right away, but remove frozen fruit as soon as possible. Wait until the period of further frost potential has passed, typically mid-March.
- Check branches for green tissue below the bark to determine the length of dead material before pruning.
- Avoid sunburned trunks by wrapping defoliated citrus trees with tree wraps or paint with white water-based paint or latex paint diluted with water (50:50 solution).
- Do not walk on frosty turf grass. This will most likely damage the grass. You will know if someone has walked on the grass because they will leave white footprints behind.
- Reduce spring irrigation and fertilization applications to compensate for smaller plant canopies after pruning.

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