

Palms

Learn more about palms, including palm selection, planting, and maintenance guidelines.



Palms are most prolific in tropical and subtropical regions, although a few varieties will even grow in warm temperate regions. A wide variety of species are available with a range of characteristics that make them fitting for most landscapes.

Palms are quite different from shade trees and conifers in appearance, growth, and care requirements. Unlike trees, a palm has only one aboveground growing point per trunk or stem. Located at the top of its trunk, this point and its surrounding tissues make up the terminal bud. If the terminal bud is injured, the palm often dies. This is especially true for a palm with only one trunk. If the palm has multiple trunks, the plant will usually live on if only one trunk is killed.

The roots of a palm do not thicken like those of trees and are less likely to damage sidewalks and utilities. New roots are generated at the root initiation zone, which is sometimes visible at the base of the trunk.

Palm Selection

Asking and answering these and other questions before selecting a palm will help you choose the “right tree for the right place”:

- Why is the palm being planted? Will it act as a windbreak or screen (clumping palm)? Will it be a focal point of the landscape?
- Does the planting space and location lend itself to a large, medium, or small palm? Are overhead or belowground utilities nearby? Is the site sunny or shady, windy or protected? Is the soil deep, fertile, and well drained, or is it shallow, infertile, and compacted?
- How much maintenance are you willing to provide? Does the palm have large fruits or fronds that need to be removed regularly to reduce the possibility of injury, litter, or property damage?

Purchasing Palms

Most palms are grown in containers at nurseries, although larger specimens may be dug and transplanted out of field stock. Choose a healthy palm for the best results in your landscape.

A high-quality palm has:

- A properly-sized root ball for the species and uniform trunk diameter consistent with the species’ characteristic trunk diameter.
- A trunk free of mechanical wounds and wounds from incorrect pruning.
- Full crown of healthy, vigorous fronds. (Sabal palms [Sabal palmetto] are purchased with fronds removed.)

A low-quality palm has:

- Trunk sections of varying diameter (“hourglass”) or small diameter below the terminal bud (“pencil”).
- A trunk with wounds from mechanical impacts or incorrect pruning.
- Few fronds, poor color for the species, or disease or pest infestation.

With careful palm selection, proper planting, and regular maintenance, your palm can be a beautiful part of your landscape for many years.

Planting and Transplanting Palms

(See figure on next page)

A: Remove wrappings or container.

B: Remove dead or dying fronds prior to planting. Tie the remaining fronds and limit excessive movement of the palm head to protect the terminal bud during transport and planting. Remove ties after planting.

C: The planting hole should be about 18 inches (46 cm) wider than the root ball. Dig the hole deep enough so that when the root ball is placed in the hole, where the roots emerge from the trunk is about even with the surrounding

soil surface or grade. Set the root ball on firmly packed soil to prevent settling. Gently fill the hole with the original soil where possible. Use water to settle the soil back around the root ball.

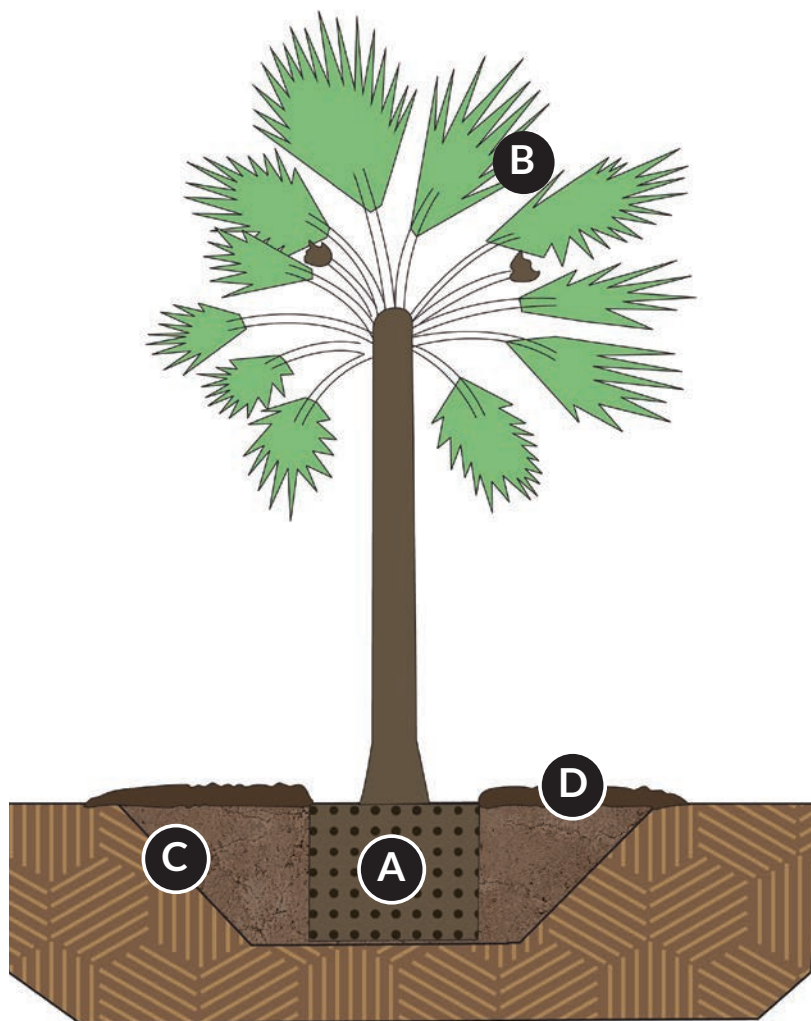
D: Apply 2–4 inches (5–10 cm) of organic mulch extending 2–4 feet (0.6–1.2 m) around the palm. Be sure not to pile too much right against the trunk. **A mulch-free area reduces excess moisture and prevents decay.**

When to Plant

For palms dug from a field where root disturbance can be severe, the best time to transplant is the beginning of the warm season—early to late spring depending on location. On the other hand, palms from a container can be planted just about year-round as the roots are usually not disturbed.

Irrigation

Irrigation needs depend on the climate and palm species. Generally, the goal is to keep the original root ball, backfill, and surrounding site soil evenly moist, not too wet and not too dry. For cooler areas, water 1–2 times a week for three months after planting. For warmer climates or during the dry season, water 3–4 times a week until the palm becomes established or adequate natural rain water is available.



Maintaining Palms

Fertilizers

Depending on the site and species, palms may require fertilization to compensate for a nutrient deficiency, such as nitrogen (yellow old and new fronds), potassium (old fronds with yellow or orange flecking), magnesium (yellow band around the outside of the fronds), iron (yellow young new fronds, green mature fronds), manganese, particularly in alkaline soils (yellowed, brown or “torched-looking” frizzled new fronds), and zinc (small fronds).

Mulching

Organic mulches can add soil nutrients as they decompose. They also help limit damage from lawn care equipment, reduce weeds, conserve water, and improve soil structure and condition. Apply 2–4 inches (5–10 cm) of organic mulch extending 2–4 feet (0.6–1.2 m) around a palm.

Diseases and Pests

Palms are susceptible to infections by fungi and sometimes viruses and bacteria, as well as to infestation by insects and other pests. Infectious agents and pests vary widely by region. A university extension service, consulting arborist, or plant health care specialist familiar with palms in your area may be able to provide a diagnosis and suggestions for treatment.

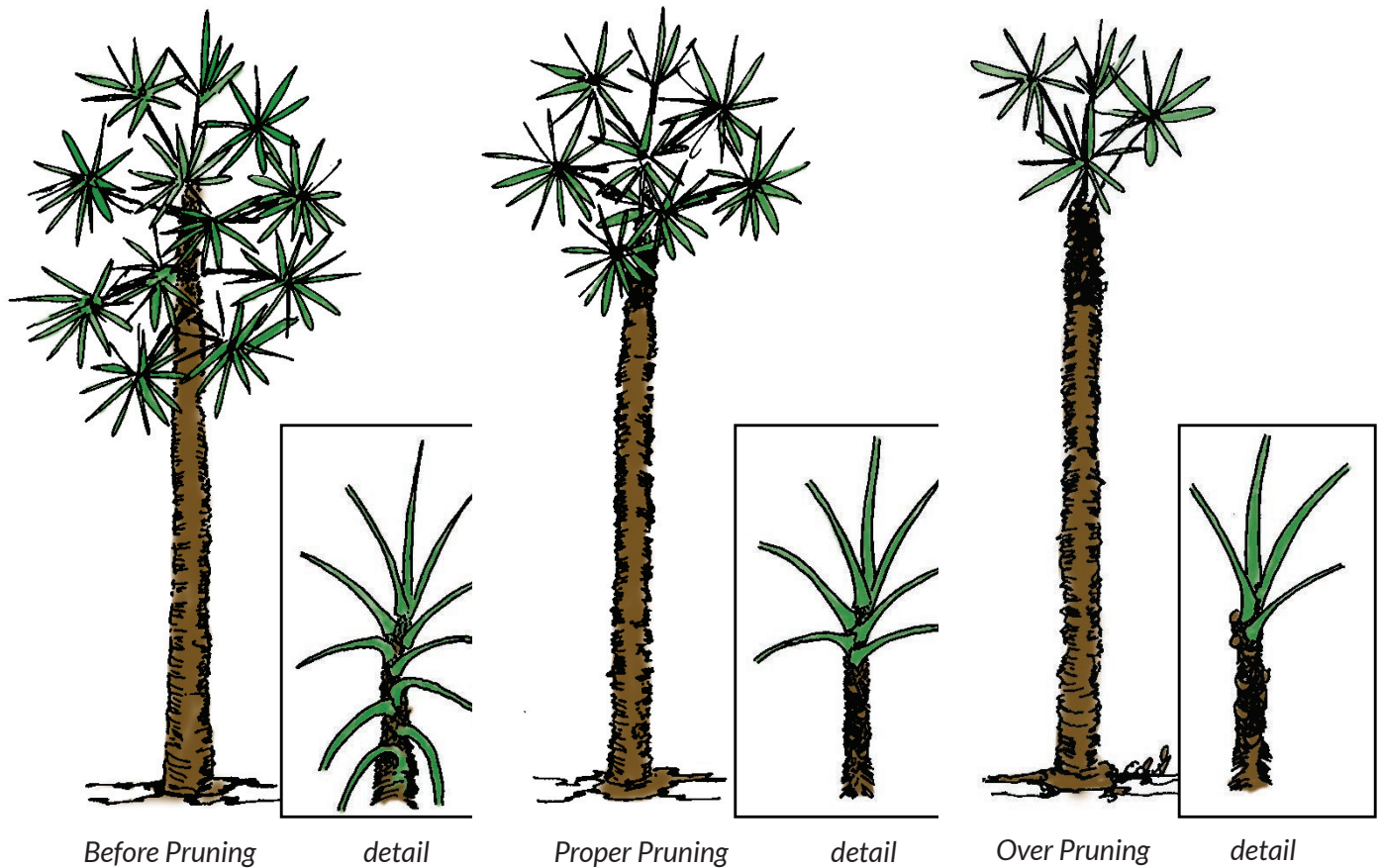
Pruning

Most pruning of palms is done to remove dead or dying fronds, inflorescences (flowering), and/or fruiting clusters, particularly those that may be a potential risk to the public, such as coconuts.

Pruning is usually conducted at least biannually. Coconuts may be pruned as often as every 3–4 months to minimize the risk of injury or damage from the heavy fruit. Great care should be taken to avoid any damage to the terminal bud. Over-pruned palms may have slower growth and may attract pests.

Generally, remove old, dead, lower fronds only, unless otherwise required for clearance. Occasionally, live green fronds, where the frond shaft has descended below a horizontal plane, can be removed. Removing live fronds where the shaft is greater than 45 degrees above horizontal is not known to reduce future pruning requirements.

Climbing spikes should not be used to climb palms for pruning because they permanently wound the palm trunk. Wounds on palms do not close.



Before Pruning

detail

Proper Pruning

detail

Over Pruning

detail

Finding an Arborist

Visit [TreesAreGood.org](https://www.treesaregood.org) for free tools:

- The “Find an Arborist” tool can help you locate an arborist in your area.
- The “Verify a Credential” tool enables you to confirm whether an arborist has an ISA credential.

Be an Informed Consumer

One of the best methods to use in choosing an arborist is to educate yourself about some of the basic principles of tree care. Visit [TreesAreGood.org](https://www.treesaregood.org) to read and download all brochures in this series.

What Is a Certified Arborist?

ISA Certified Arborists® are individuals who have proven a level of knowledge in the art and science of tree care through experience and by passing a comprehensive examination developed by some of the nation’s leading experts on tree care.

ISA Certified Arborists must also continue their education to maintain their certification. Therefore, they are more likely to be up to date on the latest techniques in arboriculture.

