## Aloha Arborist Association Hawai'i Guidelines for the Management of Coconut Palms Approved August 19, 2009

Coconut palms (*Cocos nucifera*) are a significant palm throughout Hawaii and tropical regions around the world. These palms can reach over 100' in height and may live over 100 years. They regularly shed coconuts and large fronds, which may expose people and property to injury and damage. To minimize this risk, coconuts and fronds must be regularly removed prior to their fall. In certain instances, coconut palms may possess structural defects that increase the risk of failure of a portion or all of the palm.

This brochure is designed to provide guidance for arborists, tree workers and property owners/managers in the proper pruning and general assessment of coconut palms. When caring for coconut palms, the safety of people and property is our greatest priority.

Pruning is recommended a minimum of two times per year within developed areas to manage the hazards of falling coconuts and fronds and to minimize risk to persons and property within the fall zone.

In order to ensure safe, healthy and attractive palms that can achieve a maximum life-span within a specific site, we recommend that the tree worker who is pruning the palm:

- 1. Report abnormal conditions in the crown, trunk, or base of the palm
- 2. Remove fronds, fruit, seedpods and fruit stalks carefully without damaging the trunk or fronds that are to be retained.
- 3. Remove lower fronds where any part of the frond hangs below a horizontal plane if desired. (see Figure 1)
- 4. Not remove live, healthy fronds above horizontal except where encroaching on utilities or structures (see Figure 2)
- 5. Not embed the cutting tool into the trunk or fronds that will remain on the coconut palm.
- 6. Avoid the use of spikes where practical. In most instances, damage from repeated spike use is primarily cosmetic, but structural defects may develop over time.

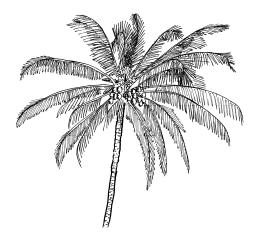




Figure 1 Figure 2

Listed below are some of the potentially serious defects or conditions that should be inspected by a Qualified Arborist:

- 1. Large wounds, cracks and cavities in the trunk (over 25% of the trunk circumference or cross section affected).
- 2. Penciling (abrupt tapering of the upper trunk immediately below the crown).
- 3. Significant hour-glassing (narrowing and enlargement of the trunk in an hour-glass form that exceeds 30% reduction of the diameter at the site of the hourglass).
- 4. Excessive root damage near the base of the palm (more than 25% of the roots within two-feet of the trunk).
- 5. Trunk flare restrictions (less than 1' radius of open space around trunk).
- 6. Excessive dead areas within the root initiation zone (more than 25%).
- 7. Termite damage.
- 8. Discolored, stunted or deformed fronds or leaning or missing crown shaft.
- 9. Excessive trunk lean (over 35 degrees).
- 10. Growing under, over, or into utility lines.
- 11. Palms with trunk heights over 70 feet.

As coconut palms age, replacement planting programs should be implemented.

This brochure has been prepared by the Aloha Arborist Association (AAA), a professional association of arborists, tree care services and arboricultural consultants with experience and knowledge of the growth and management of coconut palms in Hawaii. AAA advocates proper tree and palm care in conformance with the standards and practices set forth within the most current versions of the ANSI A300 pruning standards and ANSI Z133.1 safety standards.

A Qualified Arborist is a professional experienced in the type of work to be performed who has maintained an International Society of Arboriculture (ISA) Certified Arborist certificate continuously for at least 5 years, and can demonstrate technical knowledge and skill through conformance with internationally accepted arboricultural standards and practices.

The advice contained herein is of necessity general in nature and is intended as a guide. Each palm is subject to unique conditions that cannot reasonably be anticipated within this publication. The final determination for proper care and treatment of an individual coconut palm should be according to the recommendations of a Qualified Arborist who has conducted an inspection and assessment of the subject palm.