



After harvest, proper mulching and pruning maintains the mango tree's health, productivity and size.

# SUSTAINABLE LIVING AT FAIRCHILD TROPICAL BOTANIC GARDEN AT **WILLIAMS GROVE**

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Farm animals help children learn about the benefits of sustainable living.

Supporting the environment not only conserves the Earth's fragile ecosystems, but it also provides a better future for the generations to come. Every action impacts the interconnected web of life on Earth.

**D**aily decisions regarding what we do, what we consume, where we buy, how we choose to live and the values that we hold and promote, affect the Earth and the communities we live in.

Sustainable living requires following a model of natural resource conservation and innovation. At Fairchild Tropical Botanic Garden at Williams Grove, we believe in the preservation of agriculture in South Florida, as well as providing a living heritage and improving our quality of life through sustainable living. By using innovative horticultural techniques and proper genetic resources, we can realize this potential. It is a simple equation; yet, the modern world works against us, through a fear of the natural world and a perceived need for chemical inputs.

The research collection at Williams Grove is maintained in just this manner. In less than five acres, we house the entire genetic bank for avocado, mango, jackfruit, mamey sapote, sapodilla, canistel, abrico, caimito, Spanish lime and tamarind. The management techniques we use also provide guidance for your own back yard.



During the spring flowering season, weeds are allowed to provide a nectar source for bees, flies and wasps.

Mulch is used with a heavy hand given the spartan nature of South Florida soils. As the mulch decomposes, it releases nutrients to the trees, retains water and builds soil structure. Four to six inches of mulch are used annually, and care is taken not to place the mulch directly on the trunk since this can introduce pathogens or cause the trunk to rot. Weeds are suppressed for a time in order to allow the trees to grow and provide future weed control through shading.

Pruning maintains a tree's health, productivity and size. After harvest, the trees are pruned by hand, and the branches, twigs and leaves are mulched or ground up for use as mulch in other locations. Height, width and training techniques depend on the species and desired results. The constant is consistency.

Irrigation is used for water-loving species like jackfruit, avocado and mamey sapote, but frequency is never more than once per week. Mango, canistel, sapodilla, Spanish lime and abrico receive no watering after establishment.



At Williams Grove, bees are used as a natural insecticide.

Weeds are allowed to provide a nectar source for bees, flies and wasps during the spring flowering season. Weed control is accomplished mechanically, through mulching and shading by the trees themselves.

Organic wastes, such as fruit peelings and kitchen compost are recycled through our chickens, geese and worms. The animals also provide assistance in the production of organic fertilizers, weed control, eggs and as educational tools for children.

Insects are presumed innocent until proven guilty of damage. Since 2004, no insecticides have been applied. Control has been achieved through understanding and patience and through beneficial insects such as bees.

Eco-friendly materials are used when possible, such as the 100% corn cups in which we serve our smoothies. 