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IFAS EXTENSION

Edible Landscaping for Urban Sustainability¹

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Landscaping in the urban setting offers tremendous opportunity for contributing to sustainability. One such opportunity is edible landscaping. Edible landscapes are those that include plant species for human consumption.

Benefits of Edible Landscapes

Greater Efficiency and Value

Urban landscapes are human-dominated ecosystems that require considerable investment of time, space, money, and natural resources. Edible landscaping produces a valuable, multi-functional landscape, thus providing greater return on investment of resources while promoting sustainability. In addition to its efficiency, the edible landscape can be beautiful, equalling or surpassing the strictly ornamental landscape in aesthetic value.

Improved Taste and Nutrition of Food

Nutrient content and flavor in most plants is highest immediately after harvest. The edible landscape affords the ability to eat a food only minutes, rather than days or weeks, after harvest. In addition, many varieties that have been bred for exceptional flavor are available to the edible

landscaper, far beyond those typically found in most urban food markets.

Increasing Community Food Security

Edible landscapes can increase urban sustainability by reducing a community's dependence on distant food sources. Distant sources of food generally involve unknown production systems and fuel economic systems that funnel money away from the communities they feed. It might be difficult to imagine producing enough food in an urban landscape to make a difference. However, urban centers around the United States and in other countries increasingly are finding that edible urban landscapes can be highly productive and profitable, contributing substantially to local communities.

Management Considerations

Harvesting

Harvesting can be the most rewarding part of having an edible landscape. However, harvesting can be difficult in some situations. If fruit trees are allowed to get too tall, fruit may be out of reach, even with the use of a ladder. Keeping up with the ripening of edible plants may require weekly, or even daily, monitoring during the harvest period. Some edible

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species, if not harvested, can present management challenges. Certain trees might drop unharvested fruit to the ground which can be a nuisance. For example, unharvested, falling coconuts might be hazardous where people sit or walk, while mangos can attract vermin.

It is not uncommon to have excess fresh produce from an edible landscape. Highly perishable crops will require either quick processing, such as canning, freezing, or drying, or friends and neighbors to accept the abundance.

Inputs

Edible plants, like ornamental plants, do require maintenance. Some species require less maintenance than others, and planting the "right plant in the right place" (i.e., selecting species that thrive in existing environmental conditions) can keep maintenance requirements low. However, all species might need to be pruned, fertilized, watered, and monitored for pests periodically. Edible landscapes contain plants that are for human consumption. Therefore, special care should be taken in the selection of management inputs such as pesticides and fertilizers.

Special design approaches in edible landscaping include: crop rotation for annual and short-lived perennial species, in order to optimize fertility and to prevent pests and diseases; sequential planting to ensure a constant harvest; and integrating edible species with existing ornamental landscapes.

Edible Can Be Environmentally Friendly

The Florida Cooperative Extension Service has developed a program for "Florida-friendly" environmental landscape management known as "Florida Yards and Neighborhoods" (FYN). Edible landscapes can be managed easily under the FYN program. Information on this program can be obtained through county cooperative extension offices, and on the Internet at <http://hort.ifas.ufl.edu/fyn/index.htm>.

The Edible Plant Palette

Edible landscapes can include fruits, vegetables, and herbs. In Florida, the edible plant palette is vast. A small sampling of the many possible choices

follows. Detailed plant characteristics can be found in the reference books listed below.

Vegetables

Lettuce (*Lactuca sativa*), cucumber (*Cucumis sativus*), tomato (*Lycopersicon esculentum*), broccoli (*Brassica oleracea*), eggplant (*Solanum melongena*), radish (*Raphanus sativus*), potato (*Solanum tuberosum*), corn (*Zea mays*), squash (*Cucurbita* spp.), green bean (*Phaseolus vulgaris*), pea (*Pisum sativum*), carrot (*Daucus carota*).

Fruits

Avocado (*Persea americana*), pineapple (*Ananas comosus*), blueberry (*Vaccinium corybosum*), carambola (*Averrhoa carambola*), lychee (*Litchi chinensis*), grape (*Vitis vinifera*), persimmon (*Diospyros kaki*), mamey (*Mamey sapote*), passion fruit (*Passiflora edulis*), papaya (*Carica papaya*), banana (*Musa* spp.), orange (*Citrus sinensis*), mango (*Mangifera indica*), acerola (*Malpighia glabra*), sapodilla (*Manilkara zapota*), strawberry (*Fragaria x ananassa*).

Herbs

Basil (*Ocimum basilicum*), oregano (*Origanum vulgare*), cilantro/coriander (*Coriandrum sativum*), rosemary (*Rosmarinus officinalis*), tarragon (*Artemisia dracuncululus*), roselle (*Hibiscus sabdariffa*), chives (*Allium tuberosum*), peppermint (*Mentha x piperita*), ginger (*Zingiber officinale*), dill (*Anethum graveolens*), parsley (*Petroselinum crispum*), nasturtium (*Nasturtium officinale*).

References

Florida Home Grown 2: The edible landscape. Tom MacCubbin. 1989. Sentinel Books. Orlando, Florida.

The Complete Book of Edible Landscaping: Home landscaping with food-bearing plants and resource-saving techniques. Rosalind Creasy. 1982. Sierra Club Books. San Francisco, California.

Landscaping with Herbs. James Adams. 1987. Timber Press. Portland, Oregon.

The New Oxford Book of Food Plants: A guide to the fruit, vegetables, herbs and spices of the world. J.G. Vaughan and C.A. Geissler. 1997. Oxford University Press. New York.