

# Desert Landscape School: A Guide to Desert Landscaping and Maintenance

## CHAPTER

# 1

## Desert Ecology and Plant Biology

Main topics in this chapter:

**Desert Ecology** - how deserts are formed and how plants have evolved in these environments what are their adaptations to desert conditions

**Plant Biology** – what are the key concepts in plant biology that practitioners need to understand to better care for plants in a desert landscape

## CHAPTER

# 2

## Desert Plant Palette

Total of 75 plants divided in the following groups:

- **Trees**
- **Shrubs**
- **Herbaceous perennials**
- **Vines**
- **Ornamental grasses and bulbs**
- **Agaves**
- **Yuccas and their relatives**
- **Cacti**
- **Succulents**

Information given on each plant

- **Photo**
- **Plant family, common name, scientific name**
- **Mature size and relative growth rate**
- **Plant characteristics**
- **Cultural preferences**
- **Landscape-use considerations**

Tree list: desert willow (*Chilopsis linearis*); tenaza (*Havardia pallens*); ironwood (*Olneya tesota*); blue palo verde (*Parkinsonia florida*); little-leaf palo verde (*Parkinsonia microphylla*); palo brea (*Parkinsonia praecox*); honey mesquite (*Prosopis glandulosa*); velvet mesquite (*Prosopis velutina*); giraffe tree (*Vachellia erioloba*); sweet acacia (*Vachellia farnesiana*)

## CHAPTER

# 3

## Planting and Maintenance

Main topics in this chapter: ***Planting, Pruning, Diagnosis***

Planting trees too deeply can hinder root development and lead to other problems, such as girdling roots and trunk decay.

The depth of the hole is determined by the plant stock. This measurement is the distance from the bottom of the root ball to the area in the plant where there is a clear transition between the stem and roots (trunk or root flare).

## CHAPTER

# 4

## Sustainable Desert Landscapes

Main topics in this chapter: ***Soils, Water Harvesting, Irrigation, Sustainable Landscape Design and Maintenance***

Sustainable Landscape Maintenance and Using Plants as Tools for Sustainability:

- Composting
- Proper pruning
- Using native and desert-adapted plants
- Interaction between plants and pollinators

## CHAPTER

# 5

## Desert Design

Main topics in this chapter: ***Design Considerations, Design Process, Site Plan***

The design process presented on this chapter guides the reader through the first meeting with a client, to a site inventory and analysis, and on to the creation of design concepts.

## CHAPTER

# 6

## Desert Landscape Installation

Main topics: ***Logistics and Safety, Site Plan and Preparation, Irrigation and Planting, Soil Dressing, Follow-up Maintenance***

This chapter guides the reader through the landscape design installation process—from acquiring a project to reading the design plans, preparing the site, implementing the design, and creating a maintenance plan that guarantees the future success of the landscape.