



# The New American Yard

A LANDSCAPE OF BEAUTY AND PEACE...IN HARMONY WITH NATURE

**Participating communities:** *Berkley, Beverly Hills, Birmingham, Clawson, Ferndale, Hazel Park, Huntington Woods, Lathrup Village, Madison Heights, Oak Park, Pleasant Ridge, Royal Oak, Royal Oak Township, and Troy.*



## FROM YARD WASTE TO YARD RICHES: MAKING YOUR OWN COMPOST

Leaves, grass clippings, spent flowers, shrub trimmings, and other yard waste materials comprise more than 20 percent of all refuse generated in urban communities. Yard clippings can be recycled on-site through composting and mulching. For example, grass clippings can be recycled by cutting the top one-third of the grass blade and letting the short clips fall back onto the lawn. When clippings are recycled into the soil, they add valuable organic matter and nutrients which help build fertility naturally.

Compost, a dark, rich and crumbly soil-like substance, is formed when organic materials are decomposed by bacteria, fungi, worms and insects. Successful composting will occur, given enough time, by simply mixing grass clippings and/or leaves together with water and some soil. Soil or compost provides essential bacteria to stimulate decomposition. Whether generated through a hot or cold composting process, the end result is the same: gardener's gold.

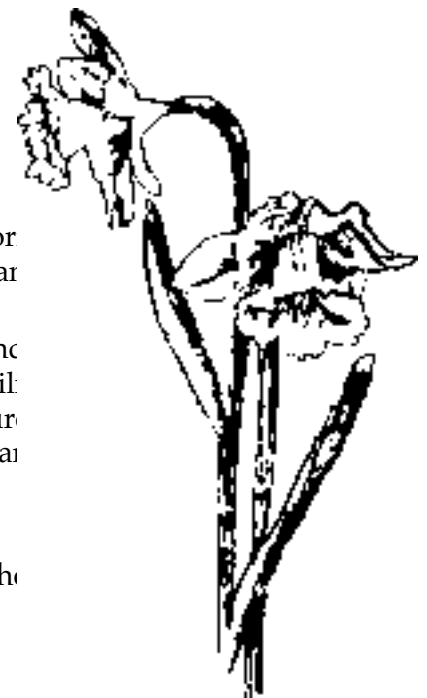
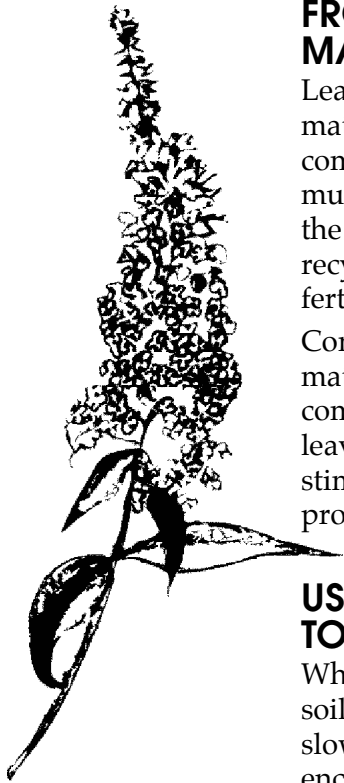
## USING COMPOST AND MULCH TO IMPROVE THE SOIL

When used in the garden or on the lawn, compost builds soil structure, holds moisture, allows drainage, slowly releases nutrients, moderates soil temperature, encourages beneficial earthworms, and suppresses soil-bor diseases. As soil improves over time, plants are healthier and resist disease naturally.

Similarly, natural mulches placed in the garden and around or shrubs gradually decompose and contribute to soil fertility. Natural mulches also reduce weeds and retain soil moisture providing an alternative to herbicides (weed-killing substances).

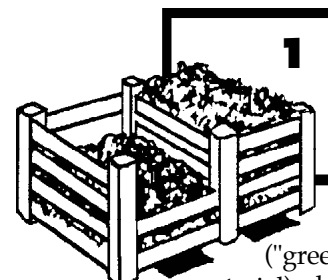
## NATURE'S WASTE RECYCLING SYSTEM

In nature, there is no waste. Flowers, grasses, trees and other



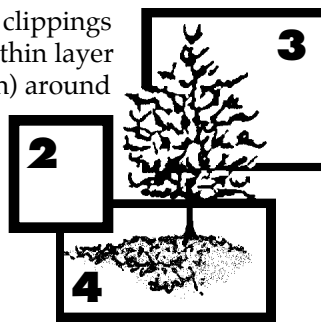
# PLAN YOUR HOME LANDSCAPE IN HARMONY WITH NATURE

**1** Backyard compost pile made by layering and mixing grass clippings ("green", nitrogen material), chopped leaves ("brown", carbon material), soil, and water.



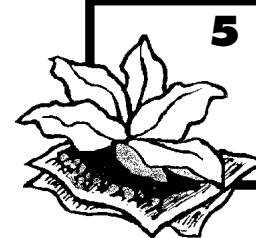
Dry grass clippings sprinkled in a thin layer (about 1 inch) around bushes to hold moisture and resist weeds.

**2** **3** Slow-growth bushes and evergreens planted to minimize yard work.



**4** Natural mulches such as shredded leaves, grass clippings, and pine needles used to reduce yard waste.

**5** Grass clippings (1-2 inches) placed on wet newspaper and used as a mulch between rows of vegetables and flowers to control weeds and conserve moisture.



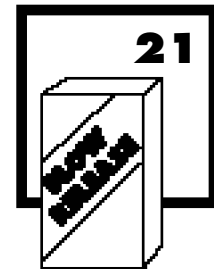
Grass clippings (1-2 inches) placed on wet newspaper and used as a mulch between rows of vegetables and flowers to control weeds and conserve moisture.

**6** Garden pathway made with shredded twigs, bark, or wood chips.



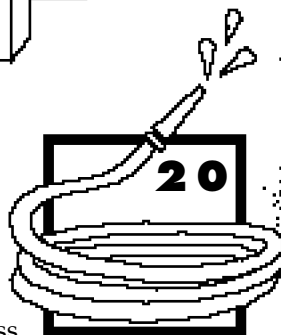
Garden pathway made with shredded twigs, bark, or wood chips.

**21** Slow-release fertilizer used which gradually releases nutrients and avoids polluted runoff.



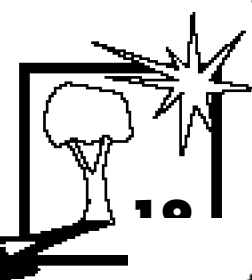
Trees watered and mulched to reduce plant stress. Fertilizer used around trees only if soil deficiencies are identified.

**20** Trees watered and mulched to reduce plant stress. Fertilizer used around trees only if soil deficiencies are identified.

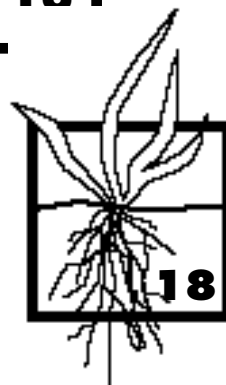


Plants selected which are suited to site conditions (e.g., sun/shade, drainage, soils).

**19** Plants selected which are suited to site conditions (e.g., sun/shade, drainage, soils).



**18** Lawns fertilized in the fall (not the early spring) to encourage deep root growth.

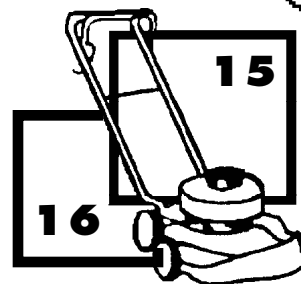


**17** Weeds pulled by hand, eliminating the need for herbicides.




Mulching mower (or a mower you now own) used to return fine-cut clippings to the lawn, reducing the need for fertilizer and yard waste collection.

**15** **16** Mulching mower used to shred fall leaves. Small pieces sift into the lawn, minimizing bagging and yard work.

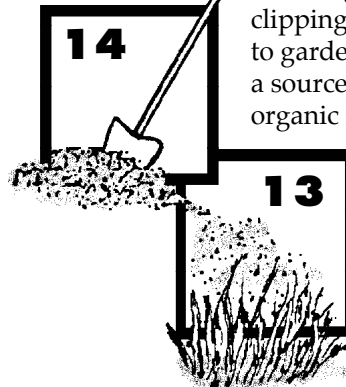


Mulching mower used to shred fall leaves. Small pieces sift into the lawn, minimizing bagging and yard work.

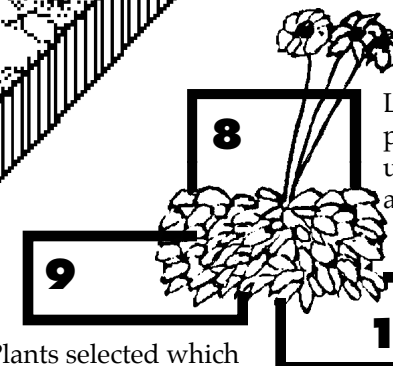
**14** Sifted compost sprinkled over lawn to help build healthy soils. Compost and/or grass clippings added to garden soil as a source of organic matter.



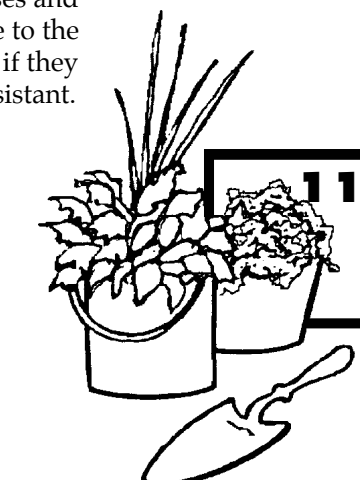
**13** Compost and/or grass clippings added to garden soil as a source of organic matter.



**8** **9** **10** Low-maintenance perennials and groundcovers used to reduce yard waste and yard work. Plants selected which naturally resist diseases and pests. Varieties native to the local area considered, if they are disease-resistant. Diverse plantings used to attract beneficial insects and birds.

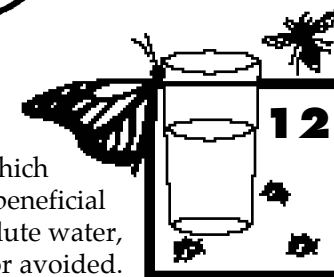


**11** Compost sifted and mixed with potting soil (1/3 : 2/3 ratio).



Pesticides, which may harm beneficial insects or pollute water, minimized or avoided.

**12** Pesticides, which may harm beneficial insects or pollute water, minimized or avoided.



## TIPS FOR USING COMPOST

*It is almost impossible to have too much compost. Compost helps hold in moisture and gradually releases nutrients to the soil.*

■ **SOIL ENHANCEMENT:** Incorporate a 3-4 inch layer of compost into garden beds in the spring or fall (mixing 50% compost with 50% soil.) If only a small amount of compost is available, place a handful in each transplant hole.

■ **MULCH:** To use compost as a mulch, spread the material around garden plants, under bushes, and around trees. Compost is especially useful as a mulch during hot summer months.

■ **CONTAINERS:** Compost mixed with potting soil in a 1/3 - 2/3 ratio is excellent for container gardening. Water frequently and add fertilizer to supplement nitrogen which leaches out of the container.

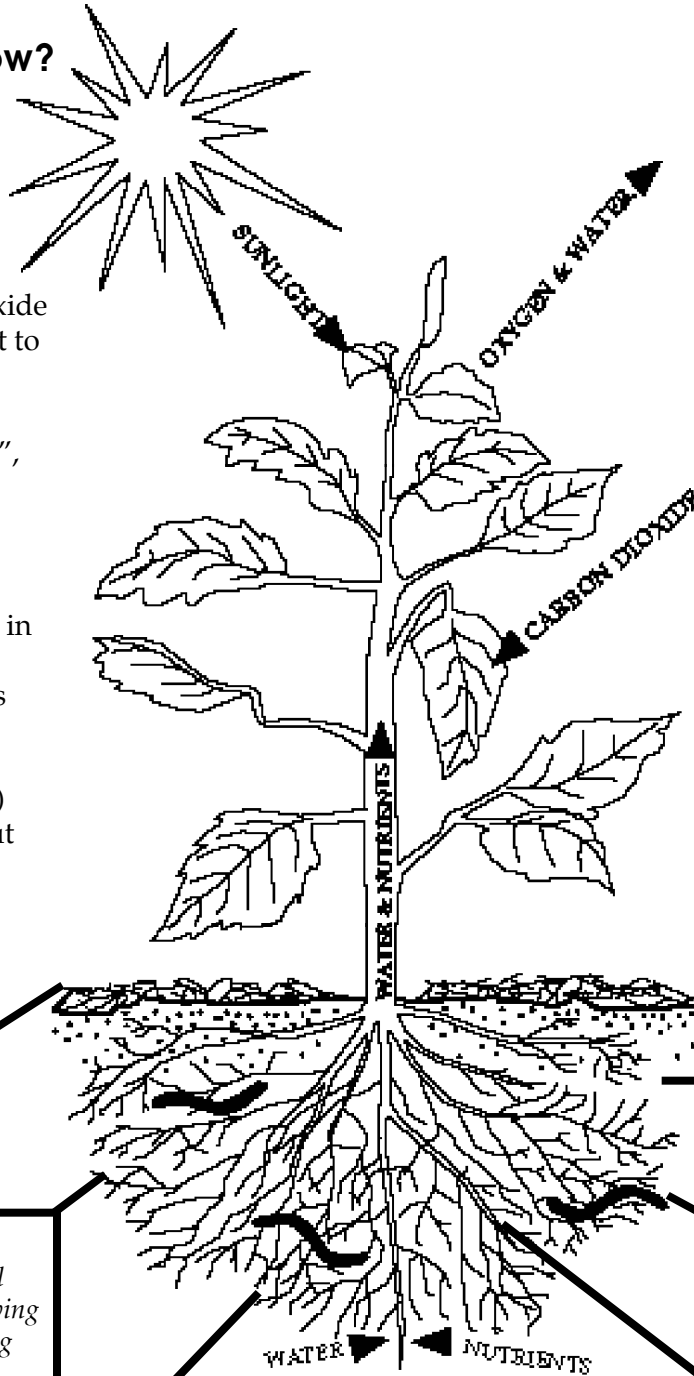
■ **COMPOST TEA:** Finished compost can be wrapped in cloth or burlap and soaked in water to make "compost tea." Compost tea acts as a fungicide to control some diseases.

# Soil Nutrients & Plant Health

## How do plants grow?

Green leaves make their own food through a process called photosynthesis. Chlorophyll found in green leaves interacts with water from the soil, carbon dioxide from the air, and sunlight to produce food.

Nutrients (soil minerals), although not "plant food", are essential for plant growth and health. Nutrients and water are absorbed through plant roots. Nutrients required in large quantities include nitrogen (N), phosphorus (P), potassium (K), and several others. Micro-nutrients (trace elements) are equally important, but required only in small amounts.



The ability of soil to release nutrients and the ability of plant roots to absorb nutrients are influenced by a number of factors including:

- Soil texture
- Soil structure
- Organic matter content of the soil
- Soil acidity/alkalinity (pH)
- Extent of microbial activity in the soil
- Water

Natural mulches (such as compost or grass clippings) contribute organic matter to the soil.

Organic matter decomposes into humus which binds soil particles together — improving soil structure and sustaining an active biological system.

Excess fertilizers and pesticides may run off to nearby lakes and streams or leach into groundwater.

Extra fertilizer may be needed if soil lacks essential nutrients. Soil testing helps the gardener determine the type and amount of fertilizer needed.

Earthworms aerate and enrich the soil.

Living microbes make nutrients available to the feeder roots of plants.

Healthy soil which gradually makes nutrients available to plants is the basis of a fertile, productive garden.

Sources of information: *Improving Your Garden Soil*, Ortho publication, 1992; H.D. Foth, *Fundamentals of Soil Science*; and Oakland County MSU Extension.

