From the Ground Up
Ecology, Soil, and Plant Communities — An Enlightened Approach to Gardening

ESSAY

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Look deep into nature, and then you will understand everything better.
ALBERT EINSTEIN

Why not begin with plant communities, a simple guiding concept of habitat gardening in which the objective is to copy what exists naturally?

The soil in a forest is made up of a series of distinct layers, ranging from the bedrock to the rich organic layers near the surface. Each layer contains its own mix of organisms from bacteria and fungi to larger animals such as beetles and earthworms. This rich mix of organisms cycle nutrients through a system that supports the growth of the plants we see above ground.

The topsoil may have been stripped away from your garden when the building or subdivision was constructed. The remaining soil may be compacted and damaged, containing much clay and often eroded by years of water flow. With some groundwork, you can bring your soil back to productivity: leave the fallen leaves of autumn in place, allow sticks and branches to decompose, and add

PAUL GREEN

Fallen autumn leaves.

compost to the soil in order to bring back essential nutrients and the microorganisms that will continue the nutrient cycle.

Once you have stabilized and enriched your soil with decayed organic matter, determine which plants to use for maximum wildlife value and garden success. The geology and landforms in this region (known as physiographic provinces), predominantly the Piedmont and the Coastal Plain, contain a mind-numbing variety of plants. Why not begin with plant communities, a simple guiding concept of habitat gardening in which the objective is to copy what exists naturally?

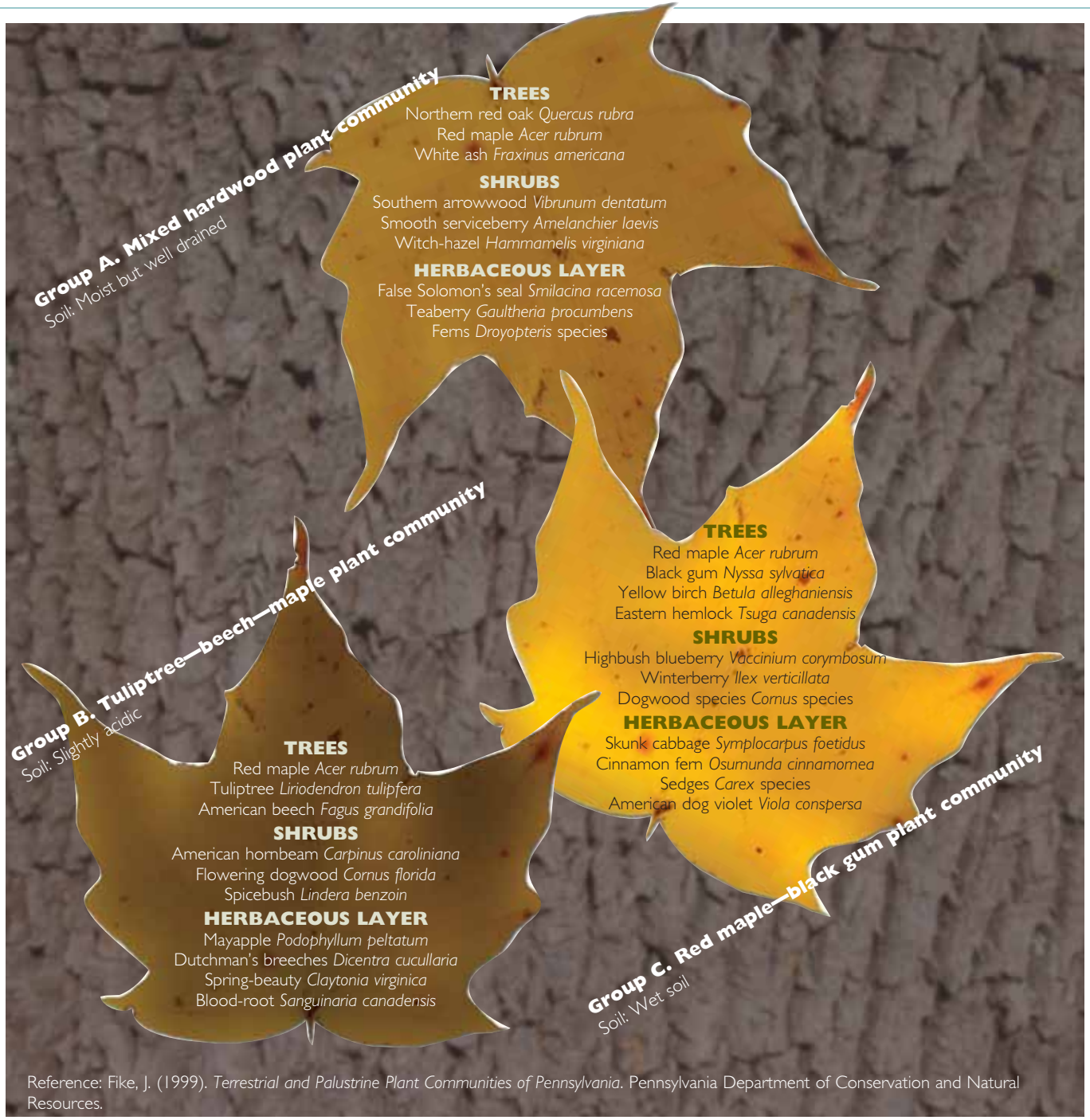
On page 72 you'll find samples of plant groups, natural communities that were part of the dominant historical landscapes of southeastern Pennsylvania. The plants that grow in these communities have evolved with each other over many thousands of years and complement each other's growth patterns and needs. Planted together, they will form a familiar structure, one that birds and other wildlife will recognize.

These sample packages provide a one-stop shopping list to begin a habitat garden and help connect to the natural environment of the region.

PAUL GREEN

Decaying tree stump.

NOTES



Reference: Fike, J. (1999). *Terrestrial and Palustrine Plant Communities of Pennsylvania*. Pennsylvania Department of Conservation and Natural Resources.