Ecoregions, Native Ranges, and Hardiness Zones Explained

**Ecoregions – Best for Selecting Native Plants**
Selecting native plant species from within your geographic region (“ecoregion”) is the best way to incorporate natives in your garden or habitat landscape to help restore the natural environment. A native plant originating from its “home” ecoregion and range will grow best because over thousands of years, it has adapted to that region’s unique environmental conditions, such as climate, moisture, topography and soil. The same plant species may be found in several states and regions, but across its native range, species often have subtle differences in their genetic make-up (called “local genotype”). This environmentally sound landscaping practice helps to preserve biodiversity, the health of the environment and the unique character of where you live.

Ecoregions, mapped at four levels of detail, are nationally used by the U.S. EPA, the U.S. Forest Service and The Nature Conservancy. (See the U.S. EPA Ecoregions of North America, Level III map on the back of this page.) The Wild Ones article “Guidelines for Selecting Native Plants” also provides more details.

**Native Ranges – Good for Selecting Native Plants**
Native ranges are useful criteria for natural landscapers and gardeners. These are geographic areas in which plant species have been reported to naturally occur. To identify native ranges, you can refer to online resources like the USDA PLANTS Database, individual states’ online flora guides, and the website for The Biota of North America Program (BONAP). Many printed field guides identify native ranges, too.

**Hardiness Zones – Good for General Plant Selections**
Many gardening catalogs give hardiness zones for vegetables, herbs and other plants based on the U.S. Department of Agriculture’s Plant Hardiness Zone Map. This map divides most of North America into 13 climate zones by the average annual extreme minimum temperature within a 30-year period. Tropical Zone 13 has such temperatures above 60 degrees F, while Zone 1 has temperatures of -60 degrees F.

Because temperature is a key factor in determining whether a plant will survive, hardiness zones help determine whether plants that are not native to an area will be likely to survive. For that reason, hardiness zones are not critical for native plant gardeners who grow locally-adapted native plants.

Also, keep microclimates in mind. These are fine-scale climate variations made up of small heat islands or cool spots. Even individual landscapes can have microclimates.

**Finding Native Plants for Your Area**
First, check with Wild Ones chapters in your state for information and native plant sales. There are also two on-line databases to help find native plant species for your zip code, websites of the National Wildlife Federation and The Audubon Society.

[By Mariette Nowak; updated Dec 2019 by the author, Denise Gehring, Janice Hand, and a board review committee.]