

NEW SEED COLLECTION ZONES FOR THE EASTERN UNITED STATES

Carolyn C. Pike¹, Barbara Crane², Paul Berrang³

¹State and Private Forestry, Eastern Region, USDA Forest Service, West Lafayette, IN; ²Southern Region, USDA Forest Service, Atlanta, GA; ³Eastern Region, USDA Forest Service, Milwaukee, WI

The USDA Forest Service was assigned the task of developing seed collection zones (herein referred to as seed zones) for the Eastern and Southern Regions of the US, in collaboration with States, NGOs, nursery and seed industry representatives. Various seed zone guidelines exist, but either are not standardized, or are limited to state boundaries. Standardized seed zones are needed to define the origin of seed across Federal, State, and Private land ownerships. We created new seed zones by combining Plant Hardiness Zones (PHZ), with Ecological Provinces (EP). EP define broad landscape-level characteristics including elevation, soils, and other features that may impact the genetic structure of plant populations. In the eastern US, counties are generally of small stature and were utilized as the minimum administrative area to define a seed zone. A first draft was created by snapping PHZ's and EP's to county lines, and then these layers were overlaid. Seed collection zones were defined as areas with common PHZ and EP. Some resulting seed zones were revised by the project committee to reduce heterogeneity on the map. Both maps, the original and revised, are freely available online at <http://www.easternseedzones.com/>. In addition, a downloadable list of counties, and the seed zone to which they are assigned, will be posted to this website. The over-arching goal of this project is to develop a standardized system to define seed origin for all taxa that can be used in accordance with existing seed transfer guidelines and seed transfer tools.