



CHAPTER 3

SPECIES LISTS AND SPECIES REFERENCE SHEETS

◆ Introduction	3-2
◆ Plant Suitability Zones for Illinois	3-3
◆ Species Lists	3-4
• Bottomland Species	3-4
• Upland Species	3-5
◆ Species Reference Sheets	3-6
◆ References	3-37



INTRODUCTION

This chapter is devoted to essential information about the most common trees used for direct seeding in Illinois. Species appropriate for direct seeding are not limited to those identified in this section. Feel free to develop similar reference sheets for additional species and include them in your copy of this handbook.

To read more about the species included or to develop reference sheets for other species, trees or shrubs, see the references at the end of this chapter.

As with the other chapters of this handbook, this chapter will undergo an annual review to determine what additions, improvements or changes are needed to better meet your needs.

Use these species reference sheets to:

- develop direct seeding plans,
- identify, collect, and store seeds, and
- assure successful planting and establishment.

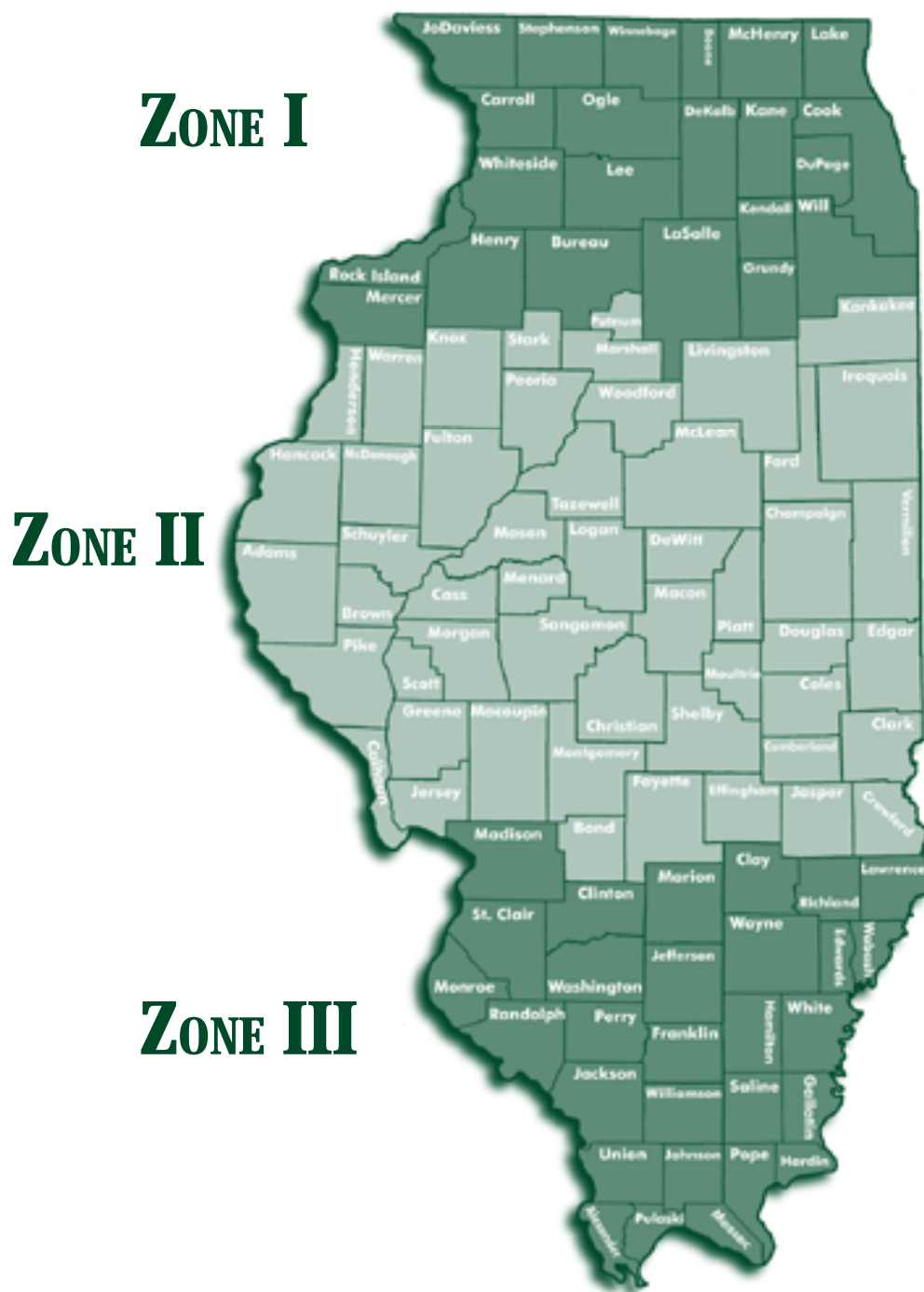
Direct seeding of hardwoods is not new. It has just not been as widely accepted as planting nursery stock (which, by the way, started from seed).

NOTE: *Subsequent chapters will provide much additional and specific information.*

PLANT SUITABILITY ZONES IN ILLINOIS

These broad zones are based on certain plant growth factors including average January-July temperatures, frost-free days, and annual rainfall.

These zones are used as a guide in selecting grasses, legumes, shrubs, trees, and vines for planting in Illinois. This map is provided by the USDA-Natural Resources Conservation Service.



SPECIES LISTS

This section identifies species best adapted to bottomland (riparian) soils or upland soils. It is essential to match the species with the site conditions. In planning, consider soils, aspect, slope, wetness, extent and frequency of flooding or ponding, and other site conditions to determine which species to plant. Most of this information is in the species reference sheets.

Bottomland Species

Listed and grouped from species appropriate for *highest, best drained sites to those adapted to the lowest, most poorly drained sites*. Shaded boxes indicate groups that have similar requirements and can be planted together.

<u>Common Name</u>	<u>Scientific Name</u>	<u>Planting Zone</u> *
Black walnut	Juglans nigra	ALL
Shellbark hickory	Carya laciniosa	ALL
Shumard oak	Quercus shumardii	II, III
Cherrybark oak	Quercus pagoda	II, III
Swamp chestnut oak	Quercus michauxii	II, III
Pecan	Carya illinoensis	ALL
Persimmon	Diospyros virginiana	ALL
Bur oak	Quercus macrocarpa	ALL
Bitternut hickory	Carya cordiformis	ALL
Shingle oak	Quercus imbricaria	ALL
Nuttall oak	Quercus texana	III
Green ash	Fraxinus pennsylvanica	ALL
Swamp white oak	Quercus bicolor	ALL
American sycamore	Platanus occidentalis	ALL
Pin oak	Quercus palustris	ALL
Willow oak	Quercus phellos	III
Water hickory	Carya aquatica	III

<u>Common Name</u>	<u>Scientific Name</u>	<u>Planting Zone</u> *
Overcup oak	Quercus lyrata	II, III
Baldcypress	Taxodium distichum	II, III

* See planting zone map on page 3-3.

Upland Species

<u>Common Name</u>	<u>Scientific Name</u>	<u>Planting Zone</u> *
Black walnut	Juglans nigra	ALL
White oak	Quercus alba	ALL
Black oak	Quercus velutina	ALL
Red oak	Quercus rubra	ALL
Bur oak	Quercus macrocarpa	ALL
Shingle oak	Quercus imbricaria	ALL
Chinkapin oak	Quercus muehlenbergii	ALL
Bitternut hickory	Carya cordiformis	ALL
Mockernut hickory	Carya tomentosa	ALL
Pignut hickory	Carya glabra	ALL
Shagbark hickory	Carya ovata	ALL
Persimmon	Diospyros virginiana	ALL
White ash	Fraxinus americana	ALL
Black cherry	Prunus serotina	ALL
Tuliptree	Liriodendron tulipifera	ALL

* See planting zone map on page 3-3.

SPECIES REFERENCE SHEETS

This section contains a species reference sheet for each of the species listed on pages 3-4 through 3-5. These references are intended primarily for the purpose of tree identification. For more detailed information on seed maturity, collection, extraction, handling, storage and germination, refer to Chapters 5 and 6.

This section is arranged alphabetically by genus and then alphabetically by species according to common name rather than scientific name since many users may not know scientific names.

Handbook users may add locally important species, but new reference sheets should follow the current format to achieve consistency.

Planners might want to copy the appropriate sheets for landowner use.

Readers of this handbook are urged to acquire copies of listed references to glean more detailed data about a given genus or species. For more tree identification information and images, visit the USDA PLANTS database at <http://plants.usda.gov/plants>.

REFERENCES

- Missouri's Oaks and Hickories.** Reprint 994. Edgar Denison and Bruce Palmer. Missouri Department of Conservation. Images reprinted with permission, Missouri Conservation Commission. Available on the Web at: www.conservation.state.mo.us/forest/IandE/oak_hickory.
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- Seeds of Woody Plants in North America.** 1992. Young, J.A. and C.G. Young. Dioscorides Press. 407 pp.
- Silvics of North America,** Vol. 1, Conifers and Vol. 2, Hardwoods. 1990. Agricultural Handbook 654. USDA Forest Service. Vol. 1, 675 pp. Vol. 2, 877 pp. Available on the Web at: http://www.na.fs.fed.us/spfo/pubs/silvics_manual/table_of_contents.htm.
- Trees of Missouri.** Reprint June 1979. Settergren, Carl and McDermott, R.E., University of Missouri-Columbia, Agricultural Experiment Station. Available on the Web at: <http://www.conservation.state.mo.us/nathis/plantpage/flora/motrees/index.htm>.
- USDA PLANTS database.** USDA, NRCS 1999. National Plant Data Center, Baton Rouge, LA 70874-4490 USA. Available on the Web at: <http://plants.usda.gov/plants>.

Photographs and Illustrations:

Unless otherwise referenced, all tree identification photos included in the Species Reference Sheets are provided courtesy of John M. Edgington, Dendrologist, Department of Natural Resources and Environmental Sciences, University of Illinois Urbana-Champaign.

Photographs were also provided courtesy of Iowa DNR-Bureau of Forestry and the Missouri Department of Conservation.

Line drawings courtesy of Dr. Edward F. Gilman, University of Florida, Gainesville.

NOTE: *Copies of all of the above are available for up to a 2-week loan from the NRCS State Agroforester. Some references may also be available from IDNR District Foresters, the IDNR Forest Management Staff Forester, and the State Cooperative Extension Forester.*