PURPOSE: Direct seeding is a low cost alternative for sites not practical for planting seedlings.

SEED: Collect acorns or purchase from a vendor.

COLLECTION: Collect acorns from parent trees with desirable physical characteristics such as straight and limb-free lower boles. Usually the first acorns to drop are defective. A few acorns from each parent tree should be cut and inspected in the field to determine if



they are rotten, infested with insects, under-developed or rotten.

INSPECTION AND STORAGE: Immediately store collected and/or purchased acorns in a four-mill thick, polyethylene bag ("freezer" bags) at approximately 35 degrees. Maintain moisture of 40 - 45%, preferably in a humidified cooler. If cold storage is not available, bury bags 12" deep in the ground. Never leave acorns in a warm dry environment such as a heated building.

After a few days of storage, acorns should be put in water and "float-tested." Acorns with the highest risk of being defective will float. Since very small acorns -even good ones - sometimes float, a small sample of floaters should be cut and inspected. Unless inspected floaters prove to be non-defective, discard all floaters. If the acorns are then stored for any considerable length of time, re-bag them and include 1/4 teaspoon of a fungicidal powder such as Captan to deter molds or fungi. Properly stored acorns may remain viable for up to three years.

SITE SELECTION: To reduce animal predation on planted acorns, choose planting areas larger than two acres and preferably not surrounded by forest. Sites should be well-drained and free of heavy clay soils. See a professional forester for specific site requirements for each oak species.

METHOD AND EQUIPMENT: Sow acorns by hand or with modified agricultural planters. Sow three inches deep at approximately 1,500 acorns per acre. A spacing of about 3 x 10 feet should produce an adequate stand with space for between row weed control if needed.

EVALUATION: Expect 35% germination or about 500 seedlings per acre from direct seeding of oak. The initial growth rate is slower for this type reforestation.

PRECAUTION: These seedlings cannot tolerate strong herbicide rates for early weed control.

Photo Credit: Thomas C. Croker, USDA Forest Service, www.forestryimages.org

