REFUGE CONTRIBUTIONS TO REFORESTATION'

Ray Aycock²

The National Wildlife Refuae system of the U. S. Fish and Wildlife Service, consisting of some 504 units scattered throughout the country, contains several thousand acres of bottomland forests in the Lower Mississippi River Valley. Many of these refuges contain extensive stands of forests that have historically contributed acorns to nurseries for seedling production. Since the heavy commercialization of hardwood seedlings brought on by the Wetlands Reserve Program and Conservation Reserve Program of USDA in the **mid-1980s**, there has been a restriction on commercial pick up of acorns on national wildlife refuges.

Prior to this restriction, there was significant private interest in collecting acorns on national wildlife refuges in the White River and Ouachita River systems in Arkansas. Restrictions were imposed by refuge managers for a number of reasons, but primarily because collecting became a heavy commercial interest that often conflicted with refuge public uses, particularly deer hunting. Refuge managers could issue collecting permits to private citizens, but they were then faced with an additional paper work responsibility that meant little to that refuge, but additional complaints from the public. Bow hunters which constitute a large user group were usually the primary group that complained.

Public complaints were usually the result of disturbance from collectors. In addition the public often perceived collectors as causing a hardship on wildlife by taking their food supply. We know that the later is an erroneous assumption because the target species, **Nuttall**, fell over a long period of time and often in very wet sites. Private collections were probably biologically insignificant, but public perception is still real. There were problems with littering, cheating, disturbance, and time spent on administering the program.

During the mid-1990s the Fish and Wildlife Service reorganized on an ecosystem basis. One of our administrative units within Region 4 (Southeast Region) is the Lower Mississippi Valley Ecosystem. One of the features of ecosystem management is empowerment by field stations. The LMR has a number on functioning committees that provide direction and funding to field stations. Probably the 3 most important committees are Reforestation, Migratory Birds, and Private Lands. All 3 committees strongly support reforestation, an ecosystem goal, both on private and public land. The Reforestation Committee which is composed primarily of foresters and biologists recognized the potential contributions of refuges to nursery production of hardwood seedlings in the southeast. This situation is particularly true for **Nuttall** oaks because a significant acreage of this species is on refuge lands or state wildlife management areas. This particular species has been the single most desired species on both public and private lands because of its high wildlife and commercial value. It also does really well on fairly wet sites and is the best survivor of all oak species used in reforestation attempts.

The Reforestation Committee is charged with coordinating the procurement and planting of hardwoods on refuge lands and private lands enrolled in the Services Partners for Wildlife Program. Partners is a program where the Service furnishes seedlings and usually pays for planting hardwood seedling under a **30-year** agreement with private landowners. During the last few years we have been faced with trying to obtain both seedlings and acorns so we were aware of what both the private and public nurseries were facing from an acorn shortage standpoint. In addition many of us had been working with NRCS and recognized the tremendous potential impact of reforestation on lands enrolled in USDA programs.

We attempted to encourage refuge managers to liberalize their attitudes toward private acorn pickup on refuge lands. This was done both to benefit our own needs and those of nurseries within the LMV that supply seedlings to the private sector. We also hoped that it would encourage an expansion of the nursery industry that would be able to meet the demand for hardwood seedlings.

The Refuge Manager at White River NWR, Larry Mallard, and particularly his forester Jeff Dedmon, decided to initiate an acorn collection program utilizing a new special use permit system on a trial basis. In years past, special use permits were utilized on an individual basis, but there was heavy speculation that the government never received anywhere close to its share, generally around 10 percent of the acorns or the value of the acorns. Closer scrutiny of collection required additional manpower refuges did not have, so the operation usually took place on an honor system. This same situation often existed on other public lands. Due to these problems most of our refuge managers did not allow private acorn collecting on their refuges.

¹Aycock, R. 1999. Refuge contributions to reforestation. In: Landis, T.D.; Bamett, J.P., tech. coords. National proceedings: forest and conservation nursery associations-1996. Gen. Tech. Rep. SRS-25. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 8-9.
*U.S. Fish and Wildlife Service, 6578 Dogwood View Parkway, Ste B, Jackson, MS 39213; TEL: 601/965.4903.

White River decided to utilize one collector on a bid basis that would have exclusive rights to approximately 70,000 acres in Monroe and Prairie Counties in Arkansas. A bid solicitation was issued in November of 1997 for the privilege of collecting up to 500,000 pounds of acorns and pecans. The successful bidder had to meet the following conditions of his special use permit if they were the successful bidder:

- (1) Bids were received on the basis of the number of pounds of Nuttali oak acorns the bidder will furnish and deliver to the refuges for the first 50,000 pounds of Nuttali oak acorns collected from the refuge.
- (2) For any amount collected beyond that first 50,000 pounds of Nuttall oak acorns, the successful bidder will furnish and deliver to the refuge 10 percent of that excess volume in Nuttall oak acorns.
- (3) If the bidden amount of acorns was not provided, the permittee forfeited the performance deposit of \$5000.
- (4) All bids were subject to the special conditions of the permit which set certain parameters for acorn condition, delivery to the refuge, storage, **sub**permittees, treatment of trees, littering, indemnity issues, and other legal issues.

Mr. Larry Crosby of Clarendon, Arkansas was awarded the bid based on his willingness to post the performance bond and his bid of 7,600 pounds of **Nuttall** acorns. In addition he agreed to furnish 10 percent of **Nuttall** acorns in excess of that first amount, along with 10 percent of all other acorns and pecans collected.

Mr. Crosby furnished a total of 6,030 pounds of **Nuttall** acorns including 430 pounds of additional acorns. These acorns are being used for us to contract grow seedlings for planting on Service and private lands. A total of 54,304 total pounds was picked up by Mr. Crosby's subpermittees. This new supply of **Nuttall** oak acorns provided a significant infusion to the nursery industry. Continuation of this project and possible expansion could significantly affect the supply of this species for nurseries in future years.

White River did experience some problems including subpermittees selling acorns to competitors, reporting less than they actually picked up and not having a valid permit. Close supervision by the refuge enabled us to obtain a fair return for our needs and to provide acorns for the private sector. Weather conditions, particularly flooding, shortened the collection period.

We believe that this activity is compatible with the goals and objectives of the refuge system and contribute significantly to the reforestation goals of the ecosystem. Hopefully it will be used for years to come.