ESTABLISHMENT OF THE UNITED STATES FOREST TREE SEED CENTER

James L. McConnell^{1/}

<u>Abstract.</u> --The U.S. Forest Service, in cooperation with state forestry agencies, universities, and private forest industries in the United States, has established the U.S. Forest Tree Seed Center at Macon, Georgia.

The primary purpose of the Seed Center is to furnish small lots of tree seed for species introducing trials, provenance research, tree breeding, and similar purposes to forest researchers outside the United States.

Any organization or company receiving a request from a foreign researcher can send it to the U.S. Forest Tree Seed Center, where the request will be evaluated. If the request qualifies under the established policies, the requestor is sent inventories and price lists. The Center handles all visas, plant quarantine inspections and foreign shipping arrangements for the requested seed.

Additional keywords: Seeds, foreign forestry, import, export.

Since January 1972, experimental lots of forest tree seed from the United States have been shipped to such exotic places as Scotland, Peru, Nepal, Madagascar, Kenya, Japan, Haiti, Gabon, France, England, Ecuador, Brazil, Australia, Argentina, Iceland, Korea, New Zealand, Romania, Turkey and Yugoslavia. These shipments were handled by the Eastern Tree Seed Laboratory in Macon, Georgia as part of a new program called the United States Forest Tree Seed Center.

The need for a centralized seed center had been apparent for many years prior to January 1972. Until then, the U.S. Forest Service handled most requests through its Division of Timber Management Research in Washington, D.C. In addition to the requests handled by the Washington office, hundreds of requests for forest tree seed were submitted to Forest Service field units and to various universities, forest industries, and state forestry agencies. This led to duplication of effort in many cases and unnecessary interruption of work in agencies not equipped to provide such services.

Too, the demand for seed of indigenous United States forest tree species has increased each year. The increasing use of wood and wood products has stimulated forestation efforts throughout the world, which in turn has accelerated tree improvement and forest genetics research. This has resulted in a growing demand for reproductive materials, especially seeds from the United States by foresters in foreign lands. Thus, the U.S. Forest Tree Seed Center was established for three reasons: (1) to facilitate handling the increasing demand for seed; (2) to overcome duplication of effort; and (3) to combine seed handling services at one location.

¹/ Director, Eastern Tree Seed Laboratory, Southeastern Area, State and Private Forestry, U.S.D.A. Forest Service, Macon, Georgia.

The primary purpose of the Seed Center is to furnish small lots of tree seed for species introduction trials, provenance research, tree breeding, and similar purposes to forest researchers <u>outside</u> the United States. Seeds are available to both public and private agencies but are intended for <u>experimental</u> <u>use</u> only, not for commercial purposes. Domestic requests for seed are not honored or supplied from seed stocks of the U.S. Forest Tree Seed Center. It is not intended that seed furnished under this program compete in any way with commercial seed sales. When requests in excess of prescribed limits are received, they are returned to the requestor with recommendations for possible sources of the seed from reliable commercial seed dealers. Approximately onefourth of the requests fall into this category.

Initially, the Forest Tree Seed Center is furnishing seed and handling collections for all requested tree species east of and including the Great Plains. As personnel and funds become available, however, the Center will handle requests for seed of all U.S. tree species. At present, primary emphasis is on the major southern pine species (Pinus echinata, P. elliottii, P. palustris, and P. taeda); but the inventory of seed now on hand contains seed from over 50 coniferous species and several hardwood species. As requests are received for other coniferous species, collections will be made and represent-ative amounts added to the Center's seed stock for use in meeting current and future requests. Requests for hardwoods, including central and northern species, will be honored as quickly as seed can be obtained. Again, representative amounts will be collected and stored, if feasible, for use in filling future requests.

The Center has cooperative agreements with many forest industries, universities and state organizations in the southern United States. When a request for seed not in the inventory is received, the Center determines which field unit might be able to fill the request. A request is then made to that field unit to collect the seed for shipment overseas. Cooperation for collections of seed by various field units has been excellent. Through this cooperation, the Center has been able to supply such relatively uncommon species as clonally identified Livingston Parish Loblolly for South Africa, Moneymaker variety pecan for Bujumbura, Africa, clonally identified slash low gum yielders for Brazil, select cottonwood cuttings for Korea, individual tree collections for sycamore for France and tung oil seed for Liberia.

A service charge for seed from the U.S. Forest Tree Seed Center is levied to cover the costs of processing requests for seed, and administering the program. The scale of charges is as follows:

1.	Seed orchard seed without clonal identification		
	(1,000 seed maximum)	\$20.00	(U.S.)
2.	Seed orchard seed with clonal identification		
	(100 seed maximum)	\$20.00	(U.S.)
3.	All others (except special collections)		
	Minimum: 500 - 2,500 seed	\$ 5.00	(U.S.)
	2,501 - 5,000 seed	\$10.00	(U.S.)
	5,001 - 7,500 seed	\$15.00	(U.S.)
	7,501 -10,000 seed	\$20.00	(U.S.)

4. Special collections - based on actual costs. The requestor will be given a price quotation for approval before the collection is made.

5. Requests for special collections outside those normally stocked by the Seed Center will be arranged when possible, with actual costs to be charged to the requesting foreign agency or organization.

6. Shipping charges, other than International Mail, will be paid by the consignee. Shipments over four pounds (2.0 Kg.) must be shipped air freight, postpaid or collect.

The scale of charges for cottonwood <u>(Populus</u> deltoides) cuttings is as follows:

1. Select clones as identified through published descriptive data. Rooting ability generally known. \$1.00 each cutting (a cutting can vary in length from 12" to 22"). Limit 25 cuttings each clone.

2. Un-identified or run-of-the bar cuttings <u>(source_identified)</u>. Rooting ability not known. \$.50 each cutting. Limit 100 cuttings.

3. Un-identified or run-of-the bar cuttings (source not identified). Rooting ability not known. \$.50 each cutting. Limit 100 cuttings.

Additional requirements for cottonwood:

Shipment from the U.S. will be between December 15 and March 1.
All cuttings will be shipped air freight. Freight charges to be paid by the consignee.

There are times when the requestor is unable to pay for the seed due to lack of foreign exchange or unavailability of any funds whatsoever. If the request is legitimate, the Center Director may in such cases use his discretion to receive seed of foreign tree species as "payment in kind", or make whatever other arrangements are feasible, including waiving all charges as a last resort in special cases.

In addition to furnishing tree seed to foreign researchers, the Center has been able to advise forestry organizations on regulations and procedures for importing and exporting tree seed. Also, the Center has been able to assist the Southeastern Forest Experiment Station in a seed exchange project with Australia. In this instance, import permits were secured for Eucalyptus seed entering the United States.

The Center has developed an excellent working relationship with the Atlanta office of the U.S.D.A.'s Animal and Plant Health Service, Plant Protection and Quarantine Program. This has made it possible for us to offer a continuing inspection and certification program to assist other organizations in importing and exporting seed and other reproductive material.

Any organization or company receiving a request from a foreign researcher can send it to the U.S. Forest Tree Seed Center, where the request will be evaluated. If the request qualifies under established policies, the requestor will be sent inventories and price lists. The Center will handle all visas, import permits, certificates of origin, plant quarantine inspections, pro forma documents, foreign shipping arrangements, and other domestic or foreign requirements for the requested seed. In most cases, seed is shipped via International Air Mail. Packages over four pounds must be shipped via Air Freight. The requestor pays all shipping charges.

Further information, including a current inventory of seed available, may be obtained by writing:

Director, United States Forest Tree Seed Center U.S. Forest Service P.O. Box 819 Macon, Georgia 31202 U.S.A.