THE GENETIC CONSERVATION OF NOBLE HARDWOODS IN FINLAND

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In Finland noble hardwoods such as *Acer platanoides, Fraxinus exelsior, Quercus robur, Tilia cordata, Ulmus glabra* and *Ulmus laevis* grow in small and fragmented populations. That is why gene conservation through selected gene reserve forests would probably capture too little of the total genetic variation within these species. Hence we have chosen to sample variation in many stands but few trees per stand and conserve this variation in *ex situ* collections. In addition to sampling, establishment of collections and maintenance work, the whole process of conservation includes inventories and collecting descriptors, as well as the final work of organizing the information in a database.

Since we plan to use collections as seed sources in the future, the clonal material is planted randomized to avoid self pollination and seedlings are planted in family groups where only one individual per family will remain after thinning.

We estimate the primary collections to be ready by 2001, after that the work will mainly be intensive maintenance and in some cases doubling the collections.

Environmental legislation and the netwoork of nature conservation areas support the active gene conservation by protecting habitats of these species against any changes that would threaten their stability. Conservation areas usually aim at preserving present status, which sometimes is in conflict with gene conservation. Vital populations for gene conservation demand more active forest management than is accepted for nature conservation purposes.

Table 1. Amounts of accessions planned to be collected and collected till 1.1.2000

	Goal		Collected	
Species	Populations	Clones/ Families	Populations	Clones/ Families
Acer platanoides	50	290	35	209
Fraxinus exelsior	20	170	29	152
Tilia cordata	70	400	62	302
Quercus robur	20	170	23	147
Ulmus glabra	40	250	38	220
Ulmus laevis	30	150	19	119