Thinning is a very important action in forestry to ensure good continuous and long-term profitability.

Thinning means what it says: partly removing trees and partly leaving trees in a stand to ensure good growth. The basic principle is that weak and damaged trees are removed, trees of higher quality are left behind so that they have even better conditions in which to assimilate light, water and nutrients and consequently grow.

Thinning thus ensures that the forest develops well in the longer term and provides a good economic outcome when it has finished growing and is to be felled. But the thinning in itself provides income through the removals.

The products or assortments obtained in thinning are principally pulpwood, smaller-diameter trees that become the raw material for paper manufacturing. Other assortments are timber and biofuel.

What then happens to forest that is not thinned? It will eventually thin itself, in other words poorer-quality and damaged trees will deteriorate and finally die, to the benefit of the more viable trees. The economic aspect of self-thinning is obviously that income for timber is lost. Trees that die become dead wood, which in itself is important for example for the survival of insects and larvae. But with uncontrolled self-thinning there is a great risk of the insects gaining the upper hand and also damaging the healthy forest.

It can be seen with the naked eye whether a forest has been thinned or not. A thinned forest looks uncrowded and in good health, while an unthinned forest often creates an unmanaged, overly dense impression.

Thinning, like final felling, is generally performed with modern forest machines, harvesters. Smaller and lighter machines are commonly used as forests for thinning are denser and more crowded. Choosing suitable machines reduces the risk of tree and soil damage.

Considerable knowledge is needed in performing thinning to enable the right decisions to be made, both in terms of production and from the point of view of nature conservation. This applies whether the thinning is done mechanically or manually using a power saw.

We can therefore say that thinning is important for forestry, from the points of view of both nature conservation and economics. This is also evident from the fact that nearly 400 000 hectares a year are thinned in Sweden. It can be mentioned for comparison that just over 180 000 hectares of forest are the object of final felling annually.