

STATE OF HORSE LOGGING, A SUSTAINABLE TIMBER TRANSPORTATION METHOD IN HUNGARIAN FORESTS

CS. FICSOR, Á. MALATINSZKY

Szent István University, Institute of Environmental and Landscape Management
H-2103 Gödöllő, Páter K. 1., Hungary, e-mail: csilla.ficsor@gmail.com; Malatinszky.Akos@kti.szie.hu

Keywords: horse logging, transport, nature friendly, environment friendly, forestry

Horse logging has been a usual process in forestry before the mechanization of forestry operations (1955), but has almost been forgotten for today. Data was collected on-the-spot, via semi-structured interviews with contractors who deal with horse logging. All the 116 state forestries were contacted by phone, preparing a map on the frequency of horse logging in the state forest areas. Altogether 16 contractors have been observed personally, asking how they use animal power in practice. 15 of them were actually working in nature protected forest areas. The field observations were made to achieve the following goals: to evaluate the viewpoint of decision making on the use of horses, the advantages and disadvantages of horse logging, to collect the experience of the contractors, in addition to observe the used horse breeds and types.

30 out of 116 forestries employ contractors who use horses for logging timber. This is 25.86 % of all the forestries. 7.76 % of forestries have reported that horse logging is used only occasionally. The most common occasion when horses are used is in young (between 10 and 50 years old) forest stand that is already selected. The reason for this is that its timber weight less and the stand is too dense at this age to be logged by machines. In these stands, horses could work efficiently and manoeuvre easily. The most commonly used horse type is the cross-breeding of warm-blooded and cold-blooded horse, with a rate of 37%. Commonly used horse breeds and types in the forests are *muraközi*, *percheron*, *nóniusz* and the *Hungarian cold-blooded horses*.

Daily average output capacity of a single horse is 15.9 m³. The average quantity which is pulled by a horse for one round is 0.81 m³. Altogether there are only 3 forestries that use their own horses and the contractors shall hire them. For every contractor the reason to use horses is tradition and harmless work. The most common way to make the timber move is to drag it with a chain or a rope to the horse.

The main advantage of this method is that it is harmless for the topsoil, the wood stand and saplings. Its environmental significance is that no harmful substance emission occurs, no harmful fuel presents and the forage consumed by the horses can be produced by the contractors or the locals as well. The disadvantages are that the output capacity of horse logging is less than that of the machines, there are few people who has knowledge, will and ability to work with horses, moreover, working with them requires a special way of life.