

Protocol for the management with forest tree seedlings and Protocol for obtaining seed material, parts of plants and seedlings

Andreja GREGORIČ¹, Kristina SEVER¹, Andrej BREZNIKAR¹, Boris RANTAŠA¹, Hojka KRAIGHER², Katja Kavčič SONNENSCHNEIN², Peter ŽELEZNIK²

¹ Slovenia Forest Service, Večna pot 2, 1000 Ljubljana, Slovenia; zgs.tajnistvo@zgs.si.
² Slovenian Forestry Institute, Večna pot 2, 1000 Ljubljana, Slovenia; info@gozdis.si.

INTRODUCTION

Forestry professionals in Slovenia have noticed the need for simple, yet important guidelines for foresters and forest owners regarding management with forest tree seedlings and obtaining forest reproductive material.

The success of reforestation by planting seedlings of forest tree species depends not just on seedling quality, but also on the handling with seedlings, from the excavation in the nursery to planting in the forest. Improper handling with seedlings causes dehydration and drought stress in seedlings, root rot, pest attack and mold and disease, thereby reducing the vitality of seedlings. The main tool for regulations and forest management are forest management plans and Act on Forests.

Due to the importance of obtaining and using appropriate genetically diverse and locally adapted forest reproductive material, the field of forest seed production and arboriculture in Slovenia is regulated by the Forest Reproductive Material Act. It determines the conditions for production, marketing and use of forest reproductive material, obligations of persons involved in the production, marketing and import, professional tasks and procedures related to origin, quality and identity of forest reproductive material, methods of formation of reserves, implementation of control.

Protocols provide all basic information that professional forester and forest owners should know about these topics.

Protocol for obtaining seed material, parts of plants and seedlings

The purpose of the protocol for obtaining seed material (seeds, cones, fruits), parts of plants and seedlings for sowing or growing seedlings for reforestation, is to provide an overview of all procedures and stages in seed collection. The uniform procedure will ensure quality and appropriate forest reproductive material and assists users with professional support.

The protocol explains:

- What should be done before the process starts;
- How to obtain forest reproductive material;
- Stages of obtaining a certificate for forest reproductive material;
- Basics of the law regulations for forest reproductive material;
- Control system;
- Terminology;
- Measures that contribute to the conservation of genetic diversity.

Protocol for the management with forest tree seedlings

Protocol for the management with forest tree seedlings from the excavation in the nursery to their planting in the forest. The purpose of the protocol is to ensure the proper organization of work at all stages of reforestation by planting seedlings. The proper proceeding will achieve the greatest success of reforestation.

The protocol explains:

- Handling and responsibilities in individual phases of forest tree seedling management;
- What do successful restoration with planting depends on;
- How to procure the seedlings;
- Why is the origin of seedlings important;
- The importance of genetic diversity in forests.

CONCLUSIONS

Both protocols are designed as leaflets and as such, they are suitable for fieldwork. Individual phases are divided into smaller tasks, and users can track progress (figure 2). Since people involved in all phases will have more knowledge, we expect greater success of reforestation by planting seedlings of forest tree species.

The importance of the conservation of forest genetic diversity and forest genetic monitoring are highlighted in both protocols. They are going to be distributed among foresters and forest owners in Slovenia. Hence, Lifegenmon project results will be transferred into practice with the purpose of providing regulated and high-quality forest reproductive material for future forests.



FIGURE 1: Protocol for the management with forest tree seedlings.



FIGURE 3: Protocol for obtaining seed material, parts of plants and seedlings.

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