

## Visit of the “ProSilva Europe” management committee in Serbia

One of important aims of ProSilva Europe is promoting close-to-nature forestry across the whole continent. While Central Europe is well represented, some boreal and Mediterranean countries still lack representatives. Recently, many countries from the region of southeast Europe have joined the association. This is especially important since, these countries share very well preserved natural forests and have remarkable experience with close-to-nature management of some forest ecosystems. With a high pace of development, they are in a turning point for forestry, whether to continue in a more natural way, or follow the steps towards industrial forestry. For the new member countries, organization of active regional ProSilva organizations is much harder task as working in the crown association. However, especially this regional involvement is one of the most important tools of ProSilva Europe. At the invitation of Dr. Martin Bobinac, the national representative of Serbia, the ProSilva Europe delegation, composed of President Prof. Jean-Philippe Schütz, Brice de Türckheim and Prof. Jurij Diaci visited Serbia in October 2007. The general aim of the visit was to strengthen the collaboration with Serbia, to involve a broader circle of forestry experts in the ProSilva activities, and to get a better knowledge of forest and forestry in Serbia. The visit was organized and sponsored by the public enterprise (JP) Srbijasume, director Jesa Ercic, dipl. ing., JP Vojvodinasume, director Marta Takac, dipl. ing., and the diplomatic mission of FAO in Serbia, Franc Ferlin, MSc. The main person behind the organization was Dr. Martin Bobinac, assistant professor at the University in Belgrade, Forestry faculty. All involved in the visit wish to thank organizers and sponsors for the hospitality and excellent working atmosphere.

Picture 1: Virgin forest of oak (*Quercus robur*), hornbeam (*Carpinus betulus*) and ash (*Fraxinus angustifolia*) Vratična in Srem (Morovič) is one of the oldest stands of the lowland floodplain forests in southeast Europe.

First part of the ProSilva visit took place in the forest area managed by the public enterprise (JP) Vojvodinasume, within management sector Sremska Mitrovica. Main stress was on management of lowland alluvial flooding forests, especially groves of weed trees, oak trees and ash trees. In the area of local forest administrations Morović, Višnjićevo and Kupinovo the delegation was familiarized with structure and development of virgin forest reserves and the methods of conservation of lowland forests and landscape (Picture 1). The hosts also presented a successful procedure of natural regeneration of pedunculate oak forests; though the regeneration is a very intensive one – a classical shelterwood system (Picture 2). Due to experience from many research plots, the colleagues are recently changing the thinning model in pedunculate oak forests; they start earlier and thin intensively (Picture 3).

Picture 2: Traditional shelterwood system in pedunculate oak forests in the Srem area. Very dense regeneration of oak trees achieved with intensive management: consideration of seed years, protection against browsing, soil and ground vegetation treatment, oak mast protection against rodents. Nowadays, the conventional chemicals are being replaced by biodegradable ones, especially to get the FSC certificate.

Picture 3: Doc. Martin Bobinac on one of his many permanent research plots explaining the improved thinning model for the pedunculate oak forests.

In the region of forest administration Kupinovo, colleges from Vojvodina presented a large protection area of flooding forests, swamp and water ecosystems called “Obedska bara”. Total surface of this area is 2000 ha (Picture 4). Obedska bara is one of the most important objects within “Raamsar convention” designated areas in southeast Europe. Delegation also visited intensive clone poplar tree plantations and ash forest management.

Picture 4: Special nature reserve “Obedska bara” including floodplain forests, swamps and water ecosystems: Ramsar site and Important Bird Area.

The transition from traditional to close-to-nature forestry is especially difficult for lowland forest ecosystems. One of the most important problems is lack of knowledge on natural process, since flooding forest ecosystems have in middle and west Europe almost all been cut down. That is why forest reserves in Vojvodina have a remarkable meaning for the research on natural developmental cycles in lowland flooding forests. Important reasons for prevalent traditional forestry in Vojvodina floodplain forests are also the necessity for economic development, low price of work and well established practices. Nevertheless, the colleagues from Vojvodina are well aware of long term benefits of close-to-nature forestry. Therefore they expressed interest for further cooperation with ProSilva, especially in fields of nature-based silvicultural systems for bottomland forests and investigation of natural forests.

Picture 5: Beautiful views in “open” landscapes on Zlatibor area. Here, many popular tourists resorts are located. Pastures and grasslands are overgrown with Scotch pine (*Pinus sylvestris*).

On the third day the delegation of ProSilva visited forests in the middle Serbia, in the area of Zlatibor (English “Golden pine”). Public enterprise (JP) Srbijasume with local unit Uzice is responsible for these forests. Area around Zlatibor has a beautiful landscape with remarkable views (Picture 5). Many mountain pastures are being overgrown by Scotch pine (*Pinus sylvestris*), while others, on more erodible lands were planted. Mostly carefully tended, more regular Scotch pine stands can be found here, while they favor also irregular, almost selection like stand structures. The overall accent is on “in time” tending and on natural regeneration. However, one of the highlights of the visit was the group selection forest of spruce, silver fir and beech in Murtenica (Picture 6). Here, the selection system is based on the “control” method with a rich tradition. The equilibrium growing stock is lower when compared to similar selection forests in the Dinaric region of Slovenia, or Emmental forest of Switzerland. Still, everyone was impressed by a rich natural regeneration and overall vitality of all three main species. In the national park Tara at the border with Bosnia and Herzegovina, the colleagues manage forests similar like around Murtenica, and this is practically their only income. Forest management in national park Tara is entirely harmonious with principles of ProSilva, while the work on the “control” method done by Prof. Dragomir Milojkovic deserves wider recognition. Close-to-nature forest management in national park Tara (it is including a network of smaller total forest reserves), is probably a better solution than complete conservation of large parts of forests (“wilderness areas”) and industrial forest management on the rest of forest area – a regime of landscape management that is common in west and north Europe.

Picture 6: Traditional group – selection forests of spruce, silver fir and beech in Murtenica area of Zlatibor

Delegation of ProSilva Europe also visited the diplomatic representation of FAO in Serbia. A meeting with all important representatives of forestry sectors, from industry to education in Serbia was held there. The FAO project "Development of forestry sector in Serbia" was introduced to delegation. Sustainable management with forest in Serbia was highly praised by the ProSilva delegation on this final meeting. ProSilva Europe delegates also expressed appreciation for the kind hospitality and offered possibilities for future cooperation in the technical and scientific sphere. All the activities made a real and direct connection between ProSilva Europe and forestry profession in Serbia. The main overall conclusion was that Serbia, as a country with many natural forests and well organized forestry, has a very good foundation for close-to nature silviculture and long term improvement of all aspects of forest management.

Picture 7: Protection forests at the borderline of the national park Tara (including Omorika spruce far behind on the Horizon), close to border with Bosnia and Herzegovina.

Prof. Jurij Diaci, doc. Martin Bobinac