



Newsletter 2 Autumn 2015

# Integrate+

## Welcome to issue two

The Integrate+ project successfully expanded its network of demonstration sites in Europe. In cooperation with local partner institutions a wide range of Marteloscopes (M-scopes) were or are being established. M-scopes are the centre piece of Integrate+. In connection with an innovative mobile software they support training and knowledge exchange around the intensively debated topic on how integrating biodiversity aspects into forest management can contribute to halting biodiversity loss in Europe's forests.

In 2014 seven M-scopes were established including six in Germany and one in Switzerland. In 2015 further sites are being selected. Examples are the M-Scopes in the Champagne-Ardenne region in France which are being installed jointly with IRSTEA. They are located in a former coppice with standards forest being representative for that region. Three sites will become available in the State of Brandenburg, Germany. Integrate+ collaborates closely with the University for Sustainable

Development Eberswalde and the State Forest Enterprise of Brandenburg. In order to represent montane forest ecosystems, M-Scopes are currently being established in the French Alps near Grenoble and in Davos, Switzerland in cooperation with IRSTEA and WSL.

Continued interaction of Integrate+ with EFI Associated Members and other institutions resulted in a growing interest in the use of M-scopes. Fruitful cooperation was initiated with institutions from

Belgium, Czech Republic, Finland, Georgia, Luxembourg, Poland, Slovenia, Spain and Sweden.

The Integrate+ team implemented a first set of training events in its M-scopes. Main attention during the next months will be given to developing a comprehensive training curriculum and schedule.

[www.integrateplus.org](http://www.integrateplus.org)



### Activities at a glance:

**Aug 14** Presentation at international conference "Forest landscape mosaics" Tartu, Estonia

**Oct 14** Advisory Group meeting Sundsvall, Sweden

**Jul 15** Presentation at German Forest Dialogue Forum Berlin

**Aug 15** Integrate+ included to work programme in the frame of a strategic cooperation dialogue between Germany and the Czech Republic

**Oct 15** Presentation at EFI 'science-policy in action' event on the role of European forests (Session Think Forest in the forest: biodiversity and forest management) in a Integrate+ M-scope, Sonian Forest, Belgium



## Integrate+ mobile software prototype is being tested in demonstration sites

### Messages from the Network:

“The National Forest Inventory (NFI) has been collecting information on the state and development of Swiss forests for many decades. To ensure high data quality, the NFI field teams are continuously trained on various topics. Marteloscopes record all main features of each individual tree on a 1 ha area and therefore represent an ideal tool for effectively carrying out training exercises. Examples for such training events are the identification and recording of tree habitat structures or that of tree damages.”

**Christoph Düggelein**  
Forest engineer  
Scientific Service NFI  
Switzerland

Georgia is undergoing a forest sector reform revising its national forestry strategy and forest management guidelines. To learn from relevant examples the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH organised a study tour to Baden-Württemberg, Germany in the framework of the Georgian-German cooperation programme ‘Sustainable Management of Biodiversity in the South Caucasus’. The group hosted by ForstBW, visited an Integrate+ M-scope site in the Freiburg City Forest.

“We discussed on how biodiversity measures can be integrated into managed forests. We took part in a virtual tree selection exercise using the ‘I+’ tablet software. It showed us the potential of M-scopes as training tools and as vehicle for communication between research, policy and practice. We thus see M-scope sites as a very powerful tool for our forest strategy revision process and the following implementation”.

Visit of Georgian Delegation including the Deputy Minister of Environment and Natural Resources to an Integrate+ M-scope site

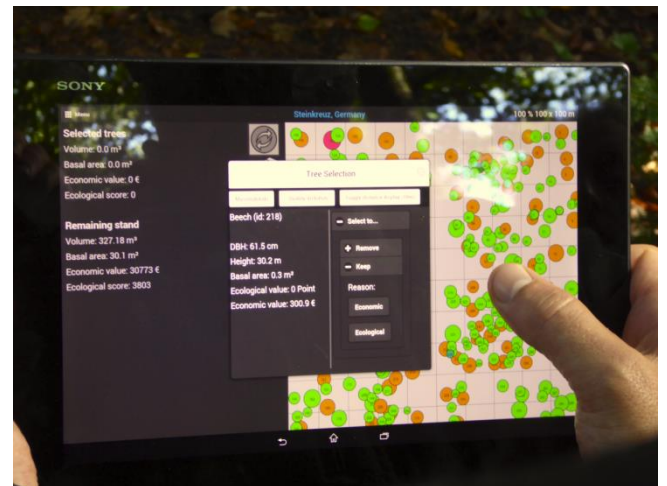
‘I+’ is an open source software currently operating on tablets. These can be used directly on an M-scope site. ‘I+’ consists of three components: a trainer for executing virtual tree selection exercises, a manager which allows defining tasks for exercises and adding new M-scopes and thirdly a relational database for data storage.

Information is available for each tree on the typically 1 ha demonstration site including tree location, dbh, height, volume, timber assortments and corresponding local market prices and tree microhabitats. Microhabitats comprise of 23 saproxylic and epixylic main features and are linked to a selection of species that are dependent on such structures. ‘I+’ allows retrieving information and images on each habitat structure and its dependent species.

“I+ allows different user groups to perform selection exercises in the field and directly discuss the results, not having to compile them on an office computer”, says Tommi Suominen of the EFI software development team. “The visualisation of the exercise results through charts and plot maps directly in the forest

stand makes a training session hands-on and stimulates fact-based discussion. For example identifying conflict trees in terms of economic and ecological value are of particular interest”, he continues.

Usability and expandability has been the paradigm in designing the software. Adding new features based on user feedback or other emerging requirements are considered in the design. Development of ‘I+’ for the use on smart phones is being explored as that will allow reaching a larger user base and by reducing costs excelling application for training purposes.



## Q & A with Gabriele Wicht-Lückge

Gabriele works for the State Forest Administration of Baden-Württemberg (ForstBW), Germany

**Q. What does your administration do?**

**A.** Our aim is to ensure and develop multifunctional and close to nature forest management in Baden-Württemberg. To achieve that, we build on integrative forest management approaches and work closely with scientific institutions. Some of our main tasks are the development of silvicultural guidelines, providing training and ensuring knowledge transfer.

**Q. What has changed in ForstBW’s silvicultural principles during the last years?**

**A.** Based on the newly designed forest development types we ensure that forests become more resilient against climate change, deliver wood and conserve biodiversity. With our new silvicultural programme we have thus clearly opened the door towards more continuous forest cover management.

**Q. ForstBW has recently started a silvicultural trainer programme. What opportunities do you see in using M-scopes to support silvicultural decision making towards new forest management goals?**

**A.** We see the implementation of tree selection exercises in the field as a central element for our silvicultural trainer programme.

Virtual tree selections without an actual intervention, however, often end in heated discussions without result. Having M-scopes as training and demonstration tools can ensure more transparency as they base on quantitative data. Targets and results of a given management aim as well as varying interests of management interventions can be visualised. Discussions in an M-scope thus become more objective and fact-based. All this motivates us to integrate M-scopes to our silvicultural trainer programme in the near future.

**Q. Could you see your administration benefiting from the Integrate+ network, and if yes, how?**

**A.** Integrate+ and its international network will allow us to be at the pulse of latest developments. In particular, our interests lie in linking economic and ecological aspects of forest management which Integrate+ supports. Last but not least we can take full advantage of lessons-learned examples provided by the Integrate+ network partners.

Thank you!  
Editor