Forest planning, one tree at a time

Photos: Veikko Somerpuro

Helsinki's Central Park basks in beautiful sunshine, and **Timo Virtanen**, the city's forest manager, is enjoying an opportunity to get out of his office and into the forest. With him, he has a handheld PC, which he uses to access the forest planning tool SilvaPRO.

It may come as a surprise to many that the City of Helsinki owns 4,800 hectares of forest land in Helsinki alone and another 4,800 hectares in the surrounding municipalities, including Espoo, Sipoo, and Vihti. To enable efficient management of these forests, the city has deployed Trimble Forestry's SilvaPRO application.

"The special characteristic of forest management in cities is the level of detail required. We make cutting decisions at the level of individual trees. The forested areas are of varying ages, and we plan our measures with a view to keeping them forest-like," says Virtanen.

He explains that, instead of generating profits, the city's forests are intended to offer local residents opportunities for recreation and outdoor activities and to foster biodiversity.

ACCESS TO INFORMATION WHEREVER, WHENEVER

In the selection of a suitable application, the city's decision was swayed by SilvaPRO's competitive price and its properties that met all the requirements. Also, the availability of information, transparency, digitally accessible functions, and easy access were among the key criteria.

"Having a Web-based SaaS application, centralized databank, and hassle-free updates is important to us. We have to be able to manage data and plan forestry operations efficiently," explains Virtanen.

Day-to-day forestry operations are facilitated by SilvaPRO's interface to an up-to-date map-data back end and by functions that enable the city to utilize its own interface material. The information can also be published via the city's IT systems.

Virtanen says, "Local residents are interested in the management of the city's forests and their use for recreation activities. That's why it's important that we can publish information via our own channels."

CUSTOMER SERVICE TO LEND A HELPING HAND

With a year's experience of the system under his belt, Virtanen is pleased with the functioning of the browser-based application, particularly when the network connection works without problems. Mastering the new system has been easy, especially because he has been able to get practice with it and test its use without having to worry about causing irreparable damage if something goes wrong.

"Trimble's customer service staff has been on hand to offer assistance, and changes are par for the course in forest management. At the moment, we are developing our work-site instruction system to enable sending instructions to forestry workers on their cell phones. We are also eagerly awaiting SilvaPRO's new terrain application," says Virtanen.

The city's forest planning experts and Trimble's customer-service team held joint meetings to discuss the city's expectations for the system, which made the implementation of the application easier by ensuring its compatibility with the city's practices.

THE GOAL OF BIODIVERSITY

Storm Kiira, which wreaked havoc in 2017, caused major changes in the city's forest plans since extensive repair work was required. In addition to this, the new city plan includes large-scale development, which will result in the proportion of forest-covered area decreasing from 40% to 30%.

"Narrow green belts and small forest areas present challenges for forest management. At the same time, our central goal is to preserve biodiversity. Aspen is common in our forests, which has a positive impact on the flying squirrel population," says Virtanen.