

Accurate forest inventory with smart measurement app

The smart phone has become an important tool for anyone who wants to keep track of their forest. The volume calculation goes fast when traditional forest measurement tools and tables are changed for the app.



Oscar Nyman in Halland region shows how he measures the forest with the app Katam Forest, one of the innovations nominated for Skogselmia Innovation Award 2019. PHOTO: MARIE HENNINGSSON

Oscar Nyman is one of those who embraces new technology to facilitate planning and work in the forest. Land Skogsbruk meets him in the forest in Halland which is owned by his partner Anna Skogar and her mother.

"I come from the IT sector, for me it is strange that in the forest you usually work as you always did," says Oscar Nyman.

Digital forestry plan

It began with the fact that the eight-year-old forestry plan that exists over the property was put into a digital living forestry plan, Eskog.

- Then we entered the measures we made and when we made them. We also added some actions that Anna's father did, says Oscar Nyman.

Time to test

Half a year ago he heard about the smartphone app Katam Forest, which, incidentally, was nominated for Skogselmias Innovation Award 2019. That app he wanted to test and contacted Katam company.

- The trees are a stock item, you have to know what you have in stock and how that inventory looks, says Oscar Nyman.

Want to update immediately

Katam has replaced the old forest measuring tools and tables against an app.

- Usually it is the phone, or the tablet, which I use in the woods. In it I make marks that I then adjust in the computer. I usually have a computer in the car, I like to update directly.



Oscar Nyman hangs up a sign on a tree. PHOTO: MARIE HENNINGSSON

Good sample of forest to test the app

Time to try the technology. The first Oscar Nyman does is to hang up a white sign with black cubes and rectangles in a spruce in the 45-year-old thinning forest. This particular forest is a good test area. It is a forest where he would like to know how much forest there is and then follow up to see the development.

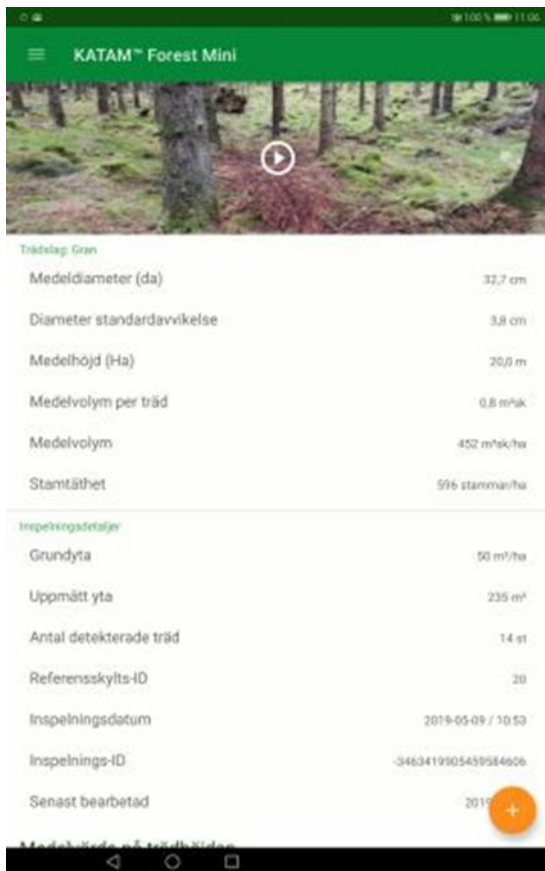
Filming for 30 seconds

Then he opens the app in his tablet and starts filming.

- I'm filming for 30 seconds. At that time, I get enough measurement data from the sample area. It goes so much faster than if I had gone around with traditional measuring tools.

The sample area is drawn out in the map

Measured sample areas, basic area, average diameter, trees / ha and volume / ha are reported. The GPS coordinates are saved and you can see both the sample area's boundaries and all the trees discovered on the map of the app. By merging sample areas within a stand, data for all or part of the stand can be reported.



Screenshot Katam PHOTO: MARIE HENNINGSSON

"That is correct"

At the touch of a button, the measurement result is sent via the mobile network to the online Eskog forestry plan and updated. An icon shows in the stand map where the measurement was performed. A measurement value for diameter spreading is also included in the plan.

- I have compared these measurements with data from traditional measurements and I find that they correspond very well. During the time that I have tested, it also works better and better after each update.

Stay updated

Oscar Nyman sees the potential of the app. Above all, he sees that timber buyers and forest companies will benefit greatly from it. But also the usual forest owner who wants to keep updated of his forest. The reality is transferred to the digital forestry plan. I think it's great.