GIS Mobile Apps Improve Bavarian Foresters’ Productivity

The Bavarian State Forest Administration is a prime example of how an enterprise GIS can improve productivity. More than 1,200 people use the administration’s ArcGIS platform to access and analyze the forest. Administrators, officials, and employees tap into GIS for analysis, workflow, and decision-making support.

To ensure that foresters would actually use the technology, application designers created GIS tools that were not intimidating to nontechnical staff.

The administration’s enterprise GIS, the Bavarian Forest Information System, helps foresters whether they are disconnected while working in the forest or online in the office. A mobile application gives foresters access to data including 90 different themes and 130 layers of information. It supports bidirectional synchronization while using only one user interface.

Because the apps are responsive and easy to use, foresters have adopted GIS and use it for many aspects of their work such as gathering data and analyzing change. For instance, they use a change-of-forest area application to monitor newly harvested and planted forests. Foresters use a tool to capture

↑ In the field, the forester is able to take advantage of easy-to-use analysis tools. The forest delineation tool has large buttons and is easily operated by nontechnical personnel like foresters. It has built-in GPS, so the position reference does not need to be added.

↑ Bavarian foresters use GIS to be more productive in the forest.
information on a GPS mobile device, and
the IT team processes the data for land
survey purposes.

Another app is used for surveying wildlife
and compares species population to
natural habitat. This count is the basis for
issuing hunting permits. By using a GIS app
specifically designed for counting species,
foresters have reduced the time to perform
count tasks by 20 to 50 percent.

Geographic information officer Christian
Simbeck explained that a goal of the
Bavarian State Forest Administration
information technology department is to
provide foresters with GIS tools that help
them achieve their mission, optimize their
workflow, and be more productive.

Simbeck advises GIS application devel-
opers to take time to understand precisely
what users need before developing applica-
tions. This includes knowing who will use
the application and what level of technol-
ogical ability they have. Where will they be
working with the tool? Locations may be
connected in the office, disconnected in the
field, or both if the user is mobile. Finally,
developers need to understand the step-
by-step details of a workflow.

This successful strategy has been
proved by the 1,200 employees who use
GIS every day.

Learn about ArcGIS for
developers at developers.arcgis.com.