Forest Operations Researchers and Geospatial Scientists Meet in Joint Symposium

Report about the 17th SSAFR in Suquamish, USA, on 27-30 August 2017, by Sándor F. Tóth, Symposium Chairman and Deputy Coordinator of IUFRO 3.04.01 – Operations Systems Analysis and Modeling

The *Symposium on Systems Analysis in Forest Resources* (SSAFR) is an international gathering taking place every two or more years since 1975. Past symposia brought together scientists from around the world who studied forest systems with the goal of making better management and policy decisions. Common topics included harvest scheduling, spatial reserve design, wildfire management, invasive pest detection and control, forest ecosystem services, supply chain optimization for biofuel and non-timber forest economics. The overarching link across these topics has been the use of operations research and decision theory to inform on-the-ground management and policy.

The 2017 SSAFR (http://depts.washington.edu/ssafr17/) was unique in that it brought together two traditionally disconnected disciplines both working on forest decision support systems: the remote sensing/geospatial informatics community and operations researchers. The former group is concerned with how to best collect and process data on forests and other resources, whereas the latter tries to optimize resource management given what-ever data is available. Despite the obvious feedback between the two groups, so far they have generally operated separately.

At this symposium, questions such as how to streamline data collection protocols for competing forest management objectives were studied. Operations researchers and remote sensing scientists met to share their research in applied optimization, simulation, management science, and geospatial informatics as they pertain to forest management and policy analysis. Geospatial analysts study how to best collect and process data, whereas operations researchers try to optimize management given whatever data is available.

Participants from industry learned how much operations research can offer for decision support. Visualization techniques to display complex information about optimal solutions, tradeoffs, conflicts and remotely sensed data have evolved to new heights. T*he 18th SSAFR will be held in Chile in March 2019 chaired by Prof. Andrés Weintraub.*

Read the full report for more information about organization and participation here: https://www.iufro.org/science/divisions/division-3/30000/30400/activities/

Group photo (top) and photo of field trip participants studying the forest management practices of the Washington State Department of Natural Resources on the Olympic Peninsula, USA during the 17th Symposium on Systems Analysis in Forest Resources. Photo by Mikael Rönnqvist.