

# **Development of a National Program for Monitoring Soil Quality as an Indicator of Forest Health in the USFS Forest Inventory and Analysis (FIA) Program. (S07-oneill152702-Poster)**

## **Authors:**

- K.P.O'Neill - *USDA Forest Service (NCRS)*
- M.C.Amacher - *USDA Forest Service (RMRS)*
- C.J.Palmer - *University of Nevada Las Vegas*

## **Abstract:**

The Montreal Process was formed in 1994 to develop an internationally agreed upon set of criteria and indicators for the conservation and sustainable management of temperate and boreal forests. In response, the USDA Forest Service's FIA program has implemented a national soil monitoring program to address questions related to: (1) the current and projected status of soil resources and (2) the contribution of forest soils to the global carbon cycle. As the only nationally consistent effort to monitor forest soil quality in the United States, this program provides critical baseline information on the soil resource and the potential effects of natural and human disturbance on forest health and productivity. Measurements are divided into three general categories: compaction, erosion, and soil chemistry. Chemical and physical analyses include: bulk density, texture, pH, exchangeable cations, P, %N, %C, and trace metals. Initial results from 1998-2000 are summarized with an emphasis on describing: (1) the current methodology, (2) the spatial distribution of key indicator variables, and (3) the application of these data to questions of forest health and sustainable management.

## **Corresponding Author Information:**

Katherine O'Neill	phone: 651-649-5191
USDA Forest Service	fax: 651-649-5140
1992 Folwell Avenue	e-mail: koneill@fs.fed.us
St. Paul, MN 55108	
USA	

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