

12th FEFCO

Forest Ecosystem Function Colloquium (FEFCO) は、地域や地球全体のレベルで森林生態系の機能とその持続的活用法を統合的に理解することを目的とし、研究者間の学術交流を推進します。

第12回森林生態系機能コロキウムは、スウェーデンウプサラ大学Laura Parducci博士に講演していただきます。どなたでも参加できます。京都大学農学研究科森林生物学研究室がホストを務めます。

12th FEFCO
2014/10/30 16:30 - 18:00
Faculty of Agriculture Main Building, S128

Dr. Laura Parducci (Ecology and Genetics, Uppsala University, Sweden)

Ancient plant DNA of Nordic Environments

Range limits of many plant species are expected to shift considerably in the next decades due to human-mediated climate change, particularly in Nordic environments, but the capacity of trees to migrate in response to these events has been questioned. New methodologies allow now to look directly in the species' DNA retrieved from fossil plant archives (peat/lake sediments, permafrost), investigate how species and lineages responded in the past and derive lineage specific tolerances and migrations rates for plants. In my talk I will show how plant DNA information can be effectively retrieved from these archives and analyzed following a multidisciplinary approach that combines 1) classical palaeoecological investigations, 2) front-line metabarcoding techniques on environmental DNA, 3) analytic models based on DNA from living plant populations and 4) ecoinformatic modeling analyses. The outcome of studies based on such approaches is not only useful for investigating the driving factors affecting past range shifts, but also for assisting ecological niche-modeling analyses of future range shifts of plants.