

# 67th 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67回森林生態系機能コロキウムは、Hans Cornelissen博士, Jane Molofsky博士にご講演いただきます。どなたでも参加できますので、多くの皆様のご参加をお待ちしております。京都大学農学研究科熱帯環境学研究室がホストを務めます。

67th FEFCO

2024/4/15 15:30 - 18:00

Former Head Office of Forest Research Station  
(旧演習林事務室)



↑ Zoom form for registration

Hans Cornelissen

Professor, Vrije University, Amsterdam, Netherlands

Embracing error and terror in ecological experiments

When ecologists carry out ecological experiments, they tend to feel sad when the replicates (or plots) of certain treatments show large variance, making it hard to find significant differences between treatments. Ecologists tend to even panic when disasters happen in their experiments, for instance major damage due to fire, animals eating a lot of plant material in their plots or woodpeckers hacking into experimental logs for decomposition studies. In this talk I will give examples of how things that “go wrong” in ecological experiments, like large variance (“error”) or disasters (“terror”), can sometimes be good news, as long as we recognize their potential value. If we are open to turning problems into opportunities, the problems may sometimes turn out to be major selling points for publishing something novel in good journals. Also, by embracing error and terror in ecological experiments we may learn important aspects of how nature really works.

Jane Molofsky

Professor, Department of Plant Biology, University of Vermont

Predicting ecosystem consequences of invasive species from plant traits

Predicting which plant functional traits will lead to massive ecosystem transformation is an important area of invasion biology. To date, there have been two contrasting hypotheses: environmental filtering posits that introduced species must share the same traits as the existing plant community while the limiting similarity hypothesis suggests that they must have traits that are different. In this talk I will propose a new theory that suggests that for a plant species to establish in a plant community it must have traits that are similar enough to the native community but to take over the community the species trait profile must be at the edge of the existing trait space (EoTS). I will illustrate EoTS hypothesis with specific examples and discuss how evolutionary processes can create introduced plant species at the edge of the plant community functional trait space.