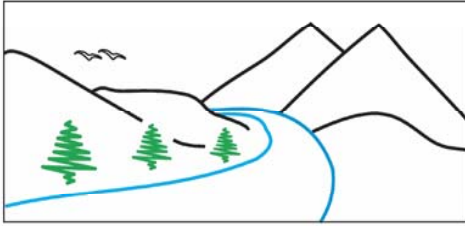


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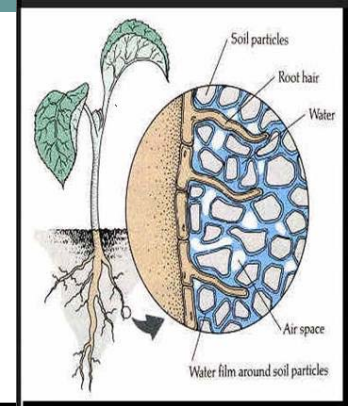


"Our environment is our future"

RESEARCH COLLOQUIUM SERIES

Dr. Brian Pickles

Ecosystem Science & Management Program
UNBC



FRIDAY

March 28, 2008

3:30 - 4:30

**LECTURE
THEATRE**

7-150

LIGHT
REFRESHMENTS
SERVED AT 3:20 PM

Spatial Ecology of Scots Pine Ectomycorrhizas

Ectomycorrhizal (ECM) fungi are important components of forest ecosystems. ECM and their associated mycelial systems are the main organs of water and nutrient uptake for many forest trees. They are a major factor in carbon movement to the soil ecosystem, and important contributors to soil respiration. ECM fungal assemblages are species rich, and there is good reason to believe that their taxonomic diversity reflects important functional diversity. However, we know little about the way in which ectomycorrhizas formed by different ECM fungi are distributed below-ground. Such information is important if we are to understand how communities of ECM fungi are structured, whether spatial patterning exists, and if such patterns reflect the life history and growth form of ECM fungal species, their autecology, and possible interactions (e.g. facilitation, interference, resource competition). The work discussed here comprises a detailed examination of the spatial ecology of ECM fungi in a 120 year old Scots pine stand using a combination of morphological and molecular approaches, repeat sampling, and geostatistical analysis.