BIOLOGICAL & BIOMEDICAL SCIENCES RESEARCH SEMINAR SERIES

Mammals, truffles, and trees: linking above- and below-ground interactions

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Interactions between trophic levels are often important for mediating diversity and influencing ecosystem functioning across spatial scales. Mycorrhizal fungi are symbionts that colonize tree roots and are essential for nutrient and water uptake. Similar to pollinators, small mammals consume and disperse the spores from fruiting bodies (mushrooms and truffles) of mycorrhizal fungi, subsequently mediating local fungal diversity and influencing establishment and growth of trees. These interactions not

only vary depending on habitat associations and abundance of small mammals but also on fruiting body traits. Fungal spore dispersal by small mammal is especially important following timber harvest, where abiotic dispersal (wind) of mycorrhizal fungi is low. Although small mammal-fungal interactions take place at local scales, trophic linkages between small mammals and carnivores can further increase dispersal capacity of fungal spores.

The talk will also also be broadcasted on Teams:



