High Elevation Mushroom Communities [MAS]

Cathy L. Cripps
Department of Plant Pathology
Montana State University - Bozeman 59717

Wild mushrooms are often perceived as appearing randomly or haphazardly in various locales, but like plants and animals, most fungal species have a preference for certain habitats and form recognizable communities. An ongoing survey of Rocky Mountain mushrooms shows that fungal communities of this montane region are unique in many respects, and some appear limited to the western U.S. Communities of high elevation habitats include: alpine mushrooms, snowbank mushrooms (dependent on snow melt-water), mushrooms of boreal conifer forests, burn fungi (which fruit after forest fires), mushrooms of quaking aspen forests, and fungi of

disturbed areas (avalanche paths, previous smelter sites, etc). These macromycete communities are discussed in terms of the species involved, the ecological roles of fungal guilds, the global distribution of these types of communities, and the dynamics of how mycofloras change through disturbance and succession. Specific examples of community types from western Montana are emphasized. The preservation of this macromycete biodiversity depends on the conservation of these habitat types and the promotion of uneven age forests.