Soil Microbial Processes and Dynamics: Their Importance To Effective Reclamation.John C. Zak, Dept. Biological Sciences, Texas Tech Univ; Suzanne Visser, Kananasksis Centre, Univ. Calgary; Philip R. Fresquez, Los Alamos National Laboratory.

The activity of the soil microflora is regulated by complex and synergistic interactions between carbon and nutrient availabilities, microfaunal grazing and abiotic contraints. Following mining activity,the recovery of the soil decomposer systems, in terms of species abundance, composition, and activity,is predicated upon the ability of the reclamation program to reestablish these synergistic inteactions. Unless well considered, reclamation efforts may initiate recovery sequences that will not lead to the effective development of belowground microbial processes and interactions.

ADDITIONAL KEY WORDS: Soil microflora, Decomposition, Microbial activity

· · -· ··