

Patterns of vegetation structural diversity across heterogeneous landscapes in southwestern Nova Scotia

Juliana E. Phelan¹, Karen A. Harper¹

¹ *Department of Biology, Saint Mary's University, Halifax, NS*

Transition zones or edges between forest and non-forest areas are an important part of the overall structural arrangement of the landscape. We assessed patterns of vegetation structure and structural diversity, the complexity of vegetation structural elements, across natural and harvested landscapes in southwestern Nova Scotia. We sampled stand structure and above-ground functional groups in contiguous 2.5 m by 5 m quadrats along two 1.25 km transects in Kejimikujik National Park and the Medway Lakes Wilderness Area. We calculated structural diversity metrics to compare structural diversity at edges to other landscape areas. Preliminary results indicate that stand density is highest in transition zones in both natural and harvested areas. Transitions in vegetation structure appear to be more gradual across natural edges and more abrupt at harvested edges. Structural patterns could affect habitat, such as for species at risk in Kespukwitk.

Keywords: Forest Edges, Structural Diversity, Spatial Pattern, Landscape

Presentation Type: Oral Presentation