in the Coast Mountains that would reduce the availability of moisture to the Interior Plateau from Pacific air masses. This is confirmed by reconstruction of the growth of the Cordilleran Ice Sheet during the Late Wisconsinan based on published radiocarbon dates.

A paleoecological record of climatic deterioration from middle to late Wisconsinan time on the Interior Plateau of British Columbia, Canada

Brent Ward[1], Marten Geertsema[2], Alice Tekla[3], and Rolf Mathewes[4]

1. Department of Earth Sciences, Simon Fraser University, Burnaby, BC, V5A 1S6 <bcward@sfu.ca> ¶ 2. Prince George Forest Region, B.C. Ministry of Forests, 1011-4th Avenue, Prince George, BC, V2L 3H9 ¶ 3. Paleotec Services, 1-574 Somerset St. West, Ottawa, ON, K1R 5K2 ¶ 4. Department of Biological Sciences, Simon Fraser University, Burnaby, BC, V5A 1S6

The Indianpoint section, 90 km southeast of Prince George, presents a >25 ka record of paleoenvironmental changes from non-glacial Middle Wisconsinan time to just before Late Wisconsin ice from the Cordilleran Ice Sheet overran the site. Detailed plant and insect macrofossil analyses of a 5–6 m thick fine-grained unit reveal that it represents a small lake, based on aquatic plants and insects, and taxa indicative of riparian or shoreline environments. This unit appears to be a large rip up clast in the Late Wisconsinan till. A total of 11 radiocarbon ages, most obtained on willow (*Salix*) twigs provide chronological control for 8 levels. Radiocarbon ages of >44 ka (CAMS-96170) and 46.5 ka (CAMS 93938) were obtained near the base and are associated with spruce macrofossils (abundant needles, seeds and seed wings) and high spruce pollen. Between 37.0 ka (CAMS115785) and 25.9 ka (CAMS117312) alternations between open spruce forest, based on pollen as no spruce macrofossils were identified, and tundra with minor willow and birch. In the upper 2.5 m of the section, between 24.5 ka (CAMS 93940) and 20.4 ka (CAMS 93939), the vegetation changes to dry shrub tundra, dominated again by willow with minor birch. Most pollen from this interval comes from herbs such as sedges, grasses and *Artemisia*. Also present are characteristic insects such as the weevil *Vitavitus thulius* and the ground beetles *Trichocellus mannerheimi*, *Pteriostichus* (*Cryobius*) *nivalis*, and *Amara alpina* that are presently only found in dry tundra habitats. The decrease in the occurrence of willow and birch in the upper 40–50 cm reflects increasingly harsh conditions as glaciers approached the site. An age of 19.9 ka (AA44045) has been obtained on a willow twig 20–30 cm below where the unit is truncated by a Late Wisconsinan till.

The lacustrine unit of the Indianpoint section spans >25 ka and records climatic deterioration associated with the growth of the Cordilleran Ice Sheet during the Late Wisconsinan. The alternations in the middle portion of the record are thought to represent climatic oscillation recorded in the GISP2 Greenland Ice Core. The increasingly dry and cold conditions indicated by the macrofossil assemblage likely reflect the growth of ice