

Burns, Bog, and Birch: The relationship between *Betula* spp. (birch) and bog soil conditions

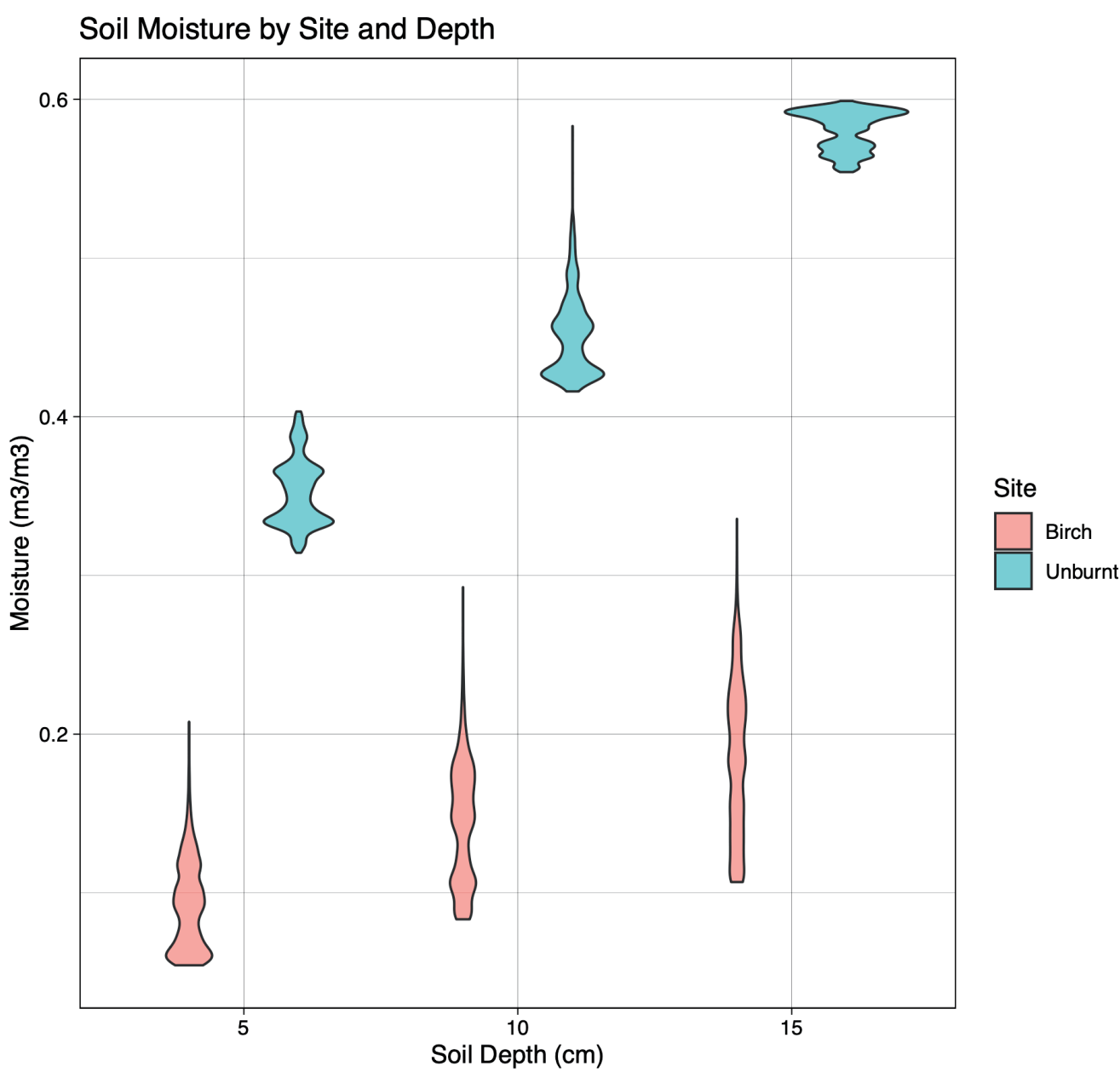
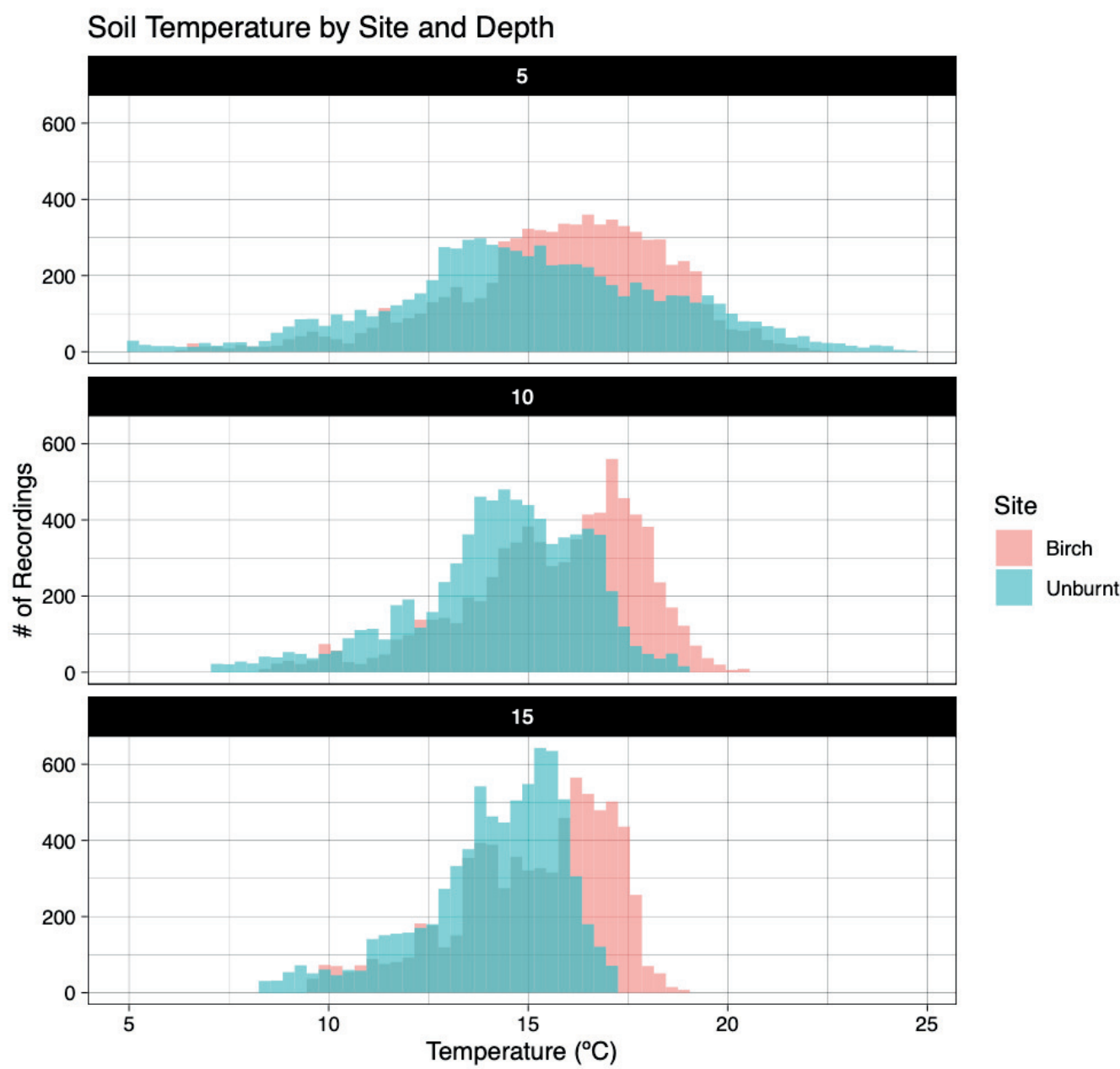
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Background

Burns Bog is a wetland in Delta, B.C. The bog has a complex history of Indigenous stewardship, peat harvesting, and colonial conservation. This study aims to better understand fire risk in the bog by researching the relationship between soil conditions (temperature and moisture) and birch trees in Burns Bog.

Methods

- Measured soil temperature and moisture in two ecosystem types (birch forest and unburnt bog)
- Counted percentage of ground cover by species
- Trees identified and measured



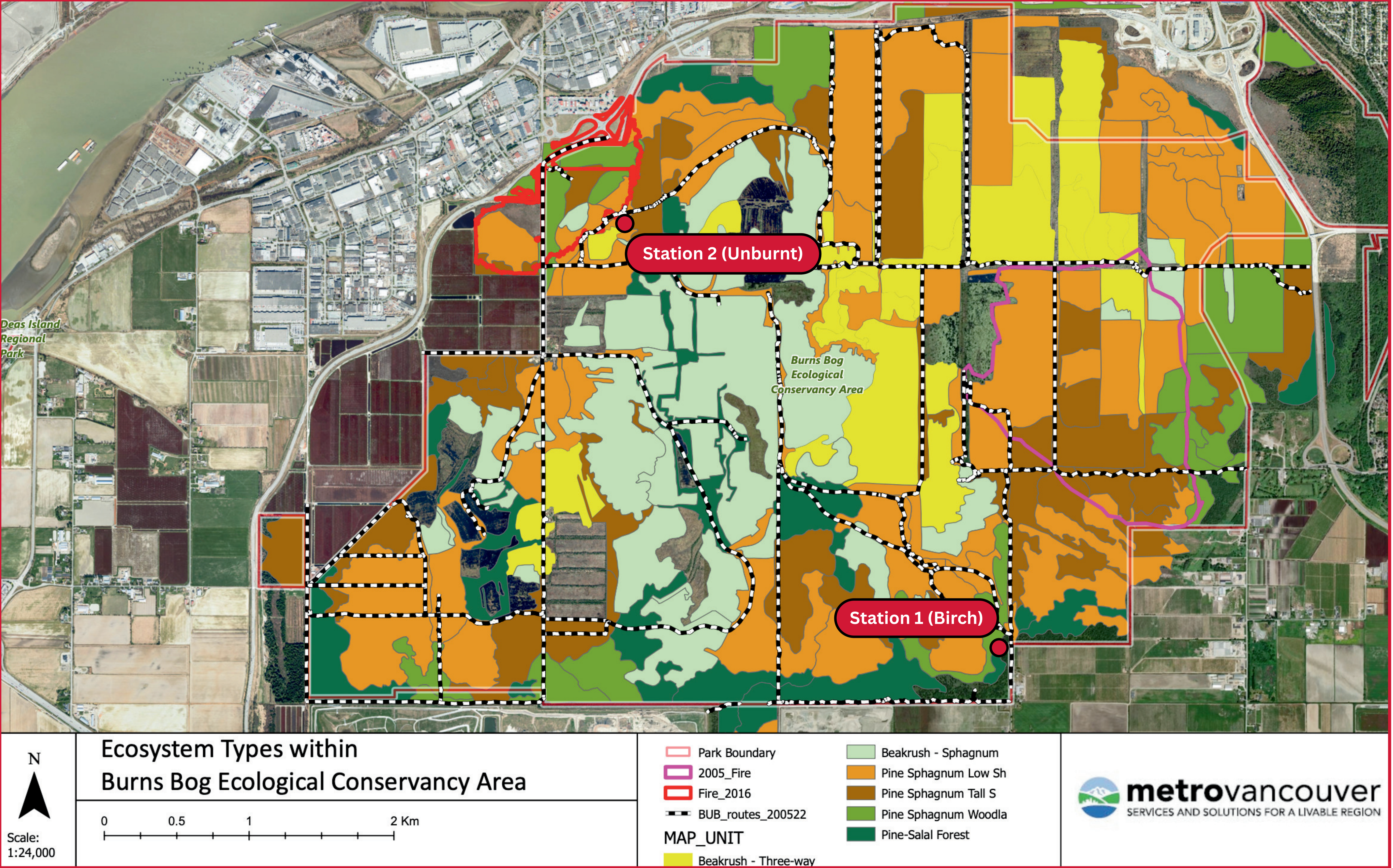
Results

- The unburnt site's soil had more moisture and cooler temperatures
- The birch site had fewer species and more trees

Birch trees are associated with drier, hotter soil and higher fire risk.

Discussion

- Supports efforts to restore the hydrology of Burns Bog
- Emphasizes importance and relevance of fire monitoring in the bog



Map of Burns Bog showing the distribution of ecosystem types. Ecosystem types are based on the dominant vegetation.



fire-ecosystems.com

This study was conducted on the unceded territory of the Katzie, Kwantlen, Kwikwetlem, Musqueam, Stó:lō, Semiahmoo, Tsawwassen, and Tsleil-Waututh Nations.

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