



# BOTANY OF BC MOUNTAINS

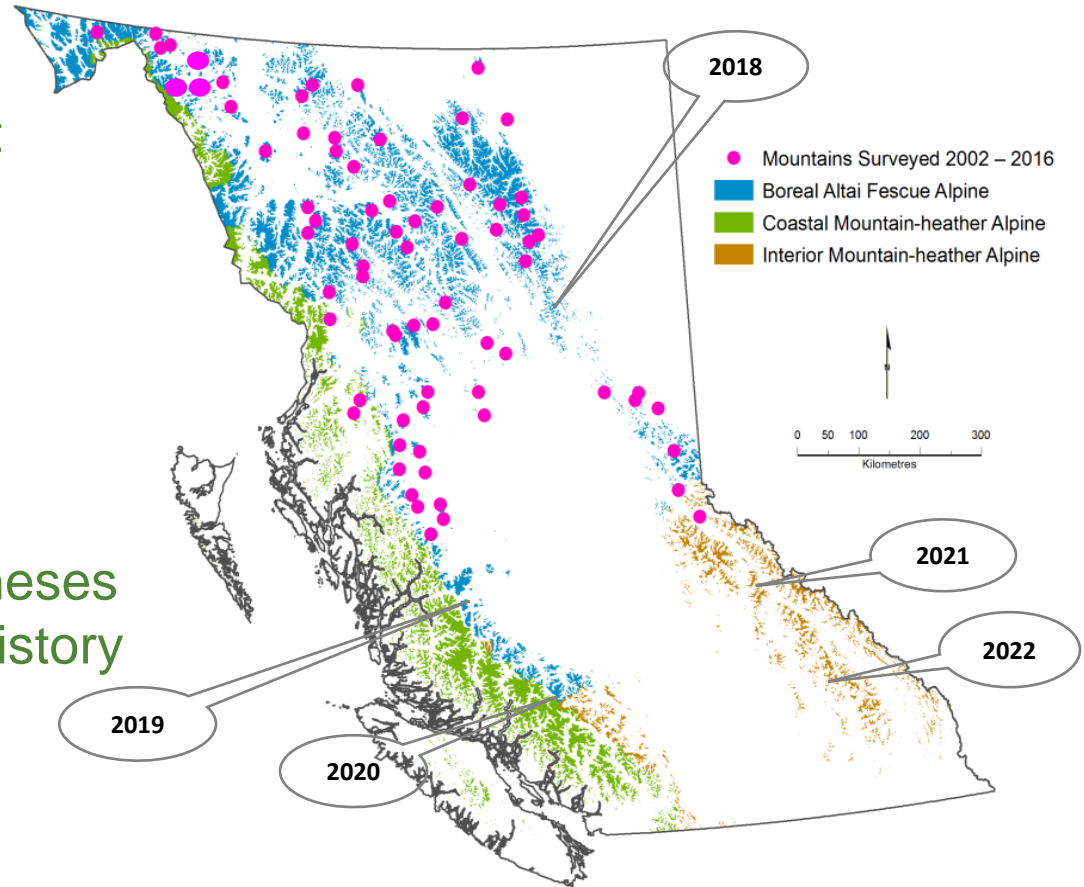
Part I: Erica Wheeler – Botany Collections Manager & Researcher

Part II: Ken Marr – Botany Curator

Royal British Columbia Museum, Research Day 2018

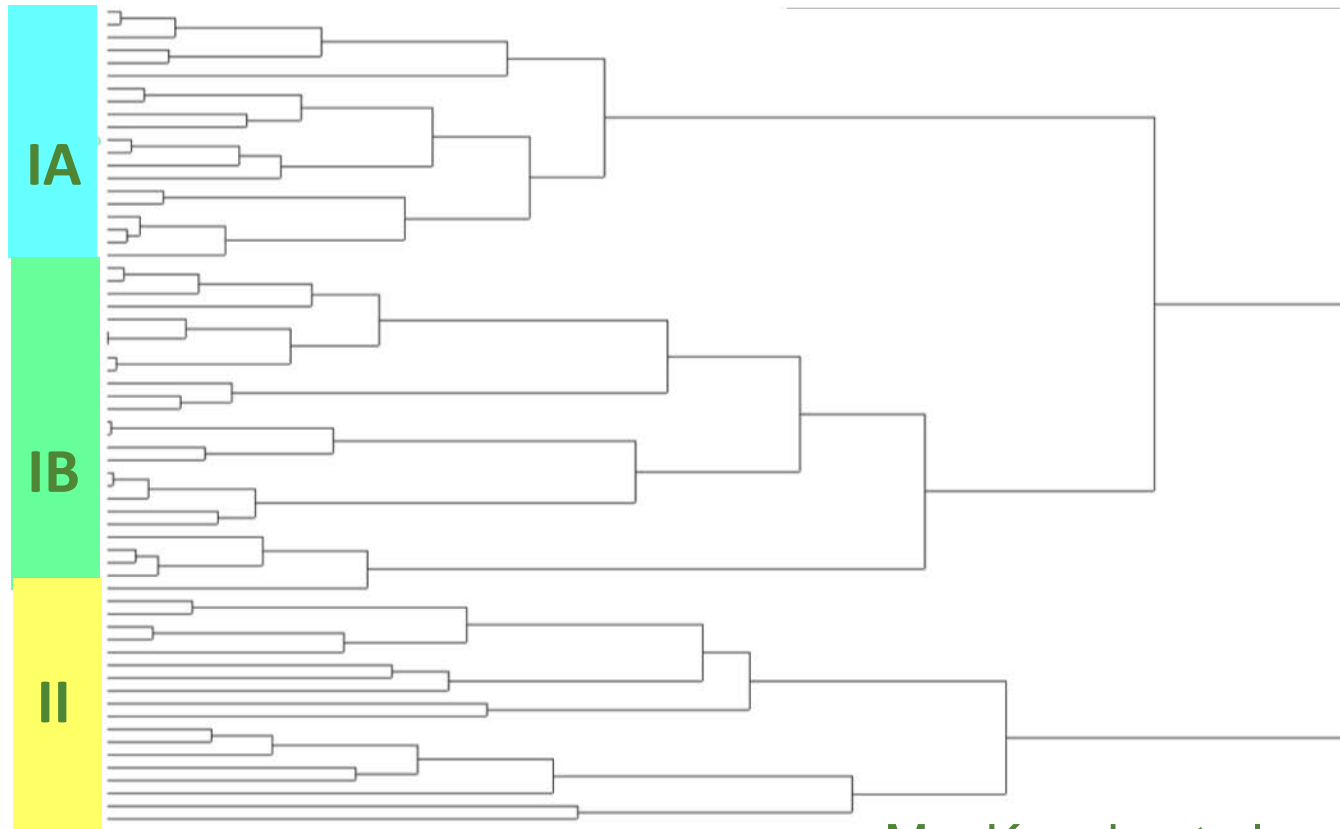
# BOTANY OF BC MOUNTAINS - Introduction

- I. Document alpine plant diversity
- II. Identify environmental drivers of alpine plant diversity
- III. Test alternative hypotheses about the landscape history of British Columbia



# BOTANY OF BC MOUNTAINS – Geospatial Analysis

Cluster analysis based on +/- of taxa, 2002- 2012

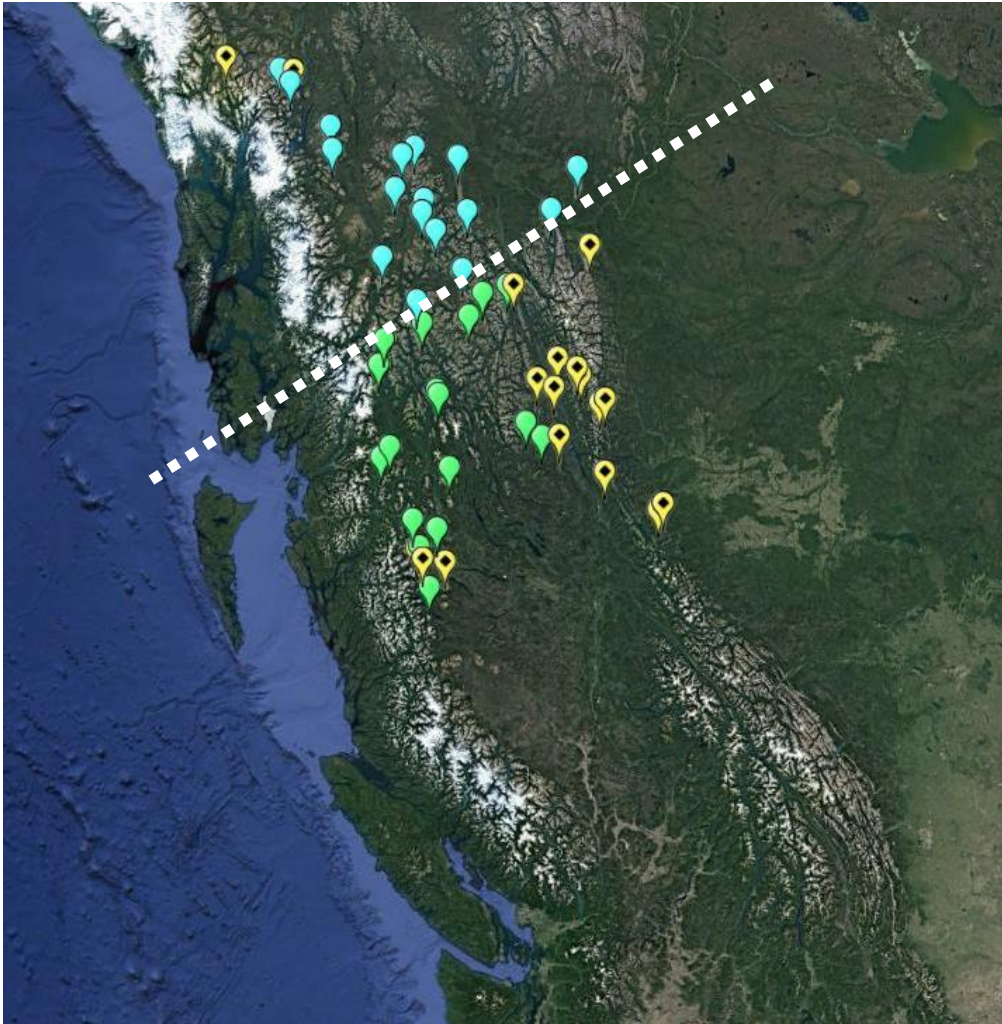


MacKenzie et al., unpublished



# BOTANY OF BC MOUNTAINS – Geospatial Analysis

Geographic distribution of Clusters IA, IB and II



Next steps:

1. Add collection data from 2013 onward...
2. Develop an 'effort index'
3. Test for abiotic correlates of distributions

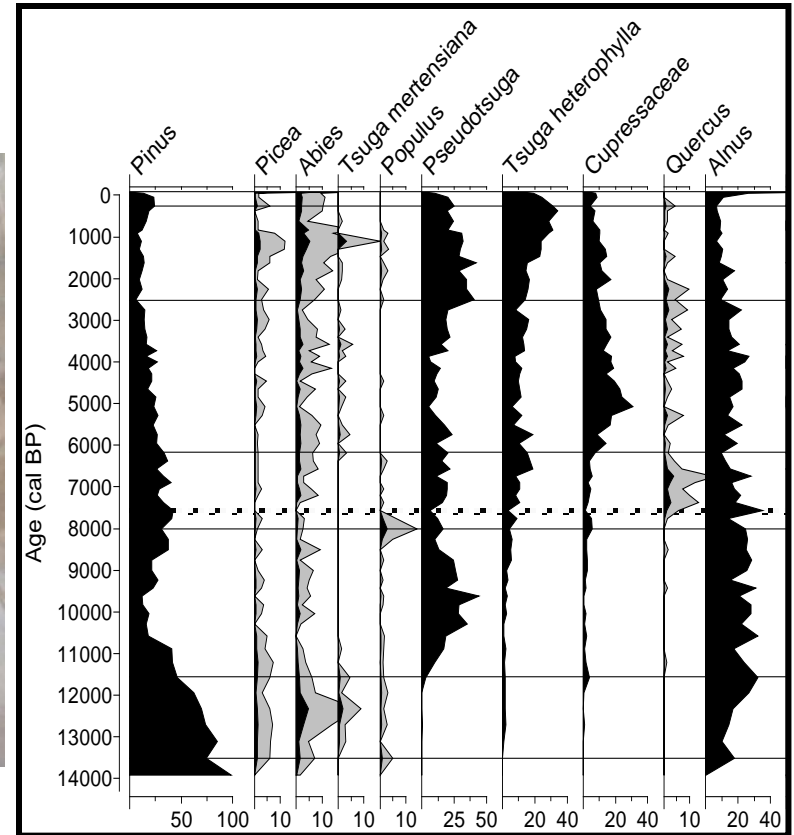


MacKenzie et al., unpublished



# BOTANY OF BC MOUNTAINS – Landscape History

What we are learning from species distributions and DNA analysis



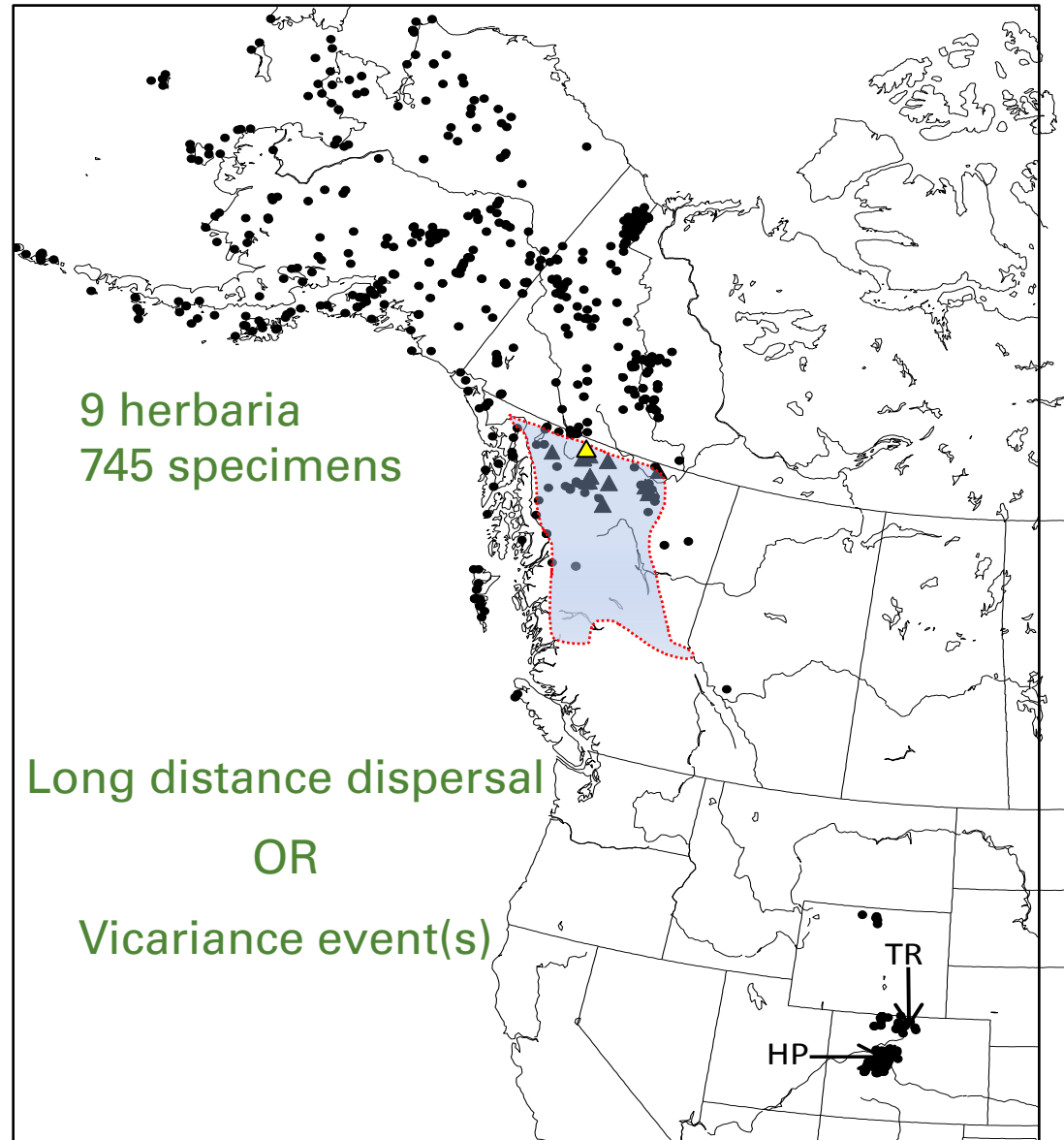
Pollen analysis from sediment core

Images Kendrick Brown, Canadian Forest Service

# BOTANY OF BC MOUNTAINS – Landscape History



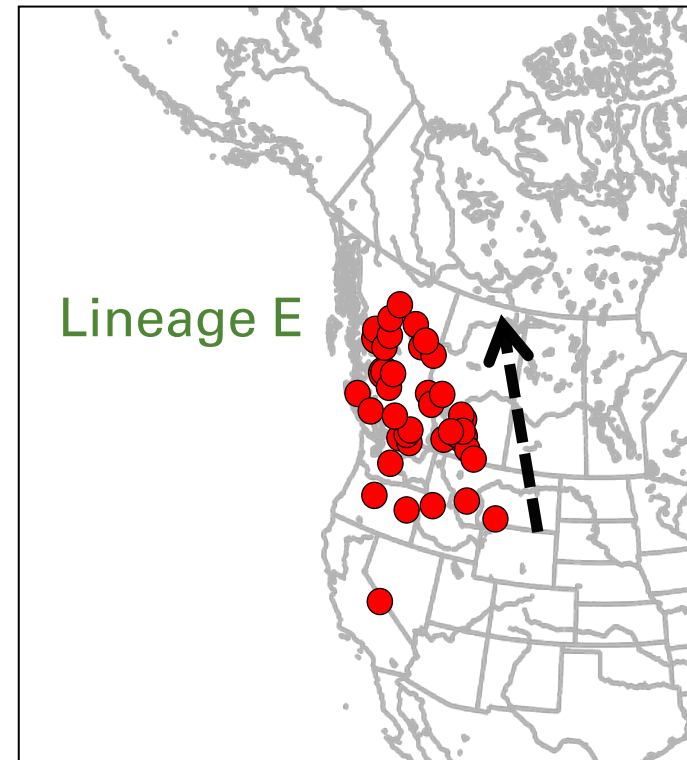
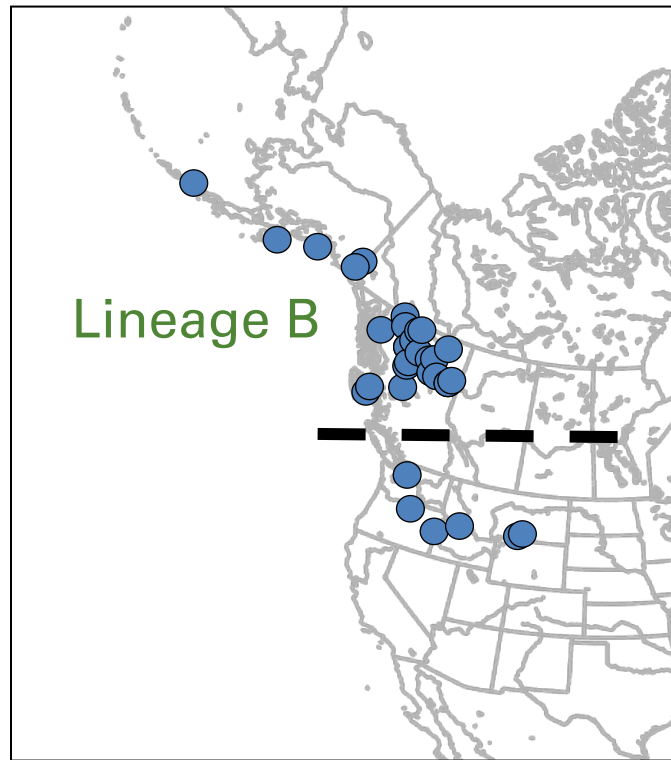
Narcissus anemone



Marr et al. 2012

# BOTANY OF BC MOUNTAINS – Landscape History

Mountain sorrel (*Oxyria digyna*): two (of six) genetic lineages



Marr et al. 2008; Allen et al. 2012; Wang et al. 2015

## RESEARCH TEAM & COLLABORATORS

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## FUNDING

RBCM	Teck Resources
FLNRORD	October Hill Foundation
ECCS, BC Parks	Vancouver Natural History Society
NSERC	

