

Plant Succession on the Juneau Icefield

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Plant Succession

Climax Species (4)

Bare Rock and Ice (1)

Primary Successors (2)

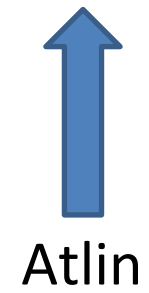
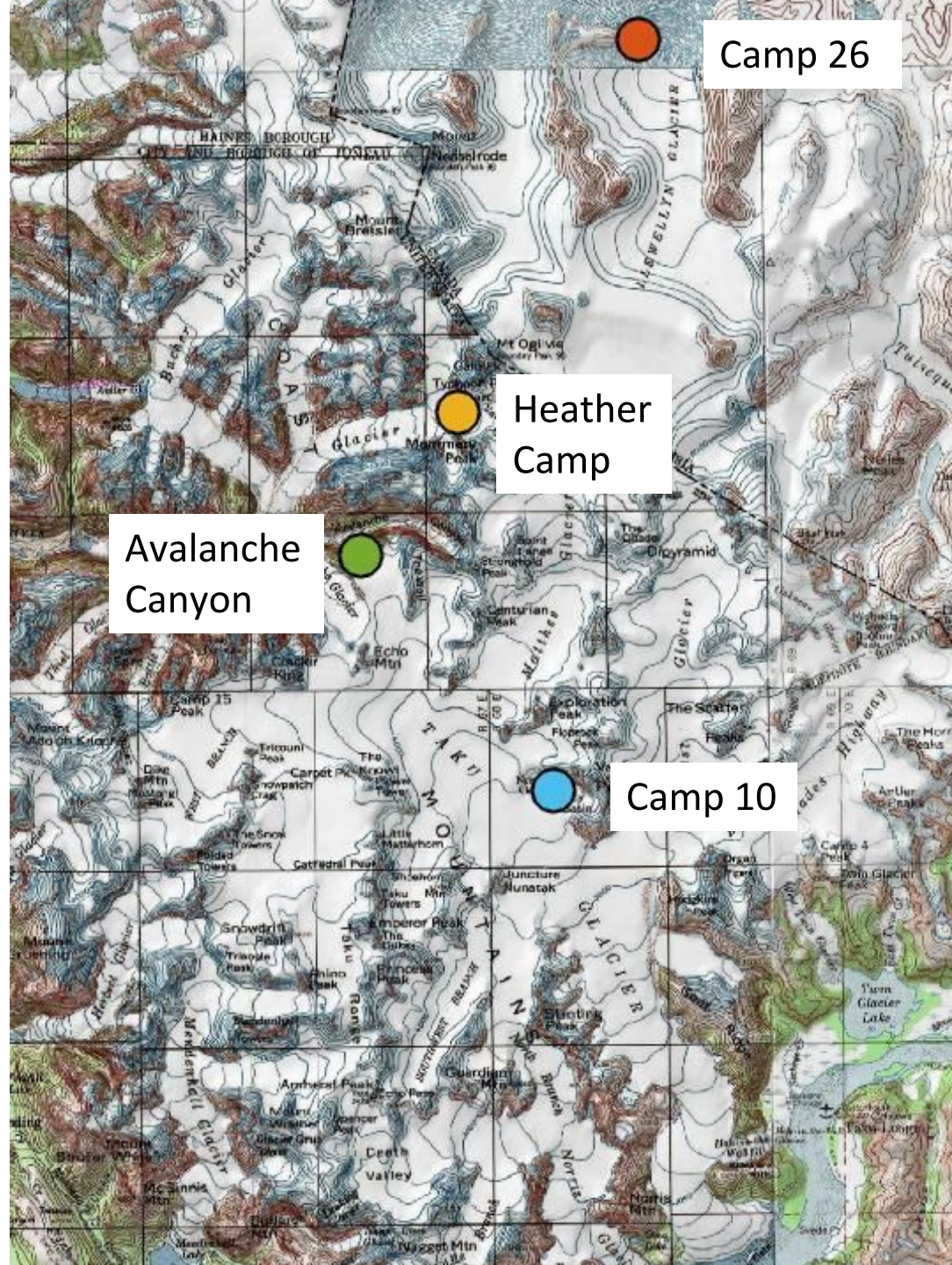
Secondary Successors (3)

Time Progression



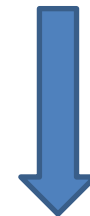
Study Sites

- Recently deglaciated areas
- Further characterize plant succession and soil development

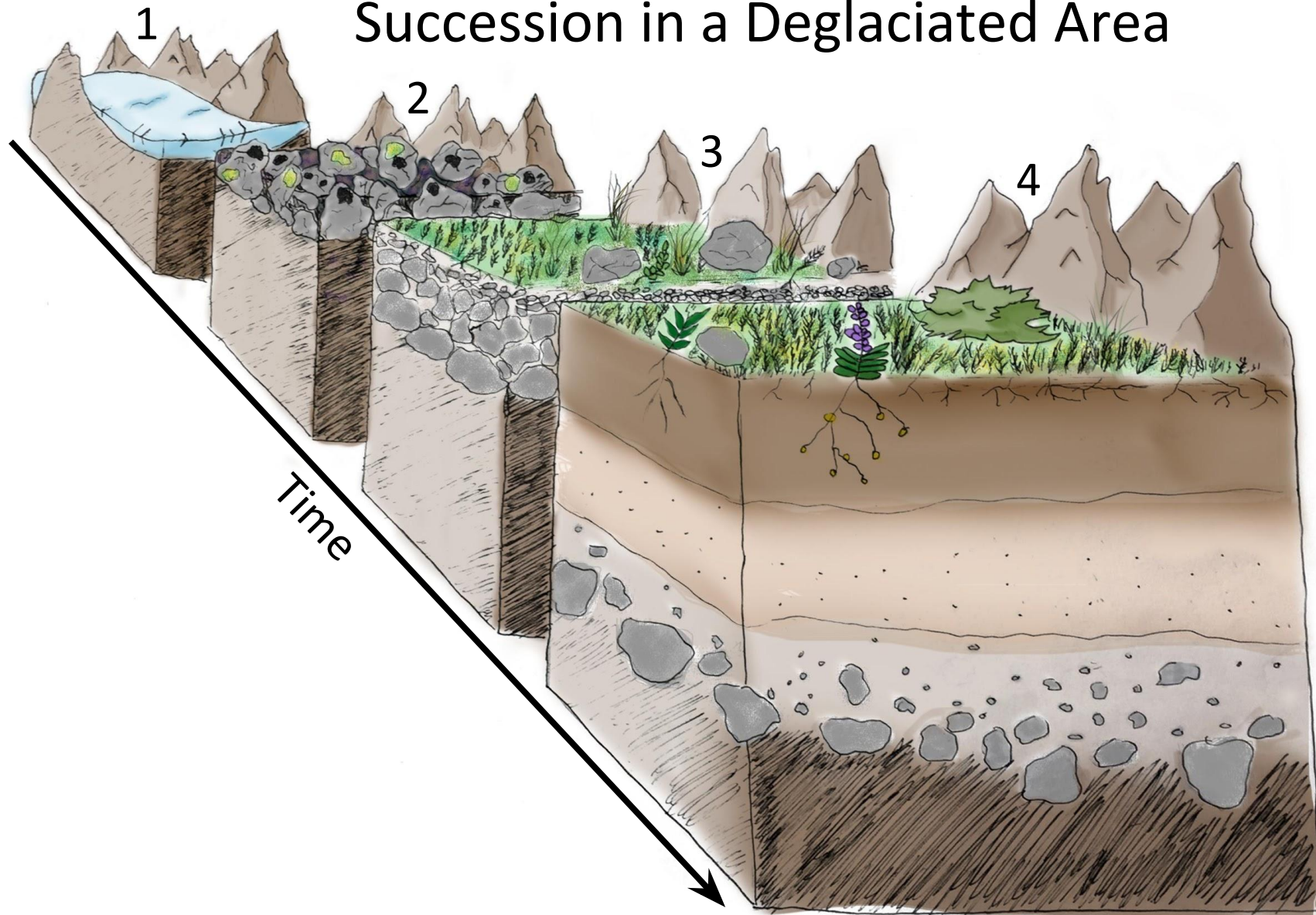


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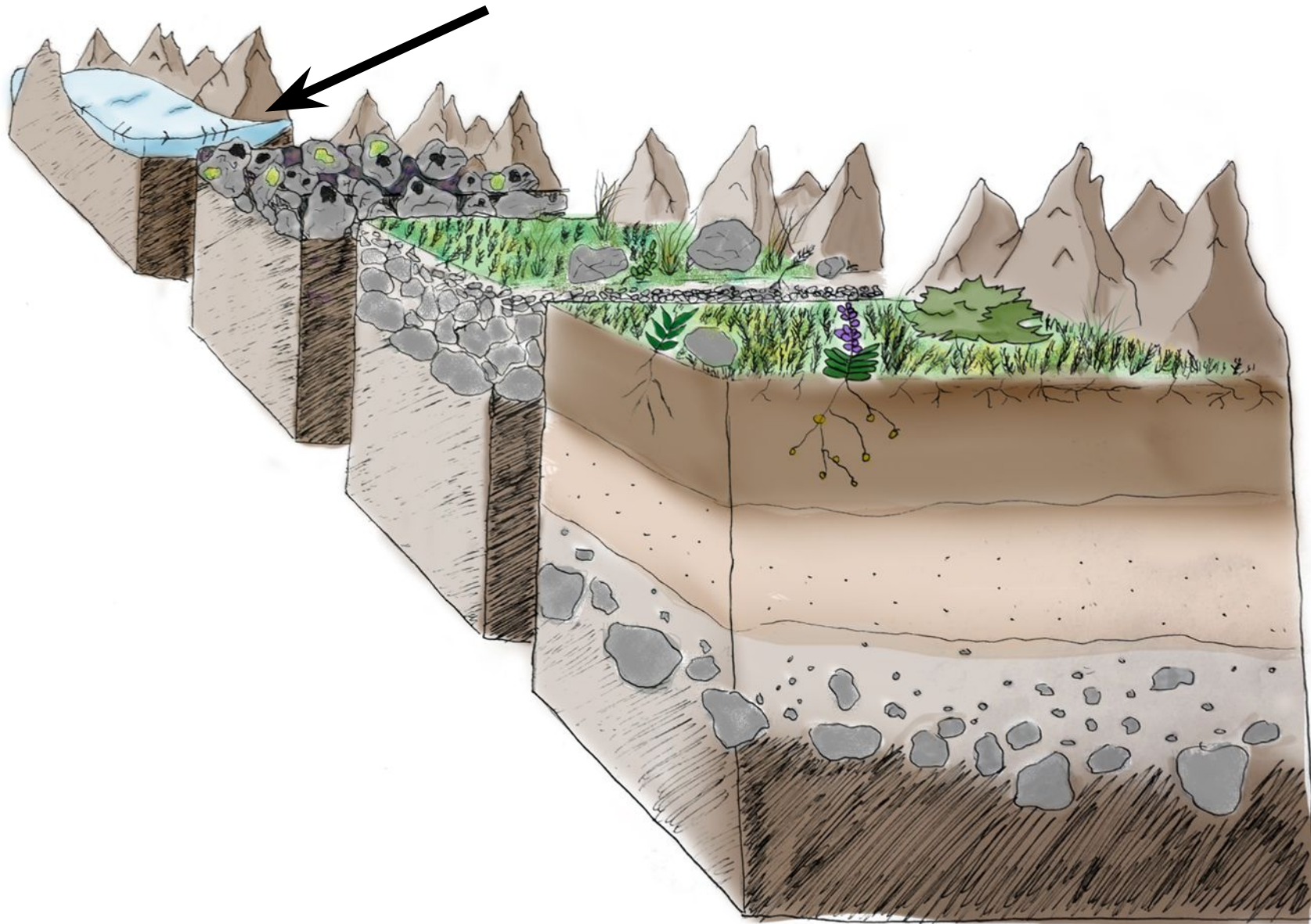
Juneau



Succession in a Deglaciating Area

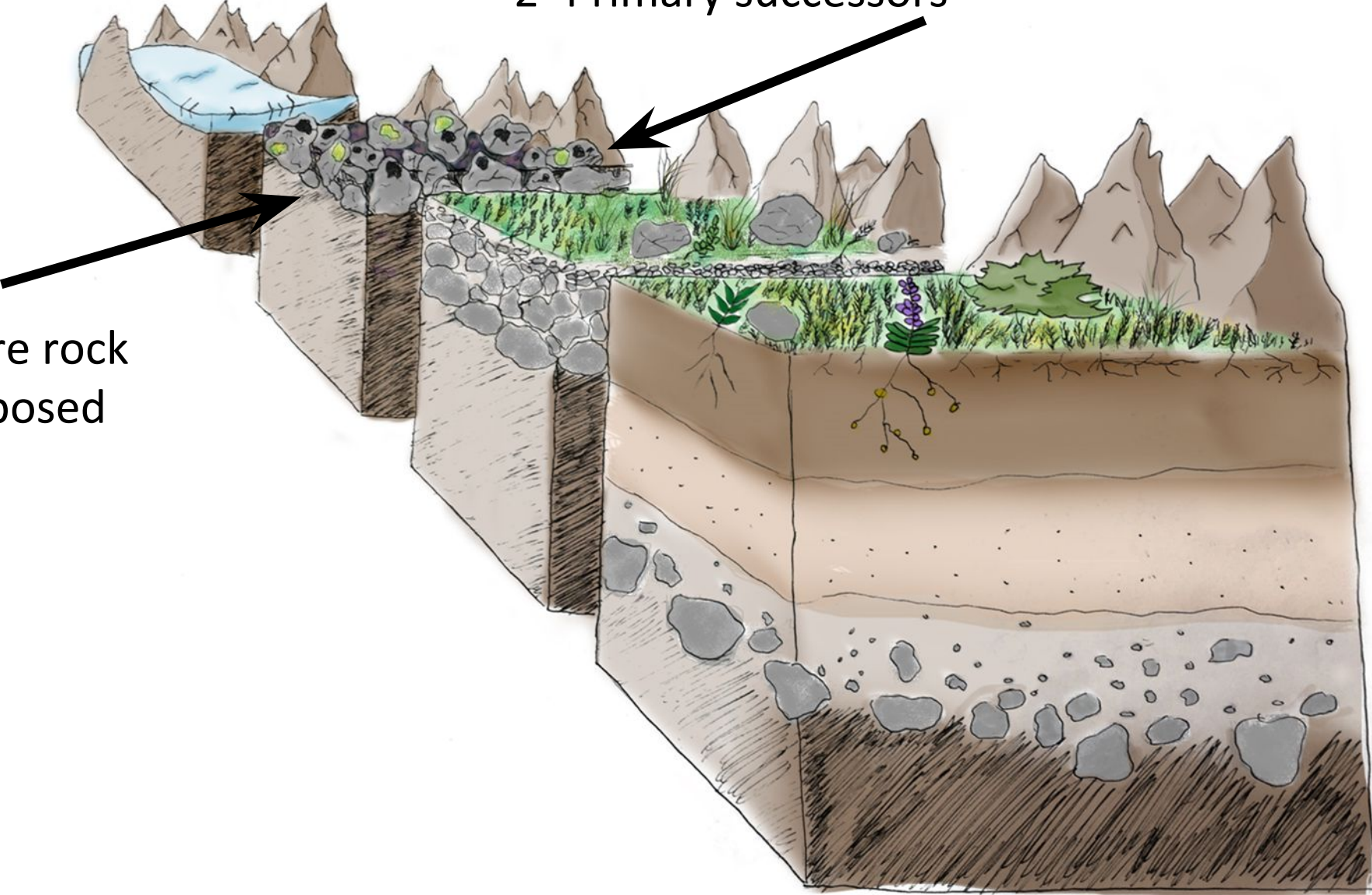


1- Glaciated area without soil

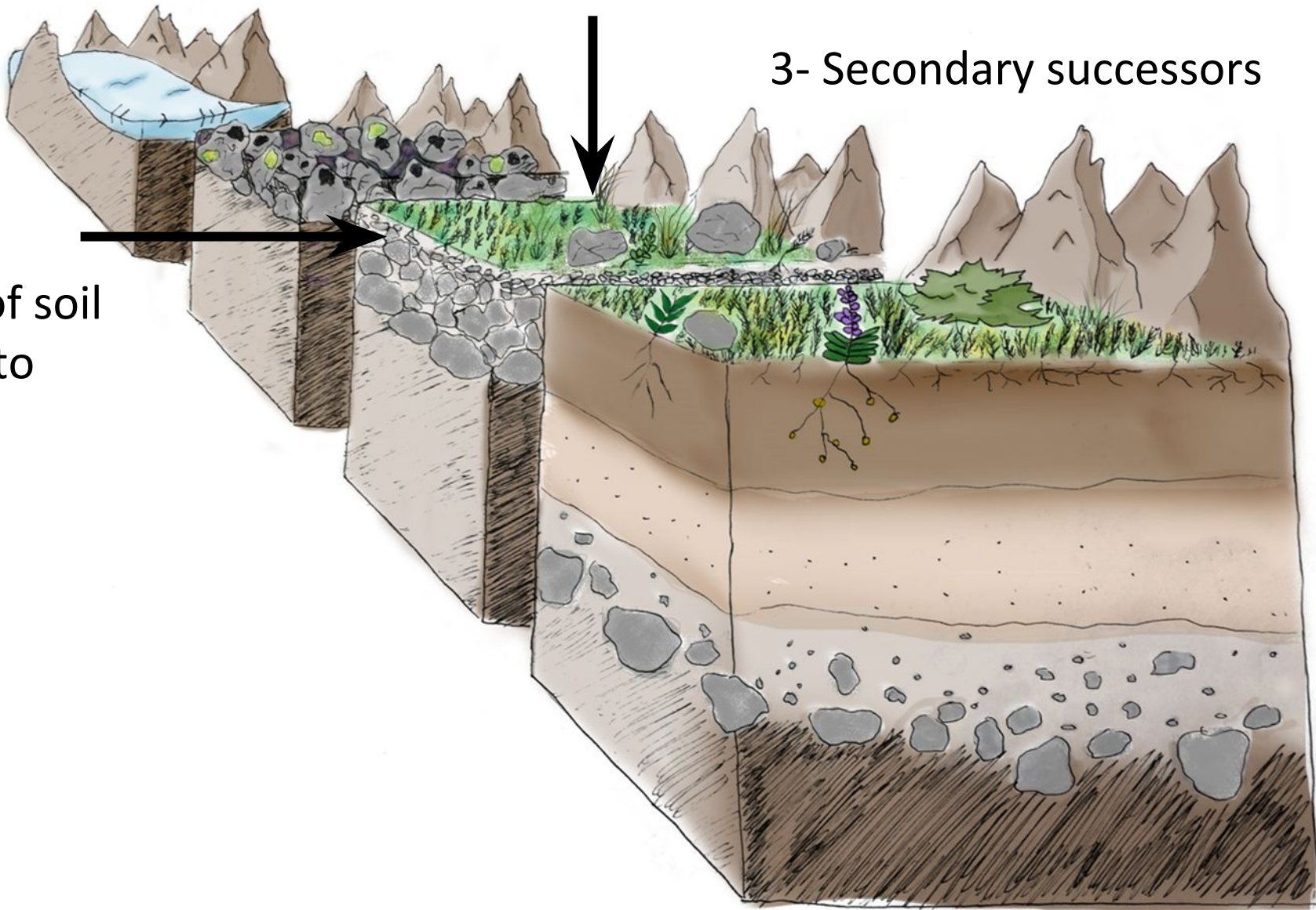


2- Primary successors

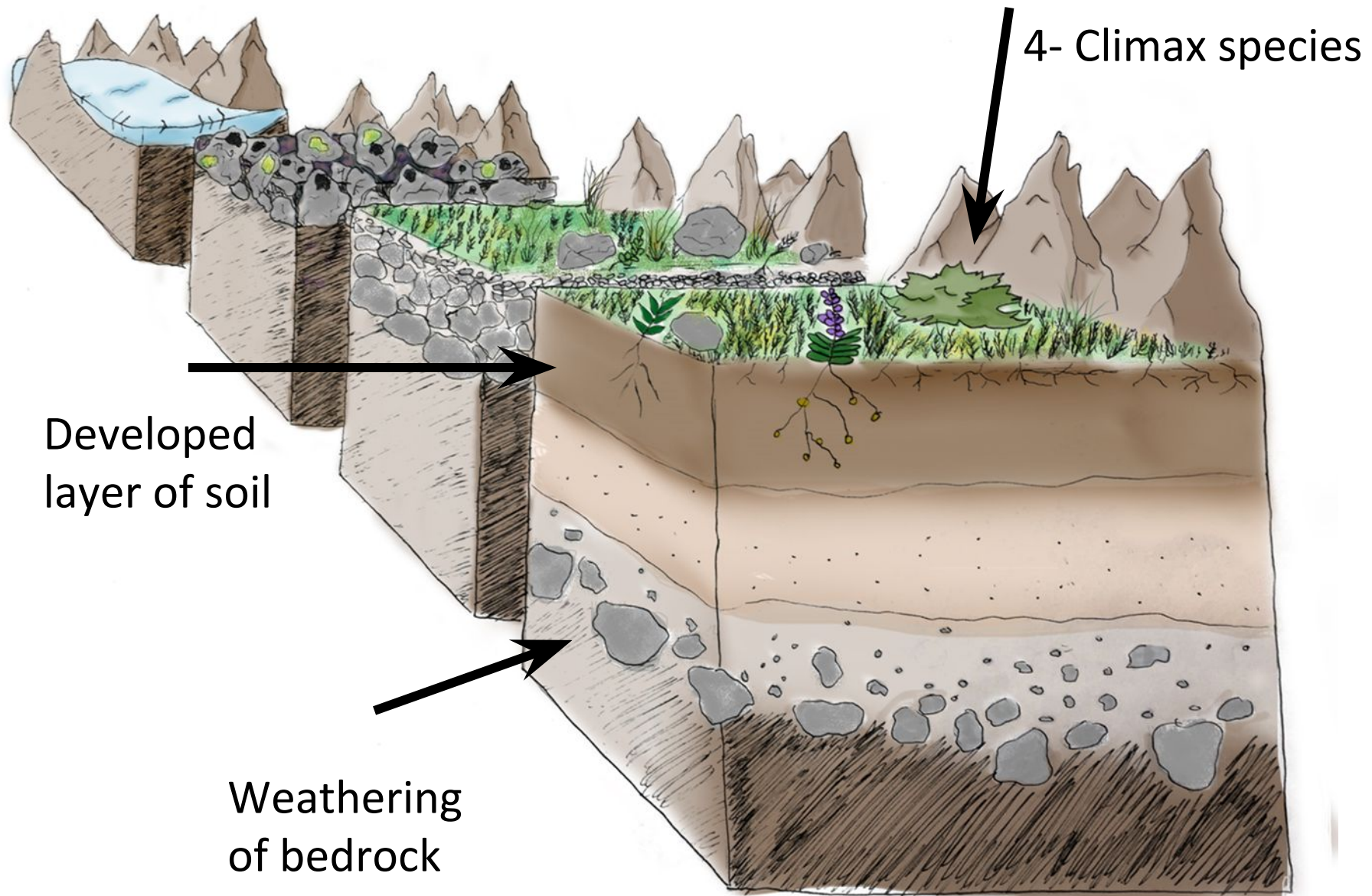
Bare rock exposed



Top layer of soil
beginning to
develop



3- Secondary successors



Avalanche Canyon

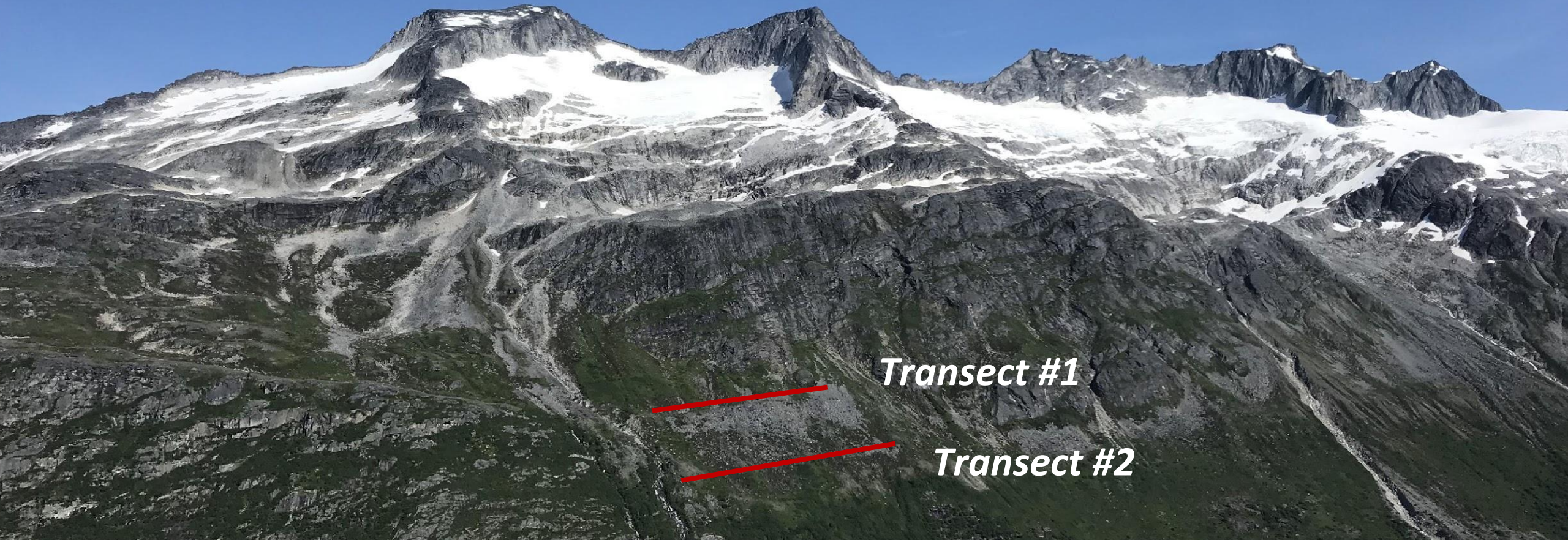


tree line

downstream



Methods



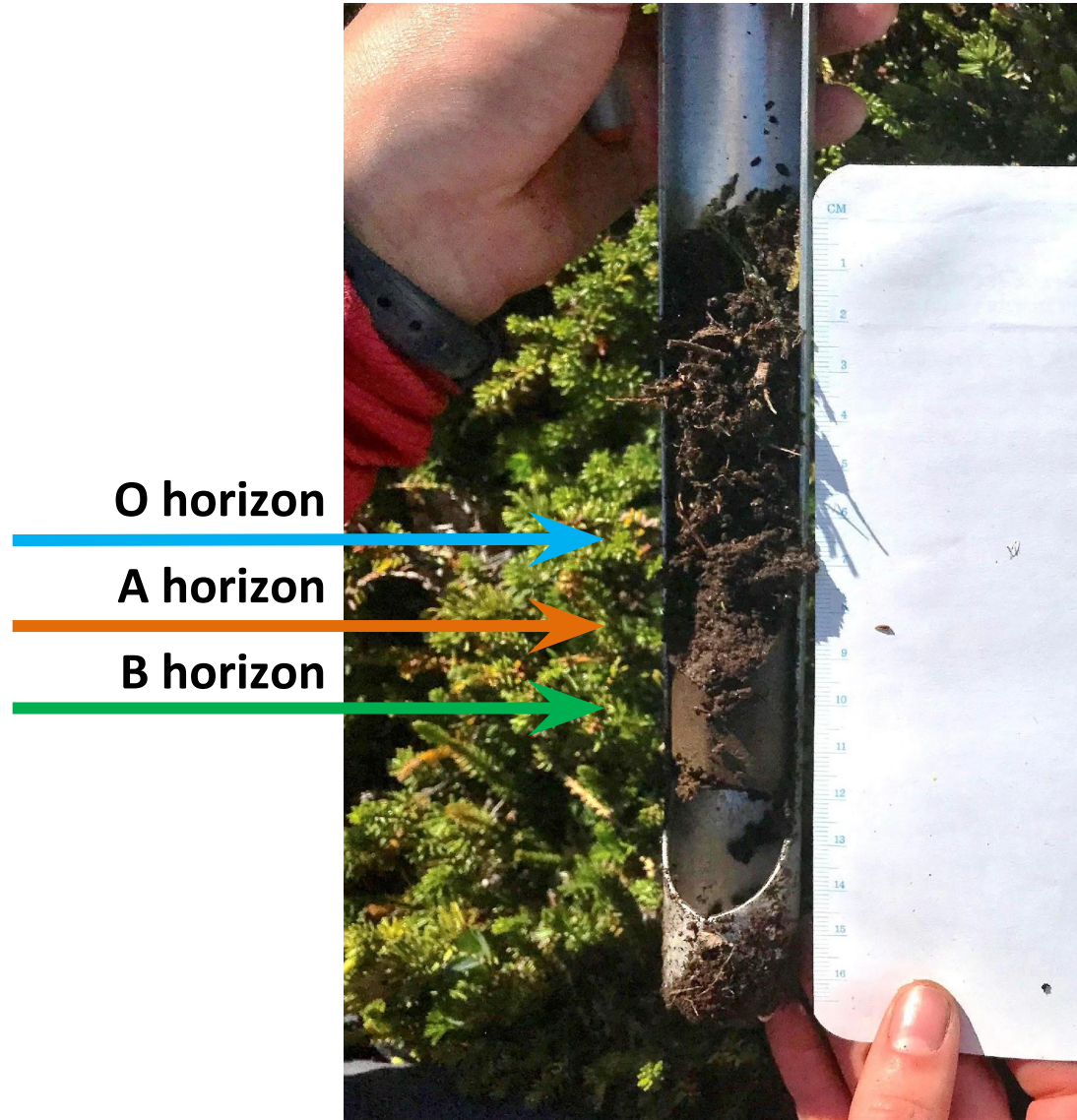
Transect #1

Transect #2

Sampling Technique



Soil Development

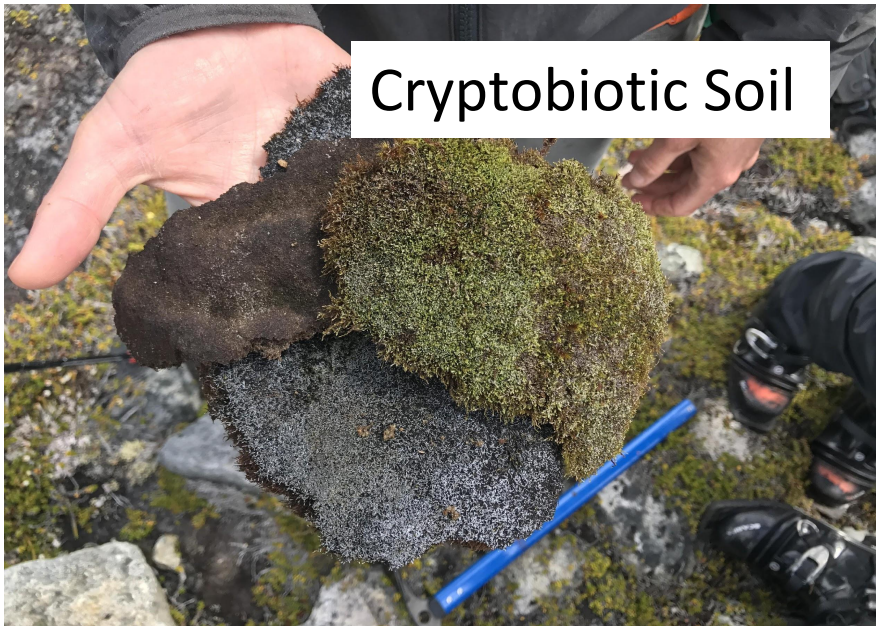


- Soil horizons
- Texture

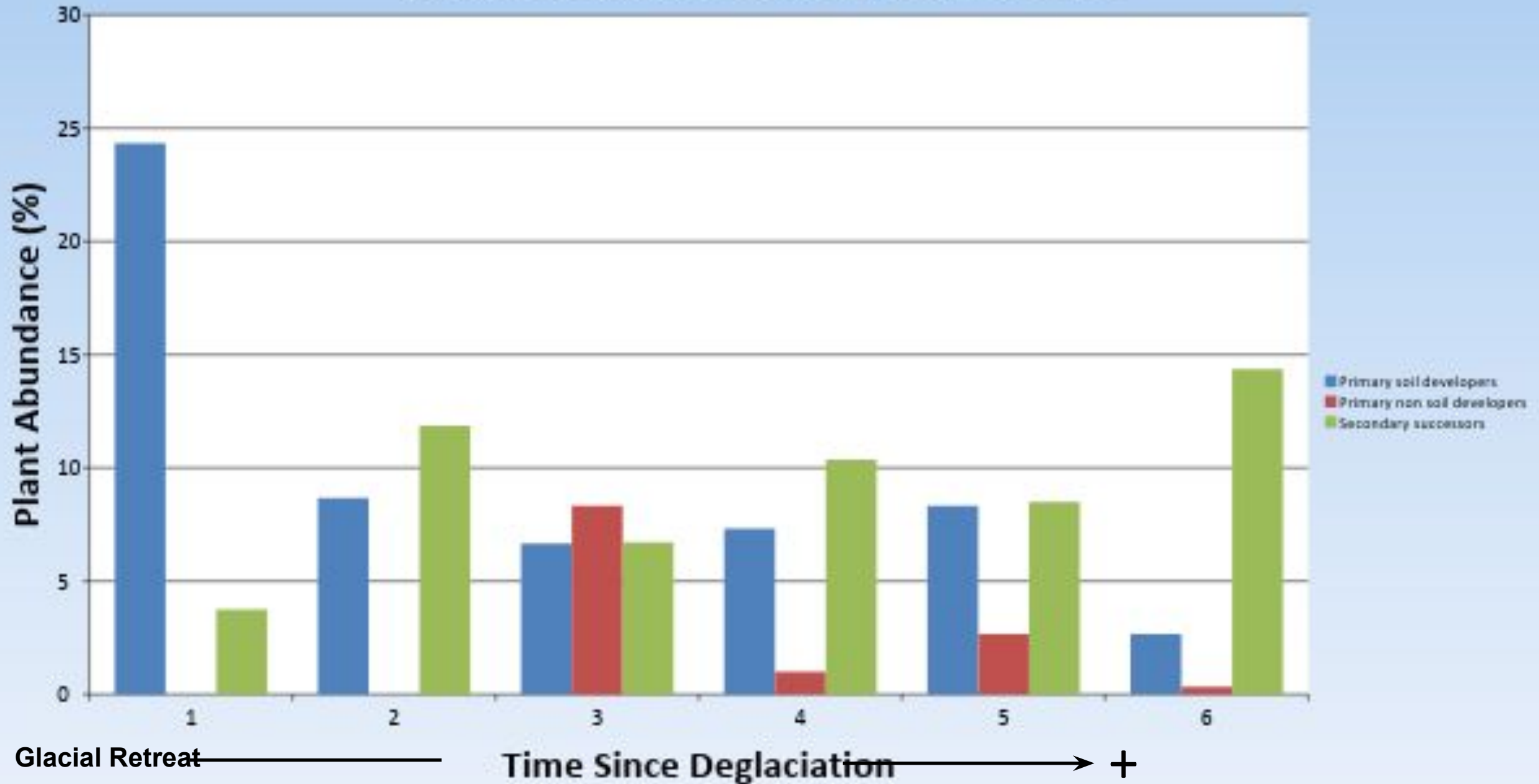
O: organic material rich

A: organics + rock material

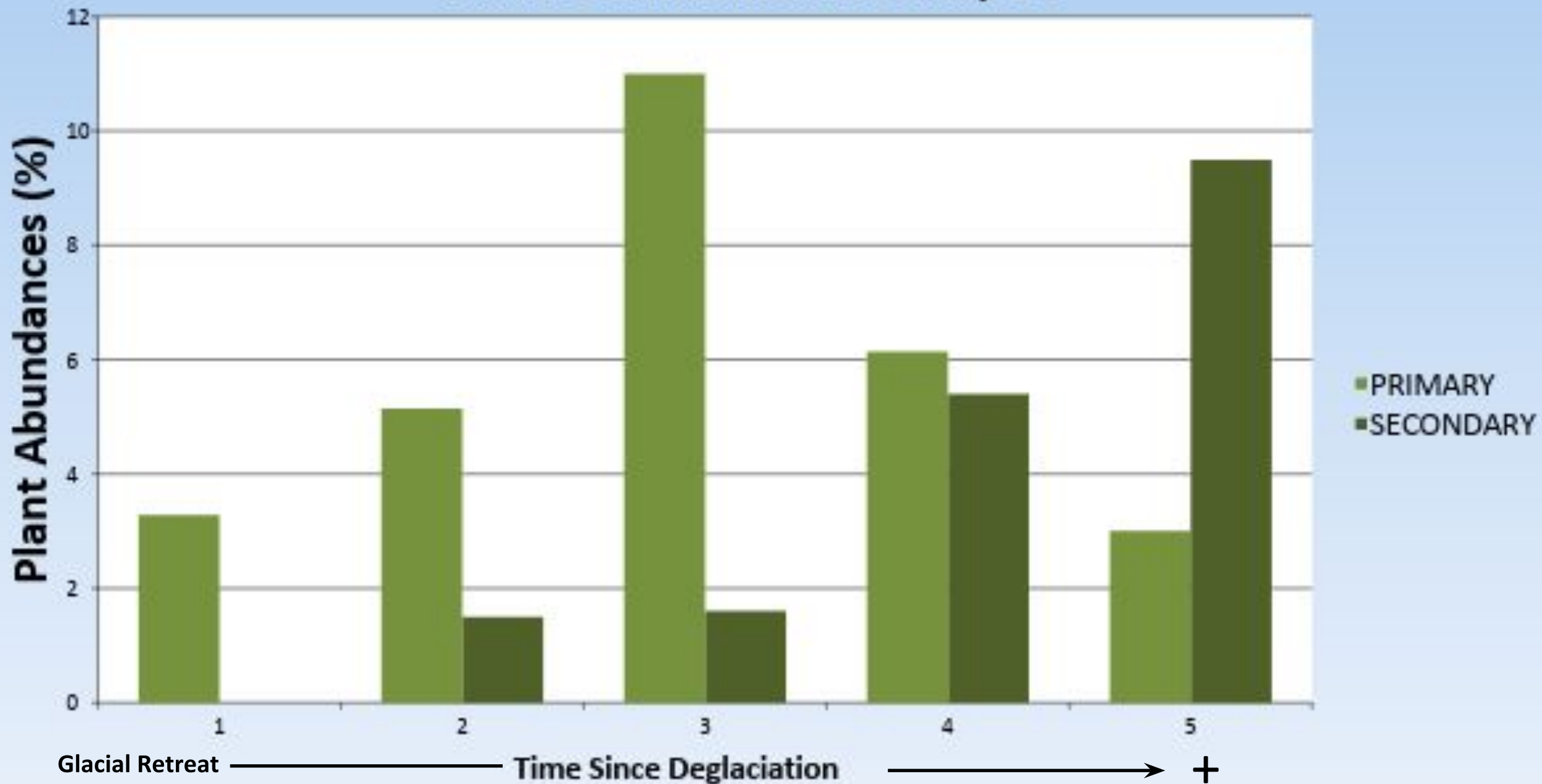
B: leaching



Plant Abundance in Deglaciating Soils



Plant Colonization at Camp 26



Key Points

- Succession related to climate change
- Vegetation as a stabilizer and nutrient filter
- Future work:
 - Absolute Dating



Thank You!

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