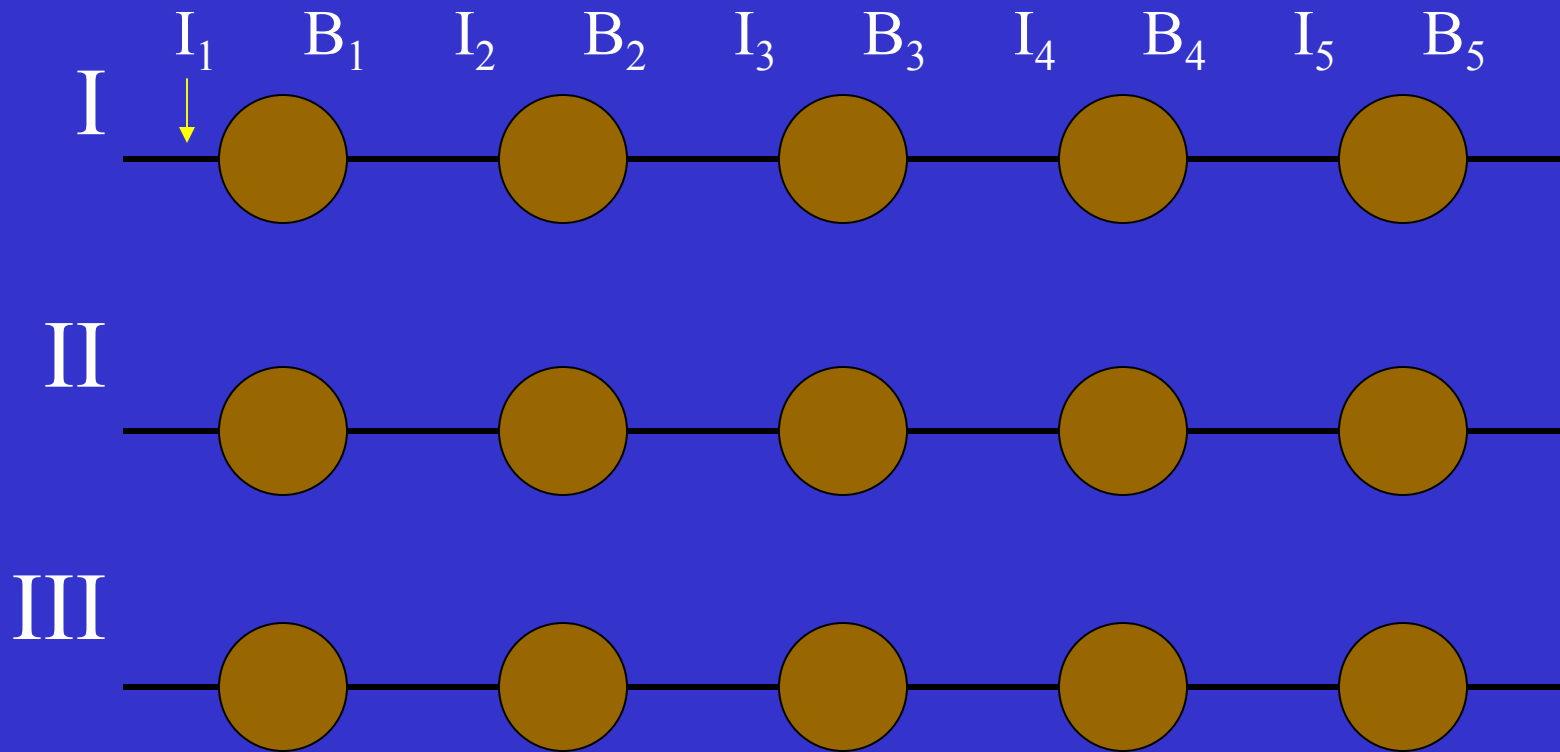


A photograph showing three people in winter clothing standing in a vast, flat, brown landscape with patches of snow. In the background, there are mountains with snow. The text "Biocomplexity of Frost boil Ecosystems: Educational Component" is overlaid in yellow on the image.

Biocomplexity of Frost boil
Ecosystems: Educational
Component

Mesic site transects



Mesic site transects (Pitfall traps)



Length: 20 m



Diameter: 7cm

5 Boils / 5 Interboils per Transect

Total: 30 Pitfall Traps

Duration: 5 days

In situ Decomposition Experiment of Graminoids

Mould Bay, Prince Patrick Is.

Luzula nivalis; collected in Satellite Bay (2002)

Green Cabin, Banks Is.

Carex misandra

In situ Decomposition Experiment of Graminoids
Mould Bay, Prince Patrick Is.
Luzula nivalis



20 litterbags (10 Boils / 10 Interboils); 3 gr each

Area: 16 m²

Initials collected for dry wt. conversion / nutrient
analyses

In situ Decomposition Experiment of Graminoids
Green Cabin, Banks Is.
Carex misandra

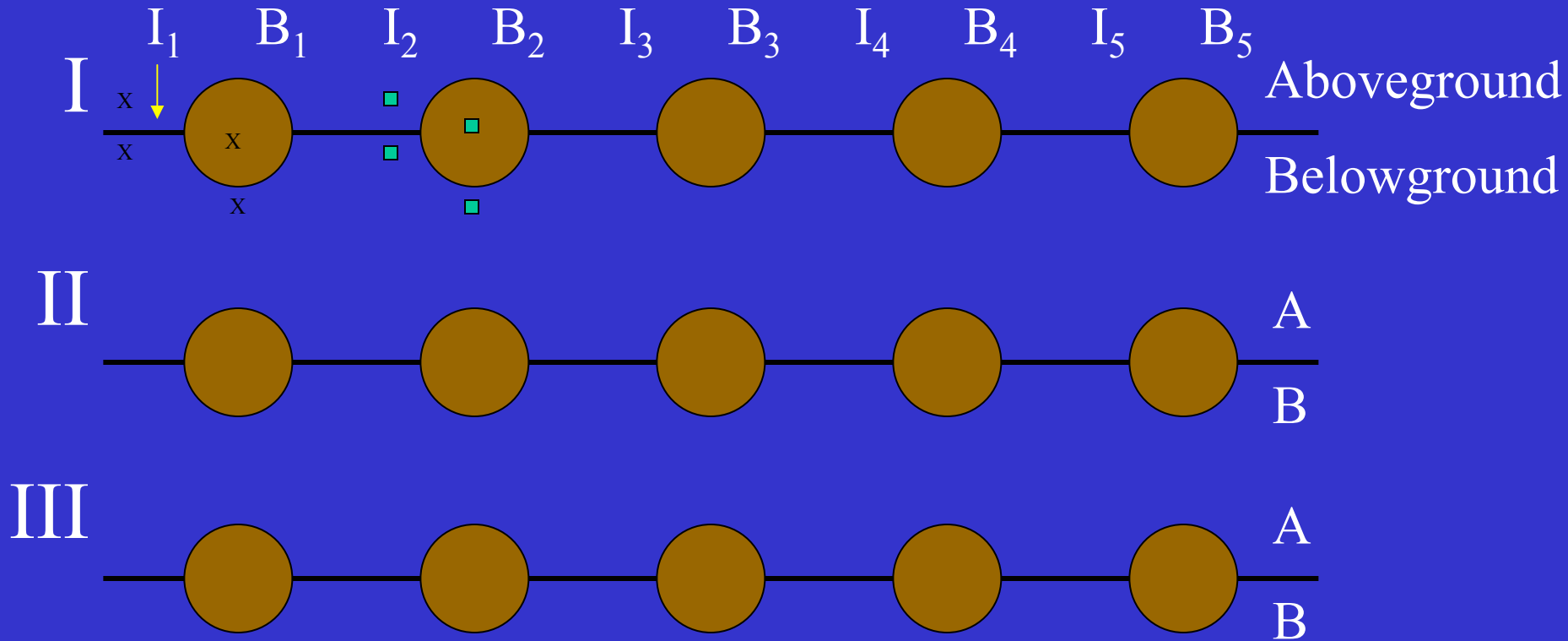


168 litterbags; 7 x 10 cm; 1.5 gr

Locations: mesic transects and topographic
sequence

Mesic site transects

Relating decay rate to microarthropod abundance / diversity

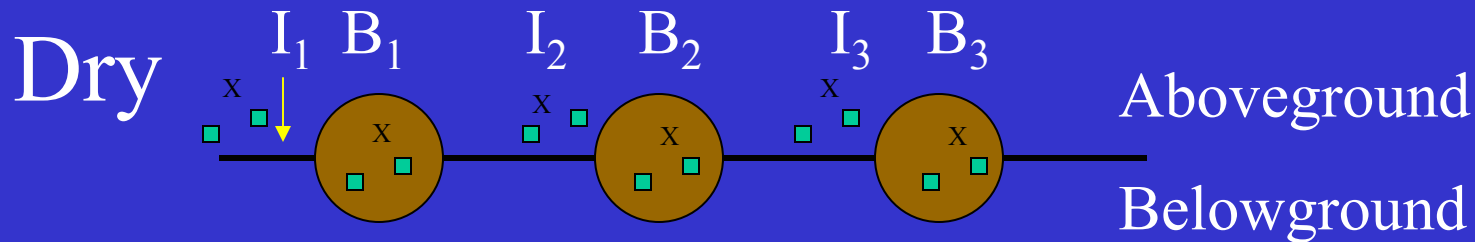


Belowground = 4 cm depth; 60 litterbags total

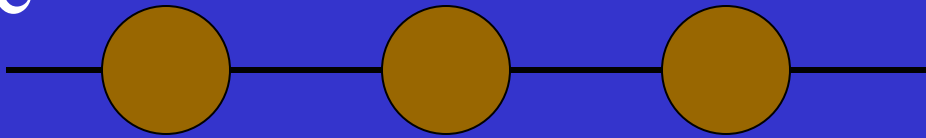
X = initial collection of litterbags for dry wt. conversion / nutrient analyses

Along the toposequence

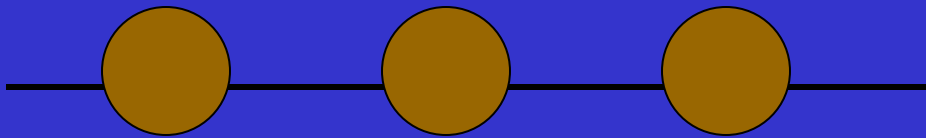
Relating decay rate to microclimatic conditions and soil N dynamics



Mesic



Wet



Belowground = 4 cm depth; 108 litterbags total

X = initial collection of litterbags for dry wt. conversion / nutrient analyses

Expectations / Predictions:

1. Microarthropod:

- * Higher abundance / composition in interboils than frost boils

2. Decay rates:

- * Higher in the interboils than frost boils

- * $I_B > I_A > B_A > B_B$

- * Decay rates: Mesic > Dry > Wet