



2026 WRB Cryosol workshop in Alaska

as NRM 489/689 course by University of Alaska Fairbanks

Fairbanks-Deadhorse (Prudhoe Bay), July 14-23, 2026



2.1. Bonanza Creek, July 16

Experimental Forest and Long-Term Ecological Research site

WRB: Sapric Cryic Histosol (Bryic, Epic, Turbic); Bathyfluvic applicable to a frozen section

ST: coarse-silty, mixed, subgelic Terric Sapristels

3.1. CRREL Permafrost tunnel



Fox, Alaska (near Fairbanks)
July 16



3.2. UAF North Campus trails – bicycle bumps, high, July 16

WRB: Eutric Stagnic Cambisol (Loamic, Ochric)

ST: coarse-loamy, mixed, frigid Aquic Hapludepts



3.3 UAF North Campus trails - Smith Lake, July 16

WRB: Sapric Cryic Histosol (Bryic, Epic)

ST: coarse-silty, mixed, cryic Terric Sapristels



4.1 UAF Farm – late successional forest, July 17

WRB: Reductaquic Turbic Cryosol (Loamic, Epic, Eutric, Folic, Humic)

ST: fine-loamy, mixed, cryic Typic Aquiturbels



4.2 UAF Farm – field, July 17

WRB: Stagnic Phaeozem (Loamic, Relictiturbic)

ST: coarse-loamy, mixed, frigid Aquic Hapludolls



4.3 UAF Farm – reindeer pasture/meadow, July 17

WRB: Cambic? Stagnic Phaeozem (Loamic, Relictiturbic)

ST: fine-loamy, mixed, frigid Aquic Hapludolls



5.1. Hess Creek – forest succession in a burned site, July 18
WRB: Reductaquic Turbic Cryosol (Loamic, Epic, Eutric, Folic)
ST: fine-loamy, mixed, cryic Typic Histoturbels



5.2. Hess Creek – forest in a unburned site, July 18

WRB: Histic? Reductaquic Turbic Cryosol (Loamic, Epic, Eutric)

ST: fine-loamy, mixed, cryic Typic Aquiturbels



6.1. Coldfoot – peat bog, depression, July 19

WRB: Fibric Cryic Histosol (Bryic, Dystric, Hyperorganic)

ST: dysic, subgelic Typic Fibristels



6.2. Sukakpak Mt. – frost mound in calcareous fen, July 19

WRB: Reductaquic Turbic Cryosol (Loamic, Calcaric, Endic, Humic, Raptic)

ST: coarse-loamy, mixed, subgelic Typic Aquiturbels

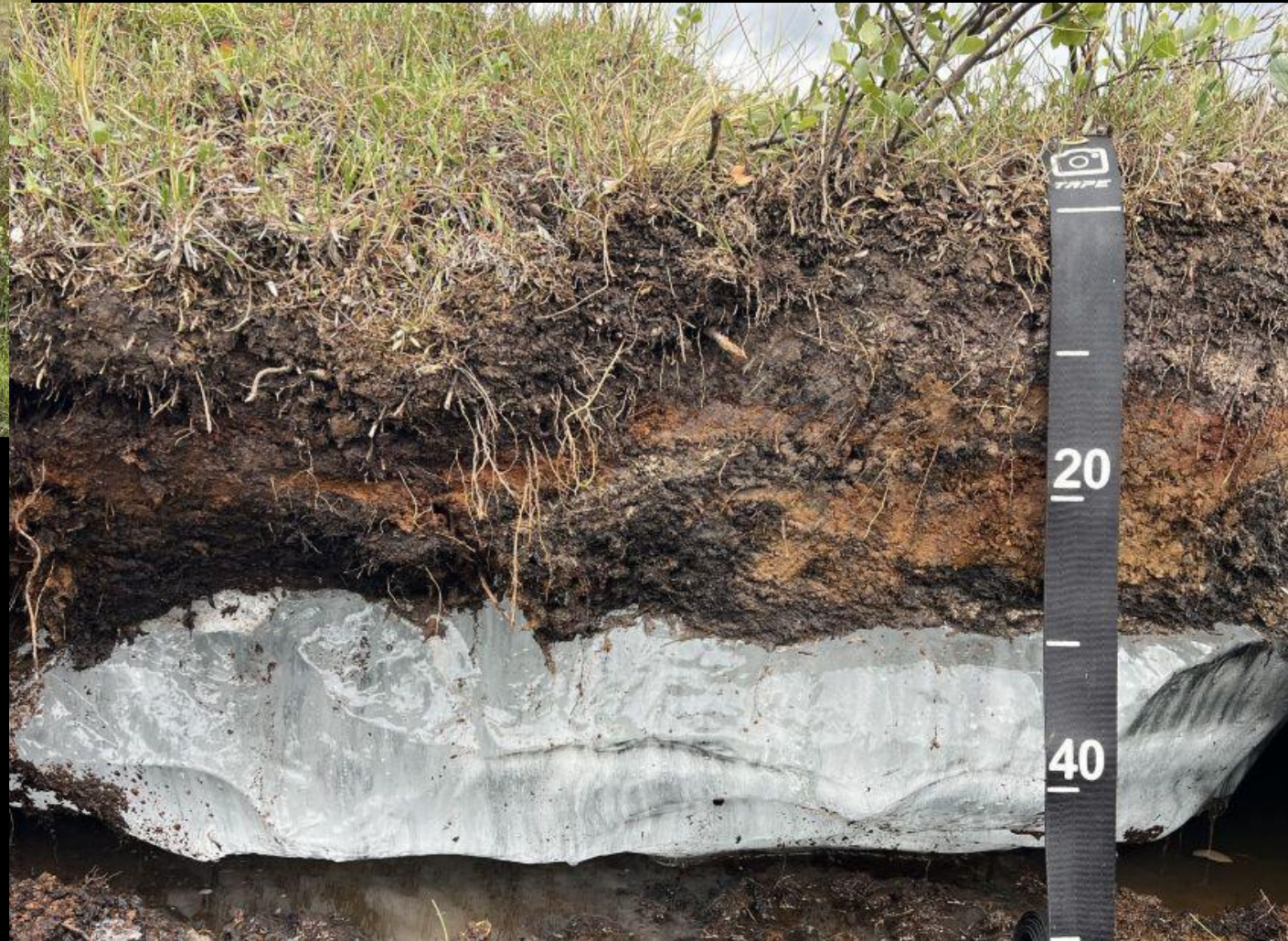




6.3. Sukakpak Mt. – peat mounds with ice lenses, July 19

WRB: Fibric Muusic Histosol (Bryic)

ST: coarse-loamy, mixed, subgelic Glacic Aquiturbels





7.1. Imnaviat Creek, July 20

WRB: Reductaquic Histic Turbic Cryosol (Loamic, Eutric);

Skeletal applicable in the inter-strip parts

ST: loamy-skeletal, mixed, subgelic Typic Aquiturbels





8.1. Sagavanirktok River, July 21

WRB: Mollic Reductaquic Turbic Cryosol (Polyarenic, Calcaric, Fluvic, Humic)

ST: coarse-loamy, mixed, pergelic Typic Aquiturbels



8.2. Sagavanirktok River – frostboils, July 21

WRB: Reductaquic Turbic Cryosol (Loamic, Humic?)

ST: coarse-loamy, mixed, pergelic Typic Aquiturbels



9.1. Fossil Creek – alluvial terraces, July 22

WRB: Calcaric Endoskeletal Fluvisol (Ochric); np permafrost within 2 m

ST: loamy-skeletal, mixed, frigid Cumulic Hapludolls (if frigid)

loamy-skeletal, mixed

Cumulic Haplocryolls (if cryic)



9.2. Fossil Creek – alluvial terraces, July 22

WRB: Calcaric Skeletic Phaeozem (Arenic, Humic, Pachic); no Fluvic in this profile

ST: loamy-skeletal, mixed, frigid Cumulic Hapludolls (if frigid)

loamy-skeletal, mixed, Cumulic Haplocryolls (if cryic)



9.3. Galbraith Lake – high-centered polygonal forms in tundra, July 22

Yellow arrow – polygon center, orange arrow – trough between polygons



9.3a. Galbraith Lake – high-centered polygon

WRB: Histic Reductaquic Turbic Glacic Cryosol (Loamic, Calcaric, Epic)

ST: coarse-loamy, mixed, subgelic Glacic Aquiturbels in the troughs between polygons (5% of the area), Typic Aquiturbel in the center of the polygon (95% of the area)





This photo: M. Andersen; all other photos: C. Kabala

Great thanks to John Galbraith, Sasha Kholodov, Nick Jelinski and Megan Andersen for excellent organization and professional guiding!

Revising soil classification: Cezary Kabala (WRB 2022), John Galbraith and Megan Andersen (Soil Taxonomy 2022)