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Coastal dunes usually blowout or parabolic
(water table limites)
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Sand seas or ergs - Rub -al-kahli; (Arabian Desert)

Loess - Loose soil - North European Plain - Germany to Russia

11, 12, & 13-1

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Glaciers (peri-glacial = near glacial Europe)
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Permafrost = cryergic or cryogenic 1-2 m - seasonal thaw

(Shrinking in last century)

200m to 1600m

Tundra - cold barren or boreal forest

Mass wasting & qualification, wind, ice

Freezing & frost wedging

Chemical & biological weathering (salt)

Frost heaving and needle ice

Segregated ice (massive in permafrost)

Ice wedges vs. progressive size increase

(Sand wedges in cold desert)

Geliflection & frost creep (upper 2m)

Nuration - melt h2o downhill erosion Fluvial Erosion - Snow melt controlled

Permafrost limits infiltration (gold in arctic) - hydrolic mining

Eolian transport - Spring winds dry dunes formed

Landforms - Patterned ground - polygons

Rock glaciers (sorted)

Felsenmeer (rock fields)

Thermokarst (Karst like caused by ice melt)

## Glaciers

Erosian/plucking (lee vs. stoss)

Pater noster lakes (chain of lakes)

Fjiords, cirque, horn, (arête & horn)

Alpine vs. continental

Gipselfleur (series of peaks)

Presidential Range - white mountains - NH

Moraine - Medial, lateral, terminal (recessional)

Drift - all deposition by glacier

Till - Non-stratified deposited directly

Re-working

Esker (Ice tunnel deposition)

Great Esker Park - Weymouth / Hingham

Kettle - Lakes

Valley - Boulder trains

Kame - Stratified drift/hill

Crevasse - Surface break

Drumlins - Boston Harbor Islands and other locations Copyright ©2010 John F. Looney Jr., Ed.D