**Brown soils revesion**

* Cool temperate climate with mixed decidious forests
* Variations of brown soil in parts of ireland
* No distinct profiles/ uniform in colour

Factors

1. Climate-cool temperate oceanic/ 15C-6C temp range. 9mths year over 0C. Rainfall-1500mm. Long growing season. Freeze thaw action in upland areas. Climate suits micro organism- decompose material- humus
2. Relief-flat areas/ hills- soil thinner. 150mt up 1C colder. Higher ground less activity. South facing/ warmer more activity.
3. Living Organisms/Vegetation- Deciduous forests- oak/beech- provide humus. Micro organism/ animals mix/ aerate soil removing horizons.
4. Parent material- varied-Acidic/ granite+sandstone, Shallow- limestone, Podzolised-glacial drift
5. Time- last ice age 10,000yrs

Characteristics

1. Colour- brown/ humus/ mixed by organisms.
2. Ph- varies slightly alkalinity- slightly acidic- perfect agriculture.
3. Humus- plentiful- deciduous trees- leaf litter- Humification.
4. Structure-Crumb-productive fertile-space-water/air
5. Texture-Loam-fertile-space-water/air-varied parent rock.
6. Water content-moderate-encourages growth-depends on local topography.

Processes affecting formation

1. Humification-dead organic matter= waste-humus. Micro organism, fungi/ bacteria.
2. Leaching- needed to wash mineral to roots. Too much leaching- bad- wet/ highland areas.