**Plant Succession- Lithosere**

Definition: An ecological sere originating on rock   
**Formation of a primary succession (lithosere):**

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|  | | 1. Bare rock colonised, by **pioneer community**, for example, lichens, mosses, bacteria, that can survive in hardy conditions, and need few nutrients. |
|  | | 1. Rock slowly weathered creating thin soil. |
|  | | 1. Plants die, creating humus, leading to a more fertile soil, grasses replace the mosses and lichens as the dominant species. |
|  | | 1. Grasses decrease in number; quick-growing shrubs become dominant. |
|  | | 1. Fast growing trees dominate. |
|  | 1. http://www.geogonline.org.uk/images/lithosere.gifOver time slower growing trees such as oak become dominant and form the climatic climax community. | |

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**Example:  
Lithosere – Eruption of Mt. Surtsey- Iceland (Temperate Volcano)**-In 1965, the first vascular plant was found growing on the northern shore of Surtsey

* + Vascular plant: form a large group of plants that are very roughly defined.

Figure 1 e.g. of Vascular plant

* Mosses became visible in 1967
  + Mosses: small, soft [plants](http://en.wikipedia.org/wiki/Plant) that are typically 1–10 cm (0.4–4 in) tall, though some species are much larger. They commonly grow close together in clumps or mats in damp or shady locations.
* Lichens first found in 1970
  + Lichens: a simple slow-growing plant that typically forms a low crust-like, leaf-like, or branching growth on rocks, walls or trees.
* Mosses and lichens now cover up most of the island

Figure 2 e.g of Mosses

* During the island's first 20 years, 20 species of plants were observed at one time or another, but only 10 became established in the nutrient-poor sandy soil

Figure 3 e.g. lichen