|  |  |  |  |
| --- | --- | --- | --- |
| http://www.vcbio.science.ru.nl/images/landscape/landscape-vertical_zonation_eng.jpg | http://www.ncrcn.org/projects/me/tidepool/images/intertidalzonation.jpg | http://natureinfocus.files.wordpress.com/2011/08/p1070951ablog3.jpg?w=450&h=341 | http://www.nature.com/scitable/content/ne0000/ne0000/ne0000/ne0000/45903619/1_2.jpg |
| http://www.biologycorner.com/resources/succession2.jpg | http://1.bp.blogspot.com/--OF9Th7P3LI/TWa5t2KMBFI/AAAAAAAAAC8/FeYAG-zB0iU/s1600/Succession.gif | http://upload.wikimedia.org/wikipedia/commons/thumb/d/de/Altitudinal_zones_of_Alps_mountains_Extended_diagram-en.svg/600px-Altitudinal_zones_of_Alps_mountains_Extended_diagram-en.svg.png |
| http://regentsprep.org/regents/biology/units/ecology/pondsuccession.gif | http://gerrymarten.com/human-ecology/images/06-11-english.gif | http://loh.loswego.k12.or.us/oltmansj/Assignments/Ecology/succes3.jpg | **Zonation** |
| **Succession** |

|  |  |  |
| --- | --- | --- |
| **Pioneer Community** | **Intermediate Community** | **Climax Community** |
| Organisms are quite small(lichens, grasses, etc) | Medium sized organisms(tall grasses, bushes, small trees) | Large organisms(big trees) |
| Simple food chains & food webs | More complex food chains & food webs | Complex food chains & food webs |
| Very little top soil | Some top soil | Lots of top soil |
| Very little water holding capacity | Some water holding capacity | High water holding capacity |
| Very little minerals deposited | Little minerals deposited | Lots of minerals deposited |
| Very little nutrient cycling | Some nutrient cycling | Lots of nutrient cycling |
| Few niches & habitats so low biodiversity | Diverse niches & habitats so high biodiversity  | Stable habitats so fewer niches so decrease in biodiversityBiodiversity stabilizes |
| Few producers so low GPPLow respirationHigh NPP | More producers, consumers, etc. so higher GPPHigher RespirationLow NPP | High GPP (but mature trees, produce less)High respiration (esp. decomposers)Low NPP |