

ZONATION PART II

Factors influencing zonation:

Desiccation (drying out) occurs when marine species spend time out of water. Living things die if they dry out too much.

Waves hitting the shore may damage or remove species. Wave action is greatest on the middle shore.

Sunlight is used by seaweeds and plants to grow. Sunlight reduces as it passes through water.

Temperature of the air soars in the summer and drops to freezing in the winter. Sea temperature is more constant, so change is less extreme underwater.

Salinity (saltiness) increases when water evaporates and salt remains, whilst rain reduces salinity. Too much or too little salt can damage some species.

Competition for space, light, food and oxygen occurs when several species inhabit an area. When conditions favour more species, competition is higher. Harsher conditions favour fewer species and reduce competition.

Other factors:

Aspect means what direction the shore faces. One that faces south will get more sunshine and so might be hotter. Ones that face north will get less sun and so will be cooler and won't have as much desiccation.

Rock features such as the hardness and the size of the rocks and boulders affect what can and cannot live there. Large rocks and boulders are hard to move and so can provide shelter for species. If stones and pebbles are small they move and so it may be difficult for species to live there.

Some species like to "burrow" into rocks to make a safe place to live. Only softer rocks can be burrowed into. Other features such as rockpools and overhangs can provide more stable conditions for species.

