

### **33. Biosphere – bioclimatic zones**

#### **This does not include mountains!**

In accordance with changes between climates throughout the world, flora (plants) and fauna (animals) configuration (regulation or zonality) has developed during millions of years ago. There are several bioclimatic zones. Somewhere, there are animals living nowhere else = **endemics**, e.g. kiwi bird or platypus in Australia.

#### **Rainforests**

= lush, green, thick and dense, very high (50-60 m), creating 4-5 stages (levels), 400 species/ha => the greatest biodiversity on the Earth, appearance of the forest is constant, uniform all year round ⇔ no seasons.

*Species:* anteater, humming-bird, gorilla, chimpanzee, howler, anaconda (America), etc.

#### **Savannas**

= lot of xerophytic plants, dependant upon changes between rainy and dry period, scattered low patulous trees (baobab), many herbivores, in SE Asia – tigers.

*Species:* antelope, zebra, giraffe, elephant, rhinoceros, hippopotamus, lion, cheetah, hyena, jaguar (America), etc.

#### **Deserts and semi-deserts**

= poor vegetation diversity, only in oases, themophilic plants.

*Species:* palm, cactus, scorpion, camel, etc.

#### **Subtropical woodland**

= summer and winter period, open (sparse) woodland, lot of shrub (little trees with hard, leathery leaves = *macchie*),

*Species:* olives, dates, figs, citrus fruits, Mediterranean pines, echidna, lizard, etc.

#### **Steppes**

= dry areas, no forests but grasslands with the best soil fertility = *prairies* (NA) and *pampas* (SA).

*Species:* rodents, rabbit, partridge, etc.

#### **Deciduous and Coniferous forests**

= deciduous forests with no leaves during winter, in maritime (coastal) regions ⇔ warmer climate

= coniferous forests dominate in continental (inland) areas = taiga = cooler climate

*Species:* lime, oak, beech, birch, spruce, pine, fir, larch, deer, bear, etc.

#### **Tundra**

= very cold climate, during the warmest month =  $<10^{\circ}\text{C}$  => forests cannot grow there, very poor diversity.

*Species:* mosses, lichens, polar fox, polar bear, reindeer, etc.

#### **Ocean**

= is very rich in diversity, warm tropical seas are rich in *species*, but colder seas are rich in *quantity*, oceanic floor is almost without life.

= plankton (micro-organisms) is the most important source of food for fish.

*Species:* seal, walrus, penguin, etc.

#### **Keywords**

fauna, flora, endemics, rainforest, biodiversity, savanna, patulous tree, baobab, (semi-)desert, oasis, shrub, macchia, grassland, steppe, prairie, pampa, deciduous/coniferous forests, taiga, tundra, plankton, all the plant and animal species mentioned in this page

