

1

Wetlands

Living organisms don't just need water; by weight, every living organism *is* mostly water. Nearly all water on this planet is in the seas that cover most of the thin surface layer of rock we live upon. The heat of the Sun evaporates water from the sea, forming the rain-bearing clouds on which the lives of all land-dwellers depend. Rain brings water to the land, and the water flows mostly downwards as it returns to the seas, picking up minerals and other nutrients, and forming wetlands of many kinds as it goes.

It isn't easy to define just what a wetland is, and there are different definitions by hydrologists, legislators, engineers, biologists and ecologists. In the USA a whole job category called wetland delineators is required to even work out where wetlands begin and end! Some definitions are legal, some are practical, but the best ones are commonsense – wetlands are places where water forms pools or flows which last long enough that the lives of the plants and animals in these places revolve around its existence for a significant part of their year, or even life span.

Some wetlands are permanent, forming bodies of water which rarely disappear; others may flow just beneath the surface of the soil, rising and falling at different times of year and rainfall; still others may hold water for only a few months. Plants and animals found in the many types of wetlands are often adapted to extremes of flood and drought, but all need water for at least a part of their life cycle. Some may simply need water to quench their thirst, while others live in it for most of their lives and may only come out in the breeding season, and of course there are many which must have water for every stage of their existence.

Many wetland plants and animals are important even to surrounding terrestrial ecosystems, and the wetlands themselves recapture many nutrients and