



Tales of the Todd - Fact Sheet

River System Plants

Wetland plants generally are especially adapted to withstand such stressful conditions as

- periodic (or sometimes permanent) inundation or saturation with water
- fluctuating water levels
- little available oxygen (in permanent wetlands)
- excess salt in water

Such plants may:

- have special air spaces in their roots and stems (called aerenchyma) that allow oxygen to diffuse from the aerated parts of the plant to its roots
- pump oxygen from their leaves to their roots situated in saturated soils (particularly woody plants). This process enables the root cells to respire and carry on necessary nutrient exchange reactions with the surrounding soils.
- develop shallow root systems, swollen trunks or roots that grow from the trunk above the soil surface
- develop structural barriers to prevent or control the entry of salts at the root surface and have organs specialised to excrete salts through glands embedded in the leaf (plants in saline environments)

The kinds of plants you might find in river systems include:

- herbaceous plants
- eg emergent plants which are rooted in the sediment but have stems, leaves, flowers, and fruits above the water surface (rushes and reeds);
- floating plants which may be rooted or free-floating, and have leaves on the water surface and carry flowers and fruits just above the surface (water lily, duckweed); and submergent plants which grow completely beneath the surface
- shrubs
usually low, woody plants with several permanent stems instead of a single trunk
- trees
usually woody, perennials with one main stem or trunk that develops many branches, usually high above the ground.