



Day 2 - Fact Sheet 3

Tales of the Todd- Read all about it!

The Todd River System at a Glance

A river system is usually defined by where surface water and ground water exists and contributes to the flow of a main river. It includes the area from which the water collects (the catchment) as well as the plants and animals that live there because of the water from that system.

One of the main features of rivers in central Australia is that you rarely see water in them; their flow is unpredictable and usually short in duration. However that is not to say that there is no water available for use by the things that live nearby; water can often be found beneath the surface and can be accessed by plant roots and by digging. Within the river system you may also find permanent or semi-permanent waterholes, with the water trapped in a rocky part of the creek bed and fed by intermittent rainfall, by floods, or by springs.

The Todd River runs through the centre of Alice Springs, flowing in a southerly direction. Development of the town has extended outwards from the river on each side. At the northern boundary of the town, the Todd River is joined by the Charles River (which is a tributary), and the river system is often referred to collectively as the Todd and Charles System.

The mainstream length of the Todd is approximately 50km. The northern part of the catchment, on Bond Springs Station, is composed of fairly flat red soil plains and the catchment boundary in this area is difficult to determine. The north-east and central part of the catchment above Alice Springs is made up of rolling, occasionally steep, rocky hills into which the river and other drainage channels have cut steep sided rocky gorges. The ground surface is mostly broken, angular, granite-gneiss rock with exposed rock outcrops and occasional sandy flats. The catchment area of the Todd is approximately 445 square km.

Riparian areas are the green zones along the banks of rivers and waterholes. In central Australia you can easily recognise riparian areas because of the thickets of trees and woody shrubs growing in long winding corridors through otherwise dry country. Riparian areas are very important for maintaining healthy river systems. They can act as filters and cleansing systems for contaminants in the water. For example, vegetation can absorb certain chemicals such as nitrates from septic systems, livestock and fertilisers and use them for growth. However other chemicals such as pesticides and herbicides can destroy the vegetation in this natural filtering system.

Vegetation along river banks forms webs of roots that hold the soil in place and prevent erosion. Erosion causes silting which can harm fish and other aquatic life. It blocks sunlight from reaching down into the water where algae and algae eaters rely on it.

The relatively rich river edges provide habitat for a great diversity of both plant and animal life. The vegetation provides food as well as shade and escape cover. It lowers the summer temperatures, both along the banks and in waterholes.