## WITZANDS AQUIFER NATURE RESERVE

## CLIMATE

The area has a warm, temperate, Mediterranean-type climate, with dry, hot summers and cool, wet winters. The average summer temperatures rise to about 28 °C, while average winter temperatures reach 17 °C. The hottest time of the year is between January and March, although these summer temperatures are tempered by the cold Atlantic water and the frequent summer fog. The lowest temperatures occur in July, but frost remains rare in the area.

The West Coast is a winter rainfall area, with about 75% of the annual rainfall occurring between April and September. Summers are generally very dry. The rainfall is mainly cyclonic as a result of cold fronts moving from the South Atlantic Ocean, and decreases rapidly as one moves north-west up the coast. This is due to the presence of the cold Benguela current, which inhibits cloud development.

Fog out at sea regularly drifts inland for up to 3 km. This occurs mostly in summer, when south-easterly winds cause an upwelling of cold water along the coast. The moisture supplied by the fog, together with that from heavy dew, compensates somewhat for the lack of summer rainfall. The frequency of the fog increases from south to north, and has a moderating effect on summer temperatures.

Wind is a characteristic feature of the West Coast, and is often very strong. In summer, the prevailing wind is south/south-east, while in winter, the north-westerly predominates. Wind is an important factor influencing the nature of the coastal vegetation. In summer, the hot and dry offshore winds cause the plants to dry out, while the salt-laden on-shore winds constantly stunt the new growth of the coastal shrubs, resulting in the characteristic 'wind-pruned' effect.







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