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- World Wetlands Day is celebrated on 2 February each year. Contact the DEAT* for details on how to participate.

Ramsar sites in South Africa. De Hoop Vlei, Barberspan, De Mond (Heuningnes estuary), Blesbokspruit, Turtle Beaches/Coral Reefs of Tongaland, St Lucia System, Langebann, Wilderness Lakes, Verlorenvlei, Orange River Mouth, Kosi Bay, Lake Sibaya, Natal Drakensberg Park, Ndumo Game Reserve, Seekoeivlei Nature Reserve, Nylsvley Nature Reserve, Verloren Valei Nature Reserve, Makuleke Wetlands and the Prince Edward Islands.

Further reading

Wetlands South Africa. Website <http://wetlands.sanbi.org/>

Vanishing Waters. 1998. B.R. Davies and J.A. Day. University of Cape Town Press.

Wetlands and People. 1996. D.C. Kotze. Share-Net: Howick.

Useful addresses

Department of Water Affairs and Forestry. Working for Wetlands Programme. Private Bag X4390, Cape Town, 8000. Tel (021) 441 2700; Fax (021) 441 2751 Website www.dwaf.gov.za/wfw/

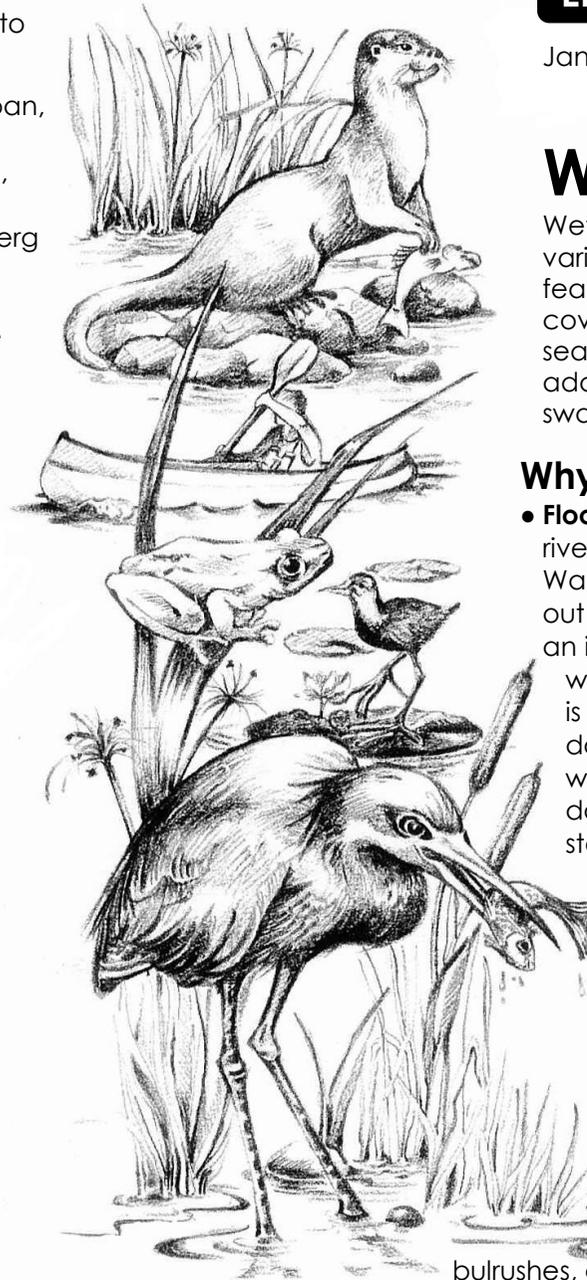
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Please write to: Share-Net, Enviro Facts Project, PO Box 394, Howick, 3290. Tel (033) 330 3931 ext 124/144; Fax (033) 330 4576; e-mail sharenet@wessa.co.za

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Wetlands

Wetlands are difficult to define because of their great variation in size and location. The most important features of wetlands are waterlogged soils or soils covered with a shallow layer of water (permanently or seasonally), unique types of soil, and distinctive plants adapted to water-saturated soils. Marshes, bogs, swamps, vleis and sponges are examples of wetlands.

Why are wetlands important?

- **Flood busters:** Wetlands associated with streams and rivers slow floodwaters by acting as giant, shallow bowls. Water flowing into these bowls loses speed and spreads out. Wetland plants, particularly reeds and sedges, play an important role in holding back the water. The wetland acts as a sponge as much of the flood water is then stored in the wetland and is slowly released to downstream areas, instead of it all rushing to the sea within a few days. This greatly reduces flood damage, particularly erosion, and ensures a more steady supply of water throughout the year.

- **Filters:** Wetlands improve water quality as they are very good natural filters, trapping sediments, nutrients (e.g. nitrogen and phosphorus), and pathogenic (disease-causing) bacteria. In addition, pollutants such as heavy metals (e.g. mercury, lead) and pesticides, may be trapped by chemical and biological processes. In other words, the water leaving the wetland is cleaner than the water entering it.

- **Wetlands and wildlife:** Wetlands are filters where sediments and nutrients accumulate, so many plants, such as bulrushes, grasses, reeds, waterlilies, sedges and certain trees grow there. The plants, in turn, provide food and a place for attachment and shelter for many creatures. There is more life, hectare for hectare, in a healthy wetland than in almost any other type of habitat. These productive places support huge

numbers of insects, fish, birds and other animals. Some animals are completely dependent on wetlands, whilst others use wetlands only for part of their lives. The Wattled Crane, for example, is dependent on wetlands for breeding. The rich diversity of waterbirds in southern Africa is possible because of the many wetlands spread across the sub-continent. The wetlands of southern Africa are of international importance as they are the southern destination for many migratory waterbirds.

- **People and wetlands:** Wetlands have been used for centuries as grazing for domestic stock, and as a source of reeds used for thatching, hut construction and basket weaving. They provide fishing and hunting, and the opportunity to observe wildlife, especially birds. Wetlands are appreciated for their beauty as open spaces and also for their educational value.

Wetlands in trouble

To many people the thought of a marsh, swamp, bog or vlei is associated with dampness, disease, difficulty and danger. Because of this wetlands are often seen as wastelands that should be converted to cropland, dams, commercial timber plantations of alien trees, waste disposal sites and pastures. Many wetlands have been "reclaimed" for industry and the construction of airports, harbours and sewage treatment plants. Historically, wetlands have been drained in attempts to control malaria.

All wetlands in southern Africa are threatened. Directly or indirectly, everyone depends on wetlands, and yet wetlands are the most threatened ecosystems in the world. By 2025, South Africa will be one of 14 African countries classified as subject to water scarcity.

Wetlands have been altered through changes in plant species composition due to alien invasive plants, conversion to agriculture and forestry, changes in water flow, and loss to infrastructure developments. For example, in 1991, the government of Botswana initiated a project to channelize the Boro River, dredge the main channel of the Okavango Delta, build three dams and construct a pipeline to the diamond mines of Orapa and Letlhakane. The project would have had serious impacts on the Okavango Delta and the livelihoods of communities depending on the wetland if it had gone ahead. The project was terminated after communities, conservation organisations, eco-tourism operators and concerned individuals voiced their opposition to it. It is expected, however, that there may be future attempts to abstract the water resources from the Okavango Delta for development in this semi-arid country. The

large-scale and intensive cultivation of sugarcane is an example of how modern farming methods can adversely affect wetlands. Pollution, eutrophication and climate change have also altered wetlands.

There has been some good news for wetlands in South Africa. This includes progressive policies in the agriculture, water and development sectors, the recognition that effective action requires a co-ordinated effort by government, and the establishment of "Working for Wetlands" as a vehicle through which government can pursue its wetland-related objectives in a coherent and co-ordinated way. As a signatory and founding member of the Convention on Wetlands of International Importance (Ramsar, Iran, 1971) and signatory to the Convention of Biological Diversity, South Africa is committed to the management, wise use and protection of its wetland resources.

What you can do

- *The Department of Environmental Affairs and Tourism (DEAT) runs a Working for Wetlands Programme. Find out more (details overleaf).*
- *Get to know the wetlands in your area and list the plants and animals living there. Draw a map of the wetland's position, size and use. Take photographs of the wetlands from fixed vantage points, and at different seasons of the year, to compare the changes between seasons and from year to year.*
- *Report the abuse of wetlands to your local nature conservation officer, agricultural extension officer or DEAT. Make your report in writing to ensure that the officer concerned has to investigate.*

Did you know?

- *The Ramsar Convention on Wetlands of International Importance recognises important wetlands and works to conserve them. South Africa has 19 sites covering 543 978 hectares recognised by the Ramsar Convention (see overleaf).*
- *Over half of South Africa's wetlands have already disappeared.*